BUNA'S PFMI DISCLOSURE FRAMEWORK

Arab Regional Payments Clearing and Settlement Organization (ARPCSO)

April 2025

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EXECUTIVE SUMMARY

The Principles for Financial Market Infrastructures (PFMI), established by the Committee on Payments and Market Infrastructures (CPMI) and the International Organization of Securities Commissions (IOSCO), provide a global standard for ensuring the safety, efficiency, and resilience of financial market infrastructures (FMIs). As Buna, the cross-border and multi-currency payment system operated by the Arab Regional Payments and Settlement Organization (ARPCSO), continues to expand its role in facilitating regional and international payments, adopting the PFMI disclosure framework is critical to enhancing transparency, building trust, and ensuring compliance with international best practices.

The PFMI disclosure framework requires FMIs like Buna to publicly disclose comprehensive information about their governance, risk management, operational processes, and financial resources. This transparency enables participants, regulators, and other stakeholders to assess Buna's adherence to the PFMI principles, and to have an accurate understanding of the risks and costs they incur by participating in the FMI.

The PFMI disclosure framework delves into areas such as:

- Risk management: Identifying, monitoring, and mitigating risks such as credit, liquidity, and operational risks, when and if applicable.
- Governance: Ensuring clear accountability, transparency, and sound decision-making processes.
- Efficiency: Providing reliable and cost-effective payment services.
- Settlement finality: Ensuring the irrevocability and certainty of payment settlements.

For Buna, implementing the PFMI disclosure framework will:

- Enhance credibility and trust: By aligning with global standards, Buna can strengthen its reputation as a reliable and secure payment system.
- Support regional integration: Transparent disclosures will encourage greater participation from central banks, financial institutions, and other stakeholders across the Arab region and beyond.
- Facilitate regulatory compliance: The framework ensures Buna meets the expectations of international regulators and standard-setting bodies.
- Promote risk awareness: Detailed disclosures will help participants better understand and manage risks associated with using the system.

In conclusion, adopting the PFMI disclosure framework is a strategic step for Buna to reinforce its position as a leading payment system while contributing to the stability and efficiency of the global financial ecosystem. By prioritizing transparency and accountability, Buna can foster greater confidence among its users and stakeholders, paving the way for increased adoption and growth.

SUMMARY OF MAJOR CHANGES SINCE THE LAST UPDATE OF THE DISCLOSURE

The Arab Regional Payments Clearing and Settlement Organization ("ARPCSO") is publishing its first disclosure in this report. In preparation for this disclosure, ARPCSO undertook the following initiatives:

- Aiming to fulfil its objectives and to continuously enhance its efficiency, safety, and stability as a Payment System, Buna conducts a comprehensive self-assessment against the principles of financial market infrastructures on a regular basis. The first comprehensive PFMI self-assessment was completed in August 2022, marking one full year of Buna's operations.
- The Central Bank of the UAE, as the lead overseer, has established a Cooperative Oversight Framework exercised by a dedicated Oversight Committee that is open to the Central Banks whose currencies are processed in Buna. The committee formed an Oversight Task Force to review Buna's PFMI Self-Assessment. In June 2024, the Task Force delivered its insights on Buna's adherence to the principles, with all observations integrated into this disclosure.
- In August 2024, Buna established an oversight action plan to address the recommendations from the oversight report. This plan sets out a timeline for implementing all recommended actions, with goals for medium-term (6–12 months) and long-term (12–18 months) milestones.

To ensure ongoing transparency and relevance, this framework will be reviewed and updated every two years, providing Buna's community with up-to-date information on achievements and developments.

GENERAL BACKGROUND ON BUNA

GENERAL DESCRIPTION

Buna is a cross-border and multi-currency payment system founded by the Arab Monetary Fund (AMF) in 2018. Buna was created in execution of the Council of Governors of the Arab Central Banks and Monetary Authorities decision, to mandate the AMF to establish a cross-border payment system that supports further economic and financial integration between Arab countries and expand trade and investment activities with the global trading partners.

Built on the foundation that an efficient infrastructure for cross-border payments is essential to a solid and effective financial ecosystem, Buna enables commercial banks, central banks, and other financial institutions, in the Arab region and beyond, to send and receive payments, in Arab currencies as well as key international currencies. Buna welcomes the inclusion of all banks and other financial institutions that meet the eligibility criteria and conditions for participation, offering its participants cost-effective and real-time services through a centralized, risk-controlled, and secure platform.

Buna's modern payment solutions comply with the highest international standards of information security and requirements against financial crime.

OBJECTIVES

Buna, as a payment system, is designed in accordance with the Principles for Financial Market Infrastructures (PFMIs) issued in April 2012 by the Committee on Payment and Settlement Systems (CPMI) and the Technical Committee of the International Organization of Securities Commissions (IOSCO). As a centralized cross-border and multi-currency payment system, that acts as a bridge between the Arab region and the rest of the world, Buna aims to:

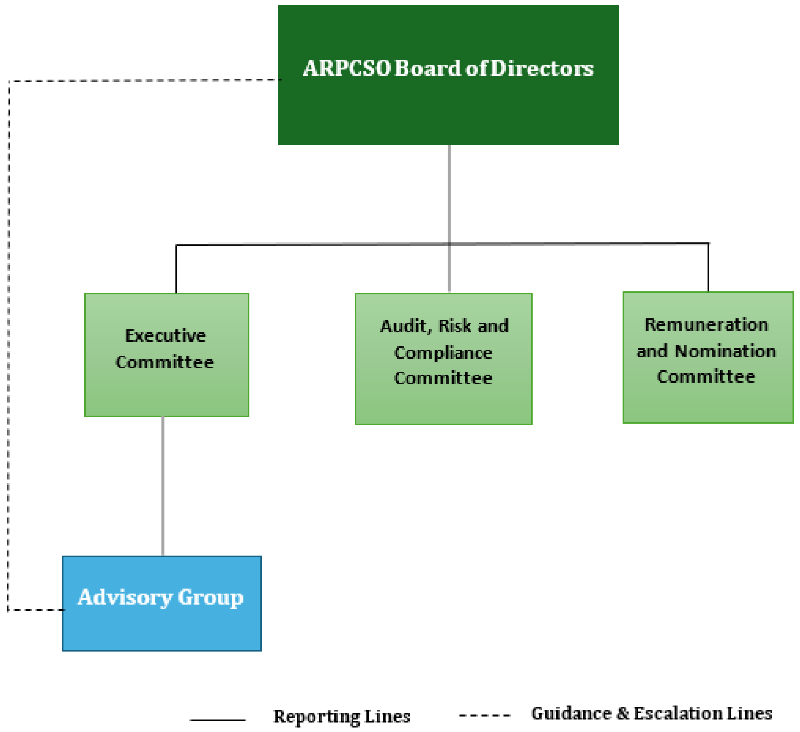
- Empower Arab economies.
- Streamline trade relationships of the Arab countries with major partners.
- Facilitate financial inclusion and regional integration.
- Promote cross-border payments and make them as efficient as domestic ones.
- Promote usage of regional currencies.
- Strengthen compliance standards.

OWNERSHIP

Buna is operated by ARPCSO which functions as an independent organization fully owned by the Arab Monetary Fund.

GOVERNANCE STRUCTURE

ARPSCO has a robust and comprehensive governance structure that comprises a Board of Directors, an Executive Committee, a Remuneration and Nomination Committee, an Audit, Risk and Compliance Committee, and an Advisory Group.



Board of Directors

The representative body of the shareholders has the responsibility for the ultimate direction and steering of the organization. The Board of Directors shall put in place the policies, regulations, and bylaws related to the administrative, financial, and human capital affairs, including appointments of Executive Management and determination of their remuneration, and shall have the full powers to manage the organization.

Committees of the Board

The Board of Directors delegates to the Board committees some of its powers, authorities, and discretions for such time, on such terms and subject to such conditions as established in their charters approved by the Board of Directors.

The Board of Directors, by virtue of Board Resolutions, has formed 3 Board Committees:

- Executive Committee (ExCo): Responsible for the day-to-day management of the ARPCSO, under the leadership of the Board of Directors and its delegation of authority.
- Audit, Risk, and Compliance Committee (ARCC): Responsible for the oversight of the system's key risks, internal controls, and the implementation of policies and procedures.
- Remuneration and Nomination Committee (RNC): Responsible for the remuneration and compensation structure of ARPCSO, as well as overseeing and advising on the development of the organization's human resources activities.

Executive Management

Led by the Chief Executive Officer (CEO), is responsible for setting, managing, and executing the strategies of the organization.

Advisory Group

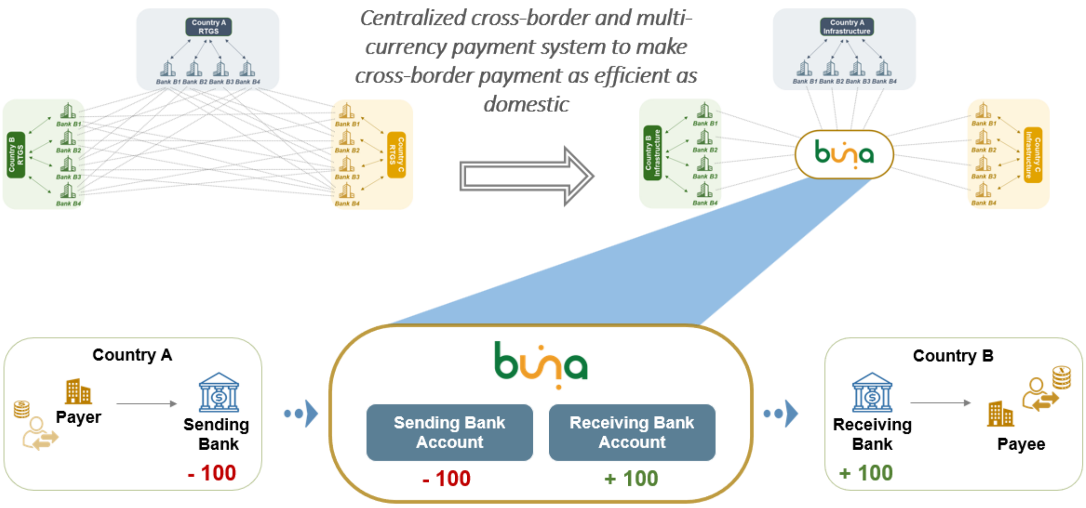
The Advisory Group is a consultancy body that helps the Executive Committee to adapt to regulatory changes, new market trends and keep abreast of any updates in the Principles for Financial Market Infrastructures (PFMI) and other international standards applicable to the organization from different perspectives. Its mandate includes:

- Support in making informed decisions that consider users' interest.
- Serve as a forum for dialogue and exchange on key industry topics.
- Advise on the system's key risks, internal controls, technology, operations, development, strategy, enhancements, and any other area for improvement.
- Advise on changes deemed necessary to the system.
- Analyze impacts of these changes and advise accordingly.
- Review and advise on changes to the pricing model.
- Review and advise on changes to the Rulebook and Participation Agreement.

CORE SERVICES AND FUNCTIONS

The current inefficiencies in cross-border payments are a global issue, primarily high costs, slow processing times, lack of transparency, high-operational and compliance costs for financial institutions, limited access, among others. They are impediments to financial inclusion, to business and investment opportunities and to more effective collaboration between countries and regions. Enhancements to cross-border payments are inevitable. The global economy is becoming more interconnected, and demand for efficient, reliable payments is only growing. Cross-border payments cannot remain a source of friction.

Buna provides a solution to this global problem by **making cross-border payments as efficient as domestic payments**. Buna achieves that by enabling financial institutions and Central Banks to send and receive payments in multiple currencies in a safe, cost-effective, risk-controlled, and transparent environment.



Buna serves multiple segments and use-cases, today the system processes corporate payments, personal remittances, FX settlement, trade and treasury payments. This makes Buna of significance to people, financial institutions, corporates and governments alike.

Individuals can better support their families when sending funds from abroad and manage their loans and savings across borders more effectively. Corporates will be able to optimize their cash management with faster payables and receivables. Governments can efficiently extend their services to their citizens living aboard and benefit from public pension schemes, scholarships or healthcare payments, among many other possible use cases. Financial institutions (the users of the system) are the ones who consume the system services and package the final product to the end users, benefiting from the efficiency of accessing a cross-border real-time payment rail with a wide network of institutions via a single connection, single agreement, and single account / per currency.

SYSTEM DESIGN AND OPERATIONS

Participant Access

Buna cross-border payment system is operating as a single efficient window for (100+) participant banks and central banks across (15) countries to transact with each other in real-time using (6) major currencies namely US Dollar (USD), Euro (EUR), Emirati Dirham (AED), Saudi Riyal (SAR), Egyptian Pound (EGP), Jordanian Dinar (JOD), in addition to Pakistani Rupee (PKR) which was recently announced and is currently in the process of being added to the system.

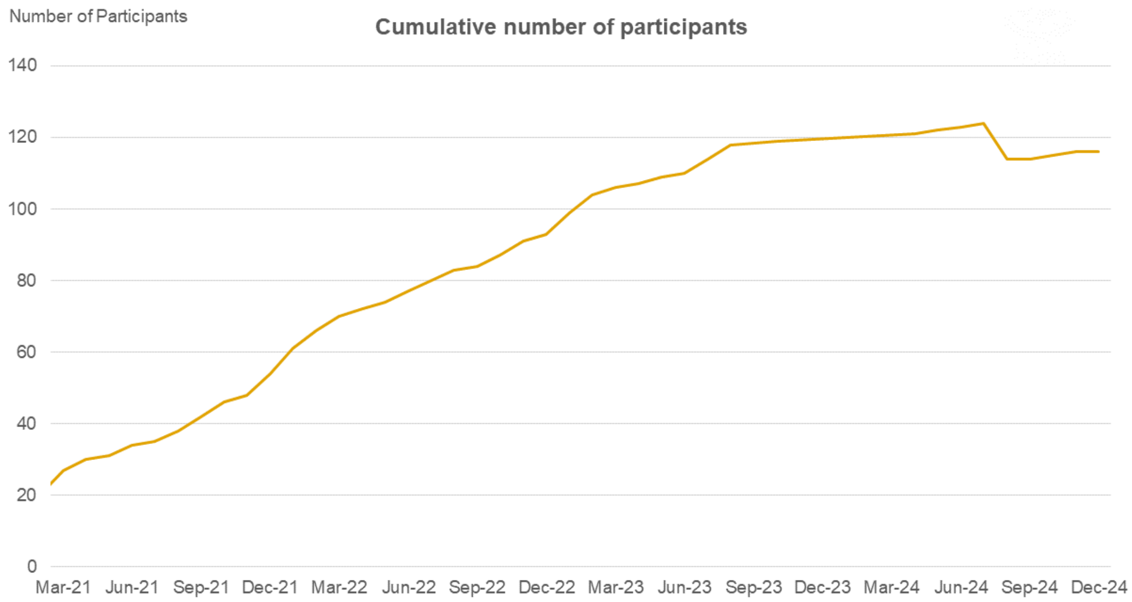
Operating Hours

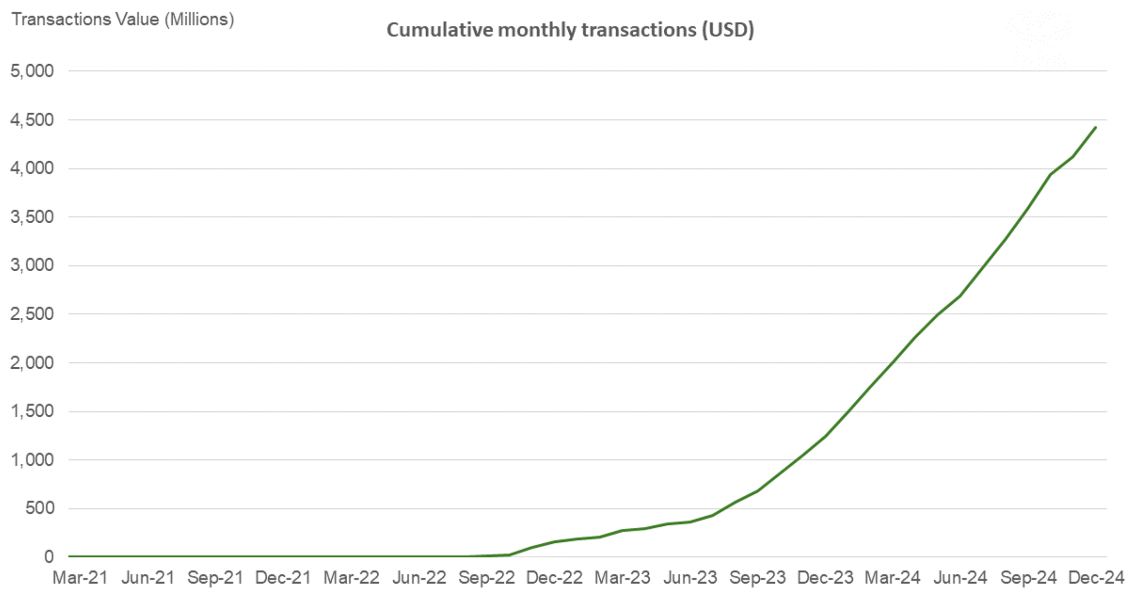
Buna operates a settlement window in the six currencies of 6-days per week (09:00 am – 09:00pm, UAE time) and is gradually moving towards 24X7 operation.

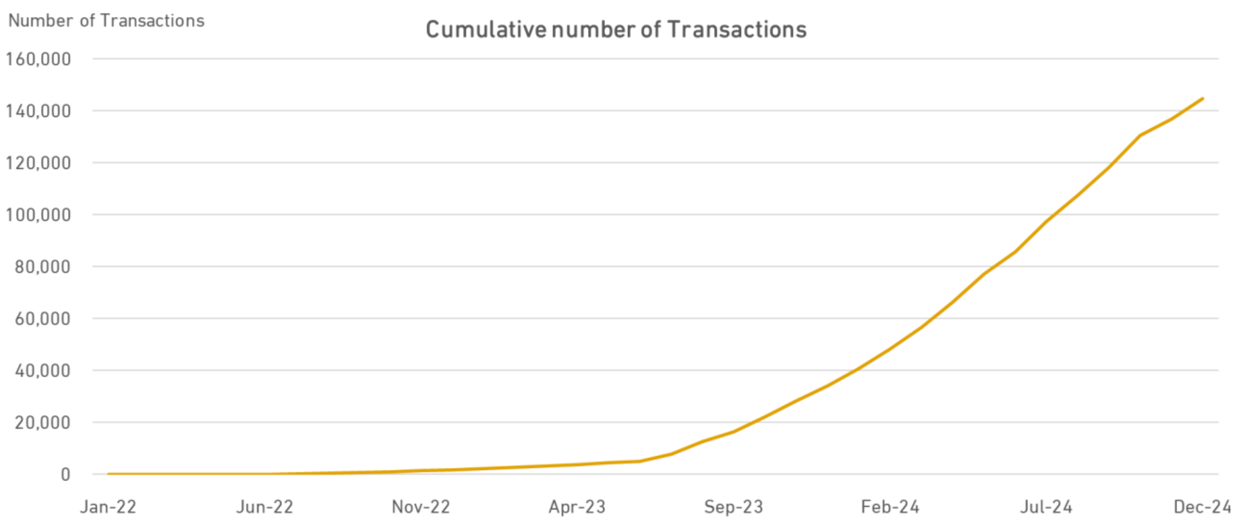
GENERAL STATISTICS

By the end of 2024, the total number of participants reached 116, with 8 new participants onboarded during the year. Out of these, 6 participants went live. Meanwhile, 12 participants were terminated, including 11 from the live participants.

The transaction volume processed through Buna showed steady growth, surpassing 110,000 transactions in total throughout 2024 on the 6 onboarded currencies, exceeding 3 times that processed in 2023, with total transactions processed is almost 150,000, which is net worth of almost USD 4.5 Billion.




Transactions Value (Millions)
Cumulative monthly transactions (USD)
5,000
4,500
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
Mar-21 Jun-21 Sep-21 Dec-21 Mar-22 Jun-22 Sep-22 Dec-22 Mar-23 Jun-23 Sep-23 Dec-23 Mar-24 Jun-24 Sep-24 Dec-24


Number of Transactions
Cumulative number of Transactions
160,000
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
Jan-22 Jun-22 Nov-22 Apr-23 Sep-23 Feb-24 Jul-24 Dec-24

PRINCIPLE-BY-PRINCIPLE SUMMARY NARRATIVE DISCLOSURE

PRINCIPLE 1: LEGAL BASIS

An FMI should have a well-founded, clear, transparent, and enforceable legal basis for each material aspect of its activities in all relevant jurisdictions.

- ***Key consideration 1 The legal basis should provide a high degree of certainty for each material aspect of an FMI’s activities in all relevant jurisdictions.***

  The Articles of Establishment (AoE) define Buna's System Operator, ARPCSO, as a separate legal entity fully owned by the Arab Monetary Fund (AMF) and is hosted in the United Arab Emirates (UAE).

  Under Article (7) from the AoE, ARPCSO is permitted to perform the following activities: (a) Setup, administer, operate and run the System and provide the services required for clearing and settlement. (b) Clear and settle transactions between participants. (c) Provide any other services required to support the objects of the Organization. (d) Incorporate companies, enter joint ventures with third parties, own shares in companies inside or outside the host country. (e) Enter into protocols or agreement with any government, central bank or regional or international organization to support the objects of the Organization. (f) Adopt methods of cooperation, partnership, acquisition and potential merger of the System with other payment systems and/or financial market infrastructures (FMIs). (g) Carry on any other business or any other objects as determined by the Board from time to time.

  Buna's System Operator, ARPCSO, is established as a distinct legal entity fully owned by the Arab Monetary Fund (AMF) and is based in the United Arab Emirates (UAE). The Host Country Agreement with the UAE Government, ratified by a Federal Decree, provides Buna with a solid legal foundation, granting it supranational status along with certain privileges and immunities. The Article of Establishment (AOE), the Host Country Agreement and the participation agreement establish a comprehensive legal framework for the system.

  However, this framework acknowledges the applicability of national laws, particularly in areas such as defence, home security, and law enforcement (article 3.3 of the AOE), as well as the recourse to English law in case of disputes between the operator and the participants.

- ***Key consideration 2: An FMI should have rules, procedures, and contracts that are clear, understandable, and consistent with relevant laws and regulations.***

  Buna has established a comprehensive Rulebook that consists of Rules and Procedures which form the basis for the contractual agreement governing its relationships with participants and Fund Holding Institutions (FHIs):

  - The Rules outline the mutual rights and obligations of participants, FHIs, and ARPCSO, covering, among others, criteria for participation, liabilities, eligible currencies, governing law, jurisdiction, and dispute resolution.
  - The Procedures define the operational and technical aspects of the system.

The Rulebook, along with other legal documents, which encapsulate rights and obligations, is governed by the English law and applies uniformly to all participants in the ecosystem, irrespective of their geographical location. These documents establish clear roles and responsibilities to ensure the neutrality, safety, and effective operation of the system.

- ***Key consideration 3: An FMI should be able to articulate the legal basis for its activities to relevant authorities, participants, and, where relevant, participants' customers, clearly and understandably.***

  APRCSO clearly articulates the legal basis for its activities to the relevant parties through its own Articles of Establishment (AoE) and its Rulebook, which is provided to all participants and FHIs during the onboarding process.

  The Articles of Establishment (AoE) define Buna's System Operator, ARPCSO, as a separate legal entity fully owned by the Arab Monetary Fund (AMF) and is hosted in the United Arab Emirates (UAE).

  The Rulebook is a key document is constructed based on the Participation and Fund Holding Institutions' Agreements, which collectively establish the legal and regulatory framework governing relationships within the Buna ecosystem. This ensures clarity and consistency in the application of rules, contributing to a well-defined and secure operational environment.

- ***Key considerations 4: An FMI should have rules, procedures, and contracts that are enforceable in all relevant jurisdictions. There should be a high degree of certainty that actions taken by the FMI under such rules and procedures will not be voided, reversed, or subject to stays.***

  ARPCSO operates with an independent juridical personality and supranational status, allowing for self-regulation under its own AoE and Rulebook.

  Buna's foundation documents, including the Articles of Establishment and Host Country Agreement, along with contractual agreements, establish a strong legal and regulatory framework, and a degree of certainty of the enforceability of its Rulebook.

  The Rulebook and legal documents, which encapsulate rights and obligations, are governed by the English law and they apply to all participants in the ecosystem, irrespective of their location.

By signing Buna's legal agreements, the parties are legally bound by them, accepting being governed by a common rule of law, jurisdiction, and dispute resolution method, hence avoiding conflicts with local laws and regulations. Therefore, for example, no transfer or settlement pertaining to the transactions performed through the System shall be cancelled, set aside, re-paid, or reversed, nor shall it be rectified, whether by a court judgement order, or by law.

In addition, the Host Country Agreement grants ARPCSO with the necessary legal basis to operate as a supranational entity with certain privileges and immunities that avoid conflicts of Buna's rules with the law of the host country.

- ***Key consideration 5: An FMI conducting business in multiple jurisdictions should identify and mitigate the risks arising from any potential conflict of laws across jurisdictions.***

  ARPCSO operates with an independent juridical personality and supranational status, allowing for self-regulation under its own AoE and Rulebook.

  The Rulebook, which encapsulates rights and obligations, is governed by the English law and it applies to all participants in the ecosystem, irrespective of their location. It has clear and well-defined roles and responsibilities in every aspect, to ensure neutrality, safety, and proper functioning of the system. The choice of English Law was made precisely to avoid conflicts of law, by establishing a supranational legal framework that all participants must abide by. By signing Buna's legal documents, all Participants become subject to the English law, accepting the enforceability of the terms and conditions established in the Rulebook.

  In terms of Fund Holding Institutions (FHIs), by signing the FHI agreement, they become subject to the English law, accepting the enforceability of the terms and conditions established in the Rulebook. For FHIs that have not signed Buna's legal documents, it is Buna's responsibility to assess whether their account opening arrangements align with the provisions of the Rulebook.

PRINCIPLE 2: GOVERNANCE

An FMI should have governance arrangements that are clear and transparent, promote the safety and efficiency of the FMI, and support the stability of the broader financial system, other relevant public interest considerations, and the objectives of relevant stakeholders.

- ***Key consideration 1: An FMI should have objectives that place a high priority on the safety and efficiency of the FMI and explicitly support financial stability and other relevant public interest considerations.***

  Buna aims to improve the efficiency, safety, and stability of its Payment System by pursuing several objectives. These objectives include reducing transaction completion time for cross-border payments, lowering costs and liquidity requirements for banks, strengthening the level of compliance by performing various checks, and enhancing Central Bank oversight through effective reporting.

To enhance financial stability and perform the required oversight on systemically important FMIs, Central Banks whose currencies are processed in Buna have established a Cooperative Oversight Framework that is exercised by a dedicated Oversight Committee. In addition to ARPCSO's own efforts, the objective of this Committee is to promote Buna's safety and efficiency, and to ensure continuous alignment with regulatory expectations.

Moreover, for other relevant public interest and in response to global requirements on financial crimes, Buna adds an extra layer of compliance on top of Participants' existing obligations. This compliance framework helps promote the safety of the system and its ecosystem. Ensuring compliance with Sanctions and Anti-Money Laundering/Counter-Terrorism Financing (AML/CTF) standards is a key objective of the system operator, providing support to Participants in enhancing their compliance levels.

Furthermore, ARPCSO, is developed an objectives-setting and monitoring framework. This framework will assess and monitor objectives in a timely manner, providing relevant reporting for informed decision-making.

- ***Key consideration 2: An FMI should have documented governance arrangements that provide clear and direct lines of responsibility and accountability. These arrangements should be disclosed to owners, relevant authorities, participants, and, at a more general level, the public.***

In accordance with its Articles of Establishment, ARPCSO's board of directors (BoD), by virtue of Board Resolutions, has formed three Board Committees. The BoD delegates to these committees some of its powers, authorities, and discretions for such time, on such terms and subject to such conditions as established in their own charters.

ARPCSO developed its Corporate Governance manual which sets out processes to delegate authorities and responsibilities from the board to management. In addition, the organizational structure describes and lists the different functional responsibilities within the organization, including their hierarchies and reporting lines.

ARPCSO discloses the relevant governance information as required through different channels and provides accountability to its different stakeholders as follows:

- Accountability to owners starts with the Articles of Establishment and materialized through the establishment of the BoD.
- Accountability to participants is provided through, but not limited to, advisory groups, annual reports, workshops, and legal documents.
- Accountability to Central Banks is provided through access to the system and to relevant reports.

  - Accountability to Fund Holding Institutions (FHIs) is provided through access to annual reports, invitations to Buna's workshops, and Buna's legal documents.

- ***Key consideration 3: The roles and responsibilities of an FMI's board of directors (or equivalent) should be specified, and there should be documented procedures for its functioning, including procedures to identify, address, and manage member conflicts of interest. The board should review both its overall performance and the performance of its board members regularly.***

  Buna's Board of Directors' structure, authorities, roles, and responsibilities are clearly outlined in the Articles of Establishment. In addition, the organization's Corporate Governance manual and policies describe the BoD's functions, composition, fit criteria, and all other relevant aspects.

  The manual mandates the establishment of specific committees to enhance the efficiency of board members in fulfilling their responsibilities and to enable in-depth consideration of key issues. Additionally, it outlines processes for delegating authority and responsibilities from the board to management. Each committee is governed by a charter that clearly delineates its objectives, authorities, and the roles and responsibilities of its members.

  - The Executive Committee (ExCo) is responsible for the day-to-day management of the organization, under the leadership of the BoD and its delegation of authority.

  - The Audit, Risk and Compliance Committee (ARCC) is responsible for the oversight of the system's key risks, internal controls, and the implementation of internal as well as AML / CFT compliance policies.

  - The Remuneration and Nomination Committee (RNC) assists the BoD in all matters related corporate governance in addition to the nomination and composition of the BoD and its Committees. It is responsible for the remuneration and compensation structure of ARPCSO, as well as overseeing and advising on the development of the ARPCSO's human resources activities.

  Moreover, the Corporate Governance Manual addresses conflicts of interest in multiple sections. It mandates that the Board of Directors (BoD) openly disclose any potential conflicts and abstain from voting on matters that may lead to such conflicts. Additionally, it is imperative that the External Auditor maintains independence. Furthermore, ARPCSO's frameworks provide comprehensive procedures for managing conflicts of interest, as well as associated codes of conduct.

  Regarding the assessment of the Board of Directors' performance, the Nomination and Remuneration Committee is responsible for evaluating the overall effectiveness of the board. Concurrently, the process for reviewing the performance of individual board members is currently being developed in collaboration with the shareholders.

- ***Key consideration 4: The board should contain suitable members with the appropriate skills and incentives to fulfil its multiple roles. This typically requires the inclusion of nonexecutive board member(s).***

  The Board of Directors (BoD) of ARPCSO comprises a chairperson representing the shareholder, five members representing users, and three independent members. In accordance with the organization's Articles of Establishment (AoE), at least one-third of the BoD must consist of independent members.

  An Independent Director is defined as an individual who has not been part of the ARPCSO Executive Committee and has had no financial dealings with ARPCSO, its shareholders, or their first- and second-degree relatives in the past two years. To qualify as an Independent Director, candidates must meet specific criteria set by ARPCSO, which include:

  - Non-Current and/or Former Executives of ARPCSO.
  - Expertise in relevant areas.
  - Non-Financial Links with ARPCSO.
  - Non-Related Parties to ARPCSO.
  - No Links with Shareholders of ARPCSO.
  - No Family Links with any of the former senior executives or current Executive Management team of ARPCSO or any of the Directors.

  Board members receive an annual gross fee and is not linked to the performance of the organization, with no additional incentives.

- ***Key consideration 5: The roles and responsibilities of management should be specified. An FMI's management should have the appropriate experience, a mix of skills, and the integrity necessary to discharge their responsibilities for the operation and risk management of the FMI.***

  The Board of Directors (BoD) has approved the organizational structure of ARPCSO, which was developed in alignment with Buna's business model and industry benchmarks. This structure identifies the key capabilities necessary for ARPCSO to fulfil its mandate and operate effectively. It has been designed with the flexibility to support a hybrid functional/product model, facilitating ARPCSO's future product expansion plans. Additionally, it includes detailed roles and responsibilities for both management and staff.

  The selection and hiring process for ARPCSO's Senior Management involved close coordination with Central Banks, beginning with the definition of roles and culminating in the selection of final candidates. External consultants were also engaged to assist in this selection process.

Job descriptions have been established for all positions within the organization to ensure a balanced mix of skills, expertise, and risk management capabilities. Furthermore, an annual performance assessment is conducted for all staff in collaboration with the Human Resources Department and the Nomination and Remuneration Committee, particularly regarding decisions related to the Chief Executive Officer and other Executive Management members. The ongoing development of a framework for managing objectives will further enhance the assessment of Senior Management performance.

- ***Key consideration 6: The board should establish a clear, documented risk-management framework that includes the FMI's risk-tolerance policy, assigns responsibilities and accountability for risk decisions, and addresses decision-making in crises and emergencies. Governance arrangements should ensure that the risk management and internal control functions have sufficient authority, independence, resources, and access to the board.***

ARPCSO's Board of Directors (BoD) approved the Risk Management Policy, which empowers ARPCSO to uphold effective risk management practices for the proactive identification, assessment, and mitigation of risks related to Buna, the payment system, and ARPCSO as the operator. The policy aims to set guidelines, create a common risk language, define roles, and cultivate a strong risk culture.

In alignment with the Three Lines of Defense Model, the policy delineates functional and risk reporting lines throughout the organization, integrating risk management into daily operations and decision-making. It also maintains ongoing collaboration with the Internal Audit Department while implementing measures to prevent conflicts of interest. A Risk Assessment Criteria and a risk heatmap have been developed and approved by the board of directors.

Complementing the Risk Management Policy is the Risk Appetite Statement, which outlines the risk parameters guiding ARPCSO's operations. This statement clearly articulates the level of risk the organization is prepared to accept in its core activities while striving to achieve the objectives of Buna. It sets appropriate thresholds for various risks that could impact financial performance, reputation, and operational integrity. Additionally, enhanced oversight measures are being introduced to monitor critical permanent control procedures.

To ensure continuous improvement of ARPCSO's risk management capabilities, both the Risk Management Policy and Risk Appetite Statement undergo comprehensive reviews at least every two years or whenever significant changes occur.

- ***Key consideration 7: The board should ensure that the FMI's design, rules, overall strategy, and major decisions reflect appropriately the legitimate interests of its direct and indirect participants and other relevant stakeholders. Major decisions should be disclosed.***

ARPCSO's Advisory Group serves as a consultancy body that helps the Executive Committee to adapt to regulatory changes, new market trends and keep abreast of any updates in the Principles for Financial Market Infrastructures ("PFMI") and other international standards applicable to ARPCSO from different perspectives. This group assists the organization in decision-making, considering the interests of ARPCSO's participants and other relevant stakeholders, through:

- Advising the ExCo on necessary changes and their impact(s) on the system.
- Stay abreast of any change in regulation, principles, and practices that may impact the system and ARPCSO.
- Advise on the Buna's key risks, internal controls, technology, operations, development, strategy enhancements, and any other areas for improvement.
- Review and advise on updates to the Buna's Rulebook.

All recommendations, progress, and actions raised by the Advisory Group are reported directly to the ExCo. Accordingly, the committee reports the relevant information to the BoD for decision-making.

Major decisions are disclosed to the relevant stakeholders from the public (including Participants and FHIs) through official circulars. Also, decisions are shared on a timely basis with Buna's community through workshops and other means of communication.

PRINCIPLE 3: FRAMEWORK FOR THE COMPREHENSIVE MANAGEMENT OF RISKS

An FMI should have a sound risk-management framework for comprehensively managing legal, credit, liquidity, operational, and other risks.

- ***Key consideration 1: An FMI should have risk-management policies, procedures, and systems that enable it to identify, measure, monitor, and manage the range of risks that arise in or are borne by the FMI. Risk-management frameworks should be subject to periodic review.***

In line with the Principles of Financial Market Infrastructures, risks that may arise in Buna include, but are not limited to, Operational Risk, Credit Risk, General Business Risk, Liquidity Risk, Legal Risk, Custody and Investment Risk, Cyber Risk, Information Security Risk, Third-Party Risk, Fraud Risk, and Systemic Risk.

Under the umbrella of the Three lines of Defense model, the Risk Management Policy outlines the principles and responsibilities for risk management within the organization. It establishes a framework for the ongoing identification and assessment of risks to which Buna may be exposed. Reinforcing this policy are several key processes which are described with further details in Principle 17.

ARPCSO fosters a continuous system of communication and collaboration across the organization, flowing both bottom-up and top-down. Each department is represented by a Risk Owner (typically the Department Head) and a designated Risk Champion. Through cyclical risk management activities, the necessary reporting and escalation is performed to highlight areas with elevated risk exposure or weakened internal control setup. In coordination with the Risk Management Department, each Risk Owner continuously and proactively determines the appropriate risk response—whether through mitigation, acceptance, avoidance, or transfer.

To ensure continuous improvement of ARPCSO's risk management capabilities, both the Risk Management Policy and Risk Appetite Statement undergo comprehensive reviews at least every two years or whenever significant changes occur.

- ***Key consideration 2: An FMI should provide incentives to participants and, where relevant, their customers to manage and contain the risks they pose to the FMI.***

Buna operates on a pre-funded model with secured settlement finality, effectively mitigating credit, liquidity, and settlement risks for its participants. However, its primary risk exposure lies in reputational risk, which could arise if the system is misused for fraudulent payments, money laundering, or terrorism/proliferation financing. Buna employs the following Compliance processes to address this risk:

- Onboarding and Periodic Due Diligence: Verifies that new applicants and existing participants meet Buna's eligibility requirements.
- Post-transaction AML Monitoring: Continuously assesses participant activities to detect suspicious behavior.
- Sanctions Screening: Continuously checks entities and transactions against relevant sanctions lists.
- Fraud Detection: Uses an intelligent engine and predefined scenarios to identify and deter fraudulent activities.

To monitor the risks posed by participants and their customers, ARPCSO employs multiple communication channels to share essential information.

- Participation eligibility information is shared with new applicants to make them aware of their responsibilities in managing risks.
- In case of payment rejection or true fraud detection, transaction details may be reported to the participant, including the reasons for rejection and any sanctions violations.
- Ongoing bilateral and generic awareness sessions are conducted where participants' queries are addressed to enhance their understanding of the risks associated with participating in Buna.

Buna currently does not apply a penalties policy for participants who fail to settle transactions on time, as it operates on a gross settlement basis with pre-funding. This structure prevents any adverse impact on the system or other participants due to a participant's failure to settle. Nevertheless, the need for a penalties policy is regularly assessed and may be reconsidered if conditions change.

- ***Key consideration 3: An FMI should regularly review the material risks it bears from and poses to other entities (such as other FMIs, settlement banks, liquidity providers, and service providers) as a result of interdependencies and develop appropriate risk management tools to address these risks.***

  Buna is exposed to and continuously monitors the following risks arising due to interdependencies. Like all other types of risks applicable to Buna, ARPCSO continuously identifies, monitors, and treats risks of interdependencies in line with the Risk Management Policy.

  - Dependency on Critical Service Providers (CSP):

    Currently, Buna's only CSP is SWIFT, being the system's sole message network carrier. Cyclical risk assessments are performed in collaboration with SWIFT to evaluate the risk exposure and the effectiveness of the existing control setup associated with this dependency.

    In addition, Buna undertakes continuous re-assessment of its CSPs to ensure proactive monitoring of associated risks and to implement appropriate mitigation strategies if new CSPs emerge.

  - Dependency on Fund Holding Institutions (FHIs):

    Buna's reliance on FHIs for liquidity management of Participants presents a risk to settlement processes if an FHI becomes unavailable. Furthermore, should an FHI enter bankruptcy, it may disrupt settlement for a specific currency until a new FHI is secured.

    Buna mitigates dependence on FHIs by implementing stringent selection criteria. Whenever feasible, Buna utilizes Central Banks of the respective eligible currencies for fund-holding services. In cases where the Central Bank cannot serve as the FHI, a Commercial Bank is engaged to manage Participants' funds. To ensure the reliability of these commercial banks, Buna is developing a monitoring mechanism to assess their performance, focusing on financial stability, regulatory compliance, adherence to risk management practices, endpoint security, and business continuity management.

  - Dependency on other service providers:

    Buna engages with Service Providers to deliver specific outsourced services for the organization. To effectively monitor and mitigate the associated risk exposure, various contractual agreements and service level agreements (SLAs) are established, along with timely monitoring mechanisms.

As of now, Buna does not present any risks to other entities since no interdependencies exist. Given that Buna's scope is confined to cross-border transactions, the transaction volume and value are not anticipated to create systemic risks or negatively impact the monetary policy of the different settlement currencies.

- ***Key considerations 4: An FMI should identify scenarios that may potentially prevent it from being able to provide its critical operations and services as a going concern and assess the effectiveness of a full range of options for recovery or orderly wind-down. An FMI should prepare appropriate plans for its recovery or orderly wind-down based on the results of that assessment. Where applicable, an FMI should also provide relevant authorities with the information needed for purposes of resolution planning.***

Measures are in place to ensure the availability, efficiency, and effectiveness of Buna's services. Buna has developed a Disaster Zone Matrix, categorizing 128 scenarios that could prevent Buna from providing services. The matrix includes scenarios related to data centers' availability, connectivity, and personnel availability, with four defined disaster zones based on severity (Yellow, Amber, Red, and Black).

After declaring a disaster zone, Buna triggers recovery plans, which include:

- Disaster Recovery Plan (DRP): Outlines methodologies to restore Buna's platform to normalcy during a disaster.
- Remote Connectivity and/or Disaster Recovery Site: Procedures for remote system access and mobilization of critical staff to the Disaster Recovery Site.
- Key and Backup Staff Identification: Procedures for identifying backup staff to take over critical roles in case of unavailability.

Regular testing, including Disaster Recovery drills and remote connectivity assessments, ensures the effectiveness of these plans. Adjustments and improvements are made as necessary to maintain optimal preparedness. In addition, The Business Continuity Management Program (BCP) and DRP are updated annually or more frequently following major system updates or upgrades. These measures collectively contribute to the robustness of Buna's business continuity and disaster recovery capabilities.

In terms of wind-down, Buna ensures participants have sufficient time to route payments through alternative channels before termination. The wind-down plan is detailed in the Rulebook, and it includes a three-month written notice to all participants and FHIs in case of voluntary liquidation. If this scenario materializes, ARPCSO will take the necessary measures to ensure the settlement of all payment messages and fees prior to termination.

PRINCIPLE 4: CREDIT RISK

An FMI should effectively measure, monitor, and manage its credit exposure 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.

The System's centralized model mitigates its credit risk exposure, for both the system and its participants, through a pre-funding model. Settlement of transactions takes place if, and only if, there is provision in the account of the payer.

To mitigate further the credit risk exposure as a result of Buna's reliance on some non-Central Bank settlement agents (or FHIs):

- Buna follows a stringent selection criterion for those settlement agents.
- Buna continuously evaluates the feasibility of diversifying this risk exposure across multiple FHIs.

Buna is developing a monitoring mechanism to assess the performance of those settlement agents, focusing on financial stability, regulatory compliance, adherence to risk management practices, endpoint security, and business continuity management.

PRINCIPLE 5: COLLATERAL

An FMI that requires collateral to manage its or its participants' credit exposure should accept collateral with low credit, liquidity, and market risks. An FMI should also set and enforce appropriately conservative haircuts and concentration limits.

Buna does not take any collateral to manage its participant's credit exposure.

PRINCIPLE 6: MARGIN

A CCP should cover its credit exposures to its participants for all products through an effective margin system that is risk-based and regularly reviewed.

This principle does not apply to a payment system like Buna, as it is specific to Central Counterparties (CCPs).

PRINCIPLE 7: LIQUIDITY RISK

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

- ***Key consideration 1: An FMI should have a robust framework to manage its liquidity risks from its participants, settlement banks, nostro agents, custodian banks, liquidity providers, and other entities.***

  Buna is not exposed to liquidity risk. By adopting a pre-funded model for settlement, Buna ensures that all transactions are fully funded before settlement, eliminating the likelihood of liquidity shortages and enhancing the system's overall stability.

  While Buna itself is not exposed to liquidity risk due to its pre-funded model, liquidity risk could materialize consequentially as a result of operational risks, such as dependencies or misalignments with FHIs' processes. Covering this aspect, Buna receives the fund holding services through Central Banks of the respective eligible currencies whenever possible. Where it is not possible to have the Central Bank of issue as a FHI, a Commercial Bank is utilized to hold participants' funds instead.

  In addition, to monitor and mitigate liquidity risk further, the system has built-in automated controls that ensure no transactions are being processed by any participant without having the required liquidity needs. Also, ARPCSO conducts daily reconciliations to confirm that the FHIs' balances and the transaction records match the FHIs' records for each currency.

  Furthermore, from Participants' perspective, access to Buna portal is provided to them for continuous monitoring and oversight of their own liquidity capacity.

- ***Key consideration 2: An FMI should have effective operational and analytical tools to identify, measure, and monitor its settlement and funding flows on an ongoing and timely basis, including its use of intraday liquidity.***

  ARPCSO monitors operational issues by conducting reconciliation processes for business operations. These processes ensure that the FHIs' balance and transaction records match their records, helping to identify and address any discrepancies. In addition, Participants have access to Buna's portal for continuous monitoring and oversight of their liquidity capacity.

  Since Buna operates as a real-time gross settlement (RTGS) system with a pre-funded model, there is no need to use analytical tools to monitor liquidity. Payments are only processed when the required liquidity is available in each participant's account, eliminating the risk of liquidity shortfalls. The pre-funded model ensures that settlements occur with the necessary liquidity in place, minimizing liquidity-related operational issues.

- ***Key consideration 3: A payment system or SSS, including one employing a DNS mechanism, should maintain sufficient liquid resources in all relevant currencies to effect same-day settlement, and where appropriate intraday or 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 payment obligation in extreme but plausible market conditions.***

  Buna does not use a deferred net settlement (DNS) mechanism. Since the system works as an RTGS and adopted a pre-funded model, it is not required to estimate the size of the liquidity shortfall as no payment will be processed unless the required liquidity is available in each participant account.

- ***Key consideration 4: A CCP should maintain sufficient liquid resources in all relevant currencies to settle securities-related payments, make required variation margin payments, and meet other payment obligations on time 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 payment obligation to the CCP in extreme but plausible market conditions. In addition, a CCP that is involved in activities with a more-complex risk profile or that is systemically important in multiple jurisdictions should consider maintaining additional liquidity resources sufficient to cover a wider range of potential stress scenarios that should include, but not be limited to, the default of the two participants and their affiliates that would generate the largest aggregate payment obligation to the CCP in extreme but plausible market conditions.***

  This key consideration is only applicable to Central Counterparties (CCPs).

- ***Key consideration 5: For the purpose of meeting its minimum liquid resource requirement, an FMI's qualifying liquid resources in each currency include cash at the central bank of issue and at creditworthy commercial banks, committed lines of credit, committed foreign exchange swaps, and committed repos, as well as highly marketable collateral held in custody and investments that are readily available and convertible into cash with prearranged and highly reliable funding arrangements, even in extreme but plausible market conditions. If an FMI has access to routine credit at the central bank of issue, the FMI may count such access as part of the minimum requirement to the extent it has collateral that is eligible for pledging to (or for conducting other appropriate forms of transactions with) the relevant central bank. All such resources should be available when needed.***

  This key consideration is not applicable since, other than the participants' account funding, Buna does not accept any other type of liquid resources that could result in exposing the system to liquidity risk.

- ***Key consideration 6: An FMI may supplement its qualifying liquid resources with other forms of liquid resources. If the FMI does so, then these liquid resources should be in the form of assets that are likely to be saleable or acceptable as collateral for lines of credit, swaps, or repos on an ad hoc basis following a default, even if this cannot be reliably prearranged or guaranteed in extreme market conditions. Even if an FMI does not have access to routine central bank credit, it should still take account of what collateral is typically accepted by the relevant central bank, as such assets may be more likely to be liquid in stressed circumstances. An FMI should not assume the availability of emergency central bank credit as a part of its liquidity plan.***

  This key consideration is not applicable since, other than the participants' account funding, Buna does not accept any other type of liquid resources that could result in exposing the system to liquidity risk.

- ***Key consideration 7: An FMI should obtain a high degree of confidence, through rigorous due diligence, that each provider of its minimum required qualifying liquid resources, whether a participant of the FMI or an external party, has sufficient information to understand and to manage its associated liquidity risks, and that it has the capacity to perform as required under its commitment. Where relevant to assessing a liquidity provider's performance reliability with respect to a particular currency, a liquidity provider's potential access to credit from the central bank of issue may be taken into account. An FMI should regularly test its procedures for accessing its liquid resources at a liquidity provider.***

  As previously described, Buna is not exposed to liquidity risk since a settlement takes place if, and only if, there is provision in the account of the payer. However, to assess the procedures of FHIs in liquidity management, various tests are conducted along with the Participants, to test the efficiency and effectiveness of withdrawal activities.

- ***Key consideration 8: An FMI with access to central bank accounts, payment services, or securities services should use these services, where practical, to enhance its management of liquidity risk.***

  Buna primarily receives fund-holding services through Central Banks for eligible currencies. However, in cases where Central Banks cannot serve as Fund-Holding Institutions (FHI), Commercial Banks are utilized. Participants use Correspondent Banks to fund their settlement accounts at the fund-holding institution and to hold participant funds for specific currencies.

  Before engaging Commercial Banks for these purposes, Buna follows a rigorous selection process based on various criteria. These criteria include institutional and regulatory requirements, technical capabilities, and operational considerations such as connectivity, liquidity, business continuity, and testing. By adhering to these criteria, Buna ensures that the selected Commercial Banks meet the necessary standards to serve as reliable fundholding and settlement institutions for the system's operations.

- **Key consideration 9: An FMI should determine the amount and regularly test the sufficiency of its liquid resources through rigorous stress testing. An FMI should have clear procedures to report the results of its stress tests to appropriate decision makers at the FMI and to use these results to evaluate the adequacy of and adjust its liquidity risk management framework. In conducting stress testing, an FMI should consider a wide range of relevant scenarios. Scenarios should include relevant peak historic price volatilities, shifts in other market factors such as price determinants and yield curves, multiple defaults over various time horizons, simultaneous pressures in funding and asset markets, and a spectrum of forward-looking stress scenarios in a variety of extreme but plausible market conditions. Scenarios should also take into account the design and operation of the FMI, include all entities that might pose material liquidity risks to the FMI (such as settlement banks, nostro agents, custodian banks, liquidity providers, and linked FMIs), and where appropriate, cover a multiday period. In all cases, an FMI should document its supporting rationale for, and should have appropriate governance arrangements relating to, the amount and form of total liquid resources it maintains.**

  Buna is not required to perform stress testing since the system works as an RTGS and adopts a prefunded model.

- ***Key consideration 10: An FMI should establish explicit rules and procedures that enable the FMI to effect same-day and, where appropriate, intraday and multiday settlement of payment obligations on time following any individual or combined default among its participants. These rules and procedures should address unforeseen and potentially uncovered liquidity shortfalls and should aim to avoid unwinding, revoking, or delaying the same-day settlement of payment obligations. These rules and procedures should also indicate the FMI's process to replenish any liquidity resources it may employ during a stress event, so that it can continue to operate in a safe and sound manner.***

  Buna is not exposed to unforeseen and potentially uncovered liquidity shortfalls since the system works adopts a pre-funded model with real-time settlement.

PRINCIPLE 8: SETTLEMENT FINALITY

An FMI should provide a clear and certain final settlement, at a minimum by the end of the value date. Where necessary or preferable, an FMI should provide a final settlement intraday or in real-time.

- ***Key consideration 1: An FMI's rules and procedures should clearly define the point at which settlement is final.***

  Buna offers two distinct services, the Real Time Gross Settlement (RTGS) and Instant Payment Service (IPS), both seamlessly integrated into a unified market infrastructure. Settlement, finality, and irrevocability aspects are meticulously outlined in Buna's Rulebook. The settlement, finality, and irrevocability aspects ensure that all Payment Messages are irrevocable once they enter the Settlement Session, and settlements are final and binding upon the submitting participants and the System. Overall, Buna ensures that all Payment Messages in both services become irrevocable at specific points during the settlement process, providing certainty and security in financial transactions for the Participants and the System. In addition, by signing the relevant agreements (FHI and Participation Agreements), all participants and FHIs become bound by Buna’s Rulebook with all its requirements.

The legal structure of Buna, as a supranational entity, fortifies the settlement finality against voidance or reversal by national jurisdictions.

Further assurance is derived from agreements with Central Banks, establishing operational protocols and responsibilities, such as fund holding and processing services. The System Operator maintains control over funds within the Fund Holding Institution (FHI) account, with withdrawals contingent on the Operator's instruction.

- ***Key consideration 2: An FMI should complete final settlement no later than the end of the value date, and preferably intraday or in real time, to reduce settlement risk. An LVPS or SSS should consider adopting RTGS or multiple-batch processing during the settlement day.***

Buna operates a centralized payment system that enables Participants to settle credit transfers in real time. Through real-time settlement (RTGS), payments meeting the required conditions are settled instantly upon receipt, while others are either queued or rejected. Payments may be pending due to insufficient liquidity or compliance investigations. It falls upon ARPCSO to diligently convey the status of all payments to participants consistently.

Batch processing is not offered by Buna. Instead, participants are informed of their final account balances through real-time online access, facilitating balance checks as needed. Additionally, the system automatically issues debit confirmations daily, with statement messages dispatched to all participants, summarizing settled transactions for the day.

- ***Key consideration 3: An FMI should clearly define the point after which unsettled payments, transfer instructions, or other obligations may not be revoked by a participant.***

The settlement and irrevocability processes are detailed in Buna's Rulebook for both its RTGS and IPS services, ensuring that all Payment Messages are irrevocable once they enter the Settlement Session, and settlements are final and binding upon the submitting participants and the System. Revoking payments is possible until the time of settlement only, not beyond.

Settlement and irrevocability details are documented in Buna's Rulebook, disseminated to stakeholders (Participants, Fund Holding Institutions, and Central Banks) by Buna through legal documents and the onboarding process.

PRINCIPLE 9: MONEY SETTLEMENTS

An FMI should conduct its money settlements in central bank money where practical and available. If central bank money is not used, an FMI should minimize and strictly control the credit and liquidity risk arising from the use of commercial bank money.

- ***Key* consideration *1: An FMI should conduct its money settlements in central bank money, where practical and available, to avoid credit and liquidity risks.***

  Buna facilitates settlements for each currency within its own accounting framework. These settlements are supported by funds held in a singular account within a designated Fund Holding Institution (FHI). Ideally, Buna avails fund holding services from the Central Banks associated with the respective eligible currencies. However, in cases where utilizing the Central Bank of issue as the Fund-Holding Institution is not feasible, a Commercial Bank is enlisted to hold participants' funds instead.

- ***Key consideration 2: If central bank money is not used, an FMI should conduct its money settlements* using *a settlement asset with little or no credit or liquidity risk.***

  Buna facilitates settlements for each currency within its own accounting framework. These settlements are supported by funds held in a singular account within a designated Fund Holding Institution (FHI). Ideally, Buna avails fund holding services from the Central Banks associated with the respective eligible currencies. However, in cases where utilizing the Central Bank of issue as the Fund-Holding Institution is not feasible, a Commercial Bank is enlisted to hold participants' funds instead.

- ***Key consideration 3: If an FMI settles in commercial bank money, it should monitor, manage, and limit its credit and liquidity risks arising from the commercial settlement banks. In particular, an FMI should establish and monitor adherence to strict criteria for its settlement banks that take into account, among other things, their regulation and supervision, creditworthiness, capitalization, access to liquidity, and operational reliability. An FMI should also monitor and manage the concentration of credit and liquidity exposures to its commercial settlement banks.***

  Before Buna utilizes a commercial bank for fund-holding services, the selection is based on a set of criteria that includes institutional and regulatory requirements, technical requirements, and operational requirements. Periodic meetings are held with Fund Holding Institutions (FHIs) to discuss their roles, and credit rating and capitalization are considered to monitor any potential risks to the system.

  As Buna operates on a pre-funded settlement model, Buna is exempted from the obligation to monitor, manage, and restrict credit and liquidity exposure. The system's reliance on pre-funding ensures that settlement occurs only when the payer's account has adequate provision, reducing credit and liquidity risks for both the system and participants. Built-in controls within the Buna system further guarantee that transactions are processed only when participants possess the requisite liquidity.

- ***Key consideration 4: If an FMI conducts money settlements on its books, it should minimize and strictly control its credit and liquidity risks.***

  Settlement processes within Buna are outlined in its Rulebook across various sections. The centralised model of the System reduces liquidity risk through pre-funding. Participants must prefund their accounts to settle transactions, preventing transactions exceeding available liquidity. This model ensures Buna's accounts with the Fund Holding Institution always maintain sufficient balances to process payments according to Buna's rules.

- ***Key consideration 5: An FMI's legal agreements with any settlement banks should state clearly when transfers on the books of individual settlement banks are expected to occur, that transfers are to be final when effected, and that funds received should be transferable as soon as possible, at a minimum by the end of the day and ideally intraday, to enable the FMI and its participants to manage credit and liquidity risks.***

  Settlements within the Buna system are executed directly within the system itself, without the involvement of Settlement Banks. This settlement model is comprehensively detailed in Buna's Rulebook. Once a Payment Message enters the Settlement Session, it becomes irrevocable, and the system settles the transaction by debiting and crediting the relevant Participant Accounts simultaneously at the end of each Settlement Session. Participants receive notifications confirming the completion of the settlement.

  Buna's settlement model allows for immediate transferability of funds received, ensuring efficient and real-time settlements within the system.

PRINCIPLE 10: PHYSICAL DELIVERIES

An FMI should clearly state its obligations concerning the delivery of physical instruments or commodities and should identify, monitor, and manage the risks associated with such physical deliveries.

This principle does not apply to a payment system like Buna, as it is specific to Central securities depositories (CSDs), Securities settlement systems (SSSs), and Central counterparties (CCPs).

PRINCIPLE 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.

This principle does not apply to a payment system like Buna, as it is specific to Central securities depositories (CSDs), Securities settlement systems (SSSs), and Central counterparties (CCPs).

PRINCIPLE 12: EXCHANGE OF VALUE SETTLEMENT SYSTEMS

An FMI that is an exchange-of-value settlement system should eliminate principal risk by ensuring that the final settlement of one obligation occurs if and only if the final settlement of the linked obligation also occurs, regardless of whether the FMI settles on a gross or net basis and when finality occurs.

- ***Key consideration 1: An FMI that is an exchange-of-value settlement system should eliminate principal risk by ensuring that the final settlement of one obligation occurs if and only if the final settlement of the linked obligation also occurs, regardless of whether the FMI settles on a gross or net basis and when finality occurs.***

  Buna eliminates principal risk by ensuring that the final settlement of one obligation occurs if and only if the final settlement of the linked obligation also occurs, regardless of whether the FMI settles on a gross or net basis and when finality occurs. This offering is based on Payment Vs. Payment (PVP), which eliminates the risks associated with this principle. PVP obligations are settled on a gross basis with a simultaneous finality.

PRINCIPLE 13: PARTICIPANTS' DEFAULT RULES AND PROCEDURES

An FMI should have effective and clearly defined rules and procedures to manage a participant's 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.

- ***Key consideration 1: An FMI should have default rules and procedures that enable the FMI to continue to meet its obligations in the event of a participant default and that address the replenishment of resources following a default.***

  Buna's Rulebook delineates triggers for participants' suspension and termination upon materialization of any of the below:

  - Upon any breach by the Participant of the System documents.
  - If the System Operator at its discretion considers that suspension is necessary to protect the interests of the System Operator or Participants (excluding the Participant concerned) and the safety and integrity of the System; or
  - In the event of the deterioration in the financial stability of the Participant or any Force Majeure Event affecting the Participant.

  To ensure participants are fully informed, Buna discloses suspension and termination rules and procedures during the onboarding process and as applicable through the website.

- ***Key consideration 2: An FMI should be well prepared to implement its default rules and procedures, including any appropriate discretionary procedures provided for in its rules.***

Buna has developed its internal procedures to implement the suspension and termination of participants in case of default, including any appropriate discretionary procedures provided for in its rules.

- ***Key consideration 3: An FMI should publicly disclose key aspects of its default rules and procedures.***

  Buna has published in its website the default, suspension and termination rules, which describe the appropriate discretionary procedures provided for, including the steps and procedures it will follow in the event of a participant default, including the roles and responsibilities of various stakeholders.

- ***Key consideration 4: an FMI should involve its participants and other stakeholders in the testing and review of the FMI's default procedures, including any close-out procedures. Such testing and review should be conducted at least annually or following material changes to the rules and procedures to ensure that they are practical and effective.***

  These procedures have already been tested by the actual suspension and termination of existing participants, ensuring that they are practical, effective, and aligned with the needs and expectations of the market. Buna maintains open communication channels with participants and stakeholders regarding the review of rules and procedures, providing regular updates on the process and outcomes of the review cycles.

PRINCIPLE 14: SEGREGATION AND PORTABILITY

A CCP should have rules and procedures that enable the segregation and portability of positions of a participant's customers and the collateral provided to the CCP concerning those positions.

This principle does not apply to a payment system like Buna, as it is specific to Central counterparties (CCPs).

PRINCIPLE 15: GENERAL BUSINESS RISK

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

- ***Key consideration 1: An FMI should have robust management and control systems to identify, monitor, and manage general business risks, including losses from poor execution of business strategy, negative cash flows, or unexpected and excessively large operating expenses.***

The general business risks of the Organization are managed according to its Risk Management policy and processes. These risks include potential decreases in revenue, rising costs, heightened competition, business sector failures, strategic errors, etc. Legal and Operational risks can also lead to general business risks. ARPCSO monitors its general business risk exposure by tracking revenue, cost recovery, and transaction volumes. A financial plan aids this monitoring by forecasting revenues and costs to establish breakeven points. The organization's risk management framework, viewed from a 2nd line perspective, involves identifying, rating, and documenting risks, along with their mitigation plans. For general business risks, the framework oversees ARPCSO's performance against strategic objectives, including financial goals. Deviations trigger actions for revenue enhancement (participants, transactions, pricing) and cost control (internal and external expenses).

- ***Key consideration 2: An FMI should hold liquid net assets funded by equity (such as common stock, disclosed reserves, or other retained earnings) so that it can continue operations and services as a going concern if it incurs general business losses. The amount of liquid net assets funded by equity an FMI should hold, should be determined by its general business risk profile and the length of time required to achieve a recovery or orderly wind-down, as appropriate, of its critical operations and services if such action is taken.***

  ARPCSO's sole owner allocated these liquid assets in cash to the organization's capital.

- ***Key consideration 3: An FMI should maintain a viable recovery or orderly wind-down plan and should hold sufficient liquid net assets funded by equity to implement this plan. At a minimum, an FMI should hold liquid net assets funded by equity equal to at least six months of current operating expenses. These assets are in addition to resources held to cover participant defaults or other risks covered under the financial resources principles. However, equity held under international risk-based capital standards can be included where relevant and appropriate to avoid duplicate capital requirements.***

  ARPCSO has developed a financial plan for Buna that includes revenue and cost forecasts to determine breakeven and cost-recovery paths. The organization performs an annual review of the financial plan to monitor performance against targets and assess capital funding requirements based on net income. ARPCSO's allocated cash capital is sufficient to cover operating expenses for at least six months and since Buna is not exposed to default risk since the system adopts a pre-funded model, ARPCSO's resources do not need to be split between business risks and losses associated with default of a member.

- ***Key consideration 4: Assets held to cover general business risk should be of high quality and sufficiently liquid in order to allow the FMI to meet its current and projected operating expenses under a range of scenarios, including in adverse market conditions.***

  Assets identified to cover general business risk are allocated in cash to ARPCSO's capital.

- ***Key consideration 5: An FMI should maintain a viable plan for raising additional equity should its equity fall close to or below the amount needed. This plan should be approved by the board of directors and updated regularly.***

  ARPCSO continuously monitors and assesses its financial plan, including the need to increase equity capital. In case an increase is required, ARPCSO escalates the matter to the sole owners for discussion and decision making.

PRINCIPLE 16: CUSTODY AND INVESTMENT RISKS

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.

- ***Key consideration 1: An FMI should hold its own and its participants' assets at supervised and regulated entities that have robust accounting practices, safekeeping procedures, and internal controls that fully protect these assets.***

  Participants' assets in Buna are held in accounts within Fund Holding Institutions (FHI). Buna prefers to use Central Banks for fund-holding services when possible. However, if Central Banks are not available, Commercial Banks are selected based on specific criteria, including institutional and regulatory requirements, technical capabilities, and operational considerations. ARPCSO also applies the same stringent criteria when selecting reputable banks to hold their assets. This approach ensures that participants' and ARPCSO's assets are held with reliable and trustworthy institutions.

- ***Key consideration 2: An FMI should have prompt access to its assets and the assets provided by participants when required.***

  Participants' assets in Buna are held in accounts within Fund Holding Institutions (FHI). Buna prefers to use Central Banks for fund-holding services when possible. However, if Central Banks are not available, Commercial Banks are selected based on specific criteria, including institutional and regulatory requirements, technical capabilities, and operational considerations. ARPCSO also applies the same stringent criteria when selecting reputable banks to hold their assets. This approach ensures that participants' and ARPCSO's assets are held with reliable and trustworthy institutions.

- ***Key consideration 3: An FMI should evaluate and understand its exposures to its custodian banks, taking into account the full scope of its relationships with each.***

  This key consideration is not applicable since ARPCSO does not perform investments.

- ***Key consideration 4: An FMI's investment strategy should be consistent with its overall risk-management strategy and fully disclosed to its participants, and investments***

should be secured by, or be claims on, high-quality obligors. These investments should allow for quick liquidation with little, if any, adverse price effect.

This key consideration is not applicable since ARPCSO does not perform investments.

PRINCIPLE 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 fulfilment of the FMI's obligations, including in the event of a wide-scale or major disruption.

- ***Key consideration 1: An FMI should establish a robust operational risk-management framework with appropriate systems, policies, procedures, and controls to identify, monitor, and manage operational risks.***

  Buna's Risk Management Policy, complimented by the Risk Appetite statement, defines the principles and responsibilities for managing all risk types within Buna, including operational risk. Operational risks are classified into four categories: people, processes, systems, and external events. To enhance the management of these categories, Buna has implemented several processes that facilitate the ongoing identification, monitoring, assessment, and management of associated risks.

  Accordingly, Buna established/is establishing (not limited to) the following major processes:

  - A Risk and Control Self-Assessment process to regularly identify risks, assess them, and evaluate the effectiveness of controls.
  - An Incidents Management process encompassing the reporting, logging, assessment, categorization, resolution, and closure of incidents that occur within Buna.
  - ARPCSO's change management process focuses on managing changes to services and platforms, ensuring that they provide business benefits while minimizing disruption. The process involves coordination with release, deployment, and configuration management, and relies on formal, documented procedures. The Change Advisory Board (CAB) reviews significant changes, and impact analysis is conducted in collaboration with stakeholders to align changes with business needs and market standards. The process includes comprehensive testing—such as sanity, functionality, system integration, and user acceptance tests—to ensure changes meet requirements. Additionally, supporting processes like Demand Management, Software Development Lifecycle (SDLC), and Technology Capacity Management have been introduced to align changes with business priorities, evaluate risks, and ensure system stability. These processes collectively enhance governance, minimize disruptions, and ensure resource availability for project releases.

- Various fraud-related policies, including the Financial Crime Compliance Policy and the Sanctions Screening Policy, as well as processes such as Transaction Monitoring. The organization is also expanding its fraud policy to encompass non-transactional fraud, including internal and external sources.
- An Information Security Management System (ISMS) that has been ISO 27001 certified since 2020, ensuring robust information security practices are in place.
- A Cyber Security Framework is being developed to reflect Buna's commitment to maintaining strong cybersecurity measures.
- A Business Continuity Management program which aims to provide a robust framework to ensure operational sustainability, tolerating minimal downtime and data loss in the event of unforeseen disruptions. The program will be complemented by contingency procedures regarding the recovery of financial transactions, if occurred.
- A comprehensive HR framework that includes the Code of Conduct, Conflict of Interest Policy, Anti-Bribery and Corruption Policy, Whistleblowing Policy, and Outsourcing Policy. This framework is continually evolving to adapt to changing needs.

Upon identification, an elevated risk exposure is monitored using Risk Acknowledgement Forms (RAFs), which are submitted to the Executive Committee for decision-making and to the Audit, Risk, and Compliance Committee for acknowledgment and board reporting, if necessary.

- ***Key consideration 2: An FMI's board of directors should clearly define the roles and responsibilities for addressing operational risk and should endorse the FMI's operational risk management framework. Systems, operational policies, procedures, and controls should be reviewed, audited, and tested periodically and after significant changes.***

The Audit Risk and Compliance Committee's (ARCC) primary risk-related responsibilities include:

- The ARCC oversees ARPCSO's system of internal controls over financial reporting and its disclosure controls and procedures. The committee periodically reviews with both the internal and external auditors, as well as with management, the procedures for maintaining and evaluating the effectiveness of these systems. The committee should be promptly notified of any significant deficiencies or material weaknesses in internal controls and kept informed about the steps and timetable for correcting them.

- The ARCC has responsibility for risk assessment and management and will provide the Board of Directors with the information it needs to understand all of the organization's major risks, their relationship to the organization's strategy and how these risks are being addressed.

From an independent assurance perspective, all ARPCSO’s policies, processes, SOPs, and systems are subject to internal audit reviews, as per the mandate and responsibilities of the third line of defense. In addition, ARPCSO’s Executive Management continuously assesses the need for additional external assessments, as required.

- ***Key consideration 3: An FMI should have clearly defined operational reliability objectives and should have policies in place that are designed to achieve those objectives.***

ARPCSO adheres to the PFMI standards; the organization defines monthly operational reliability objectives (OROs) and internal Key Performance Indicators (KPIs) to monitor the reliability of Buna's core applications, service availability, and infrastructure. These KPIs set specific targets for the recovery time objective (RTO) as maximum 2 hours and recovery point objective (RPO) as zero (i.e. no data loss) for different tiers of applications and services, as well as measures related to service availability and infrastructure capacity.

The IT service management processes in place, including Incidents Management, Problem Management, Change Management, Release and Deployment Management, and Disaster Recovery, are directly linked with the Risk Management Policy from an operational reliability point of view, and the risk assessment criteria is aligned with ARPCSO's risk assessment methodology defined in the Risk Management policy. The Risk Management Department plays a vital role in incident escalation and risk assessment for these activities.

Monitoring and reporting of the Operational Reliability Objectives (OROs) not only helps ARPCSO improve its operational reliability but also serves as valuable information for the Risk Management Department and Internal Audit to perform their oversight and assurance functions. Gaps identified in the OROs allow continuous improvement in line with the Organization's risk appetite.

In addition to the OROs, ARPCSO has defined KPIs for quality assurance of the platform which are supported by the test management processes in place. This process is designed to ensure that the platform’s components are tested and are meeting the reliability SLA/KPIs before going live.

- ***Key consideration 4: An FMI should ensure that it has scalable capacity adequate to handle increasing stress volumes and to achieve its service-level objectives.***

ARPCSO conducts regular monitoring of the system’s capacity and generates monthly reports for the relevant stakeholders. This monitoring activity aims for continuous improvement and optimization of Buna to withstand increased stress volumes and achieve its service level objectives. Through this continuous monitoring, ARPCSO proactively identifies capacity gaps prior their occurrence (near or exceeding capacity limits). Accordingly, the appropriate reporting and informed decision making is performed after the involvement of the relevant stakeholders and committees.

- ***Key consideration 5: An FMI should have comprehensive physical and information security policies that address all potential vulnerabilities and threats.***

  Buna upholds a comprehensive physical and environmental security policy, covering all Buna premises, including Headquarters and Data Centers, in support of its ISO/IEC 27001:2022-based information security management system. Controls governing access to secured areas are defined within this policy and are continuously enhanced.

  Buna's Data Centers are safeguarded according to international security standards, such as SOC 1 Type II, SOC 2 Type II, ISO 27001, PCI DSS, OHSAS 18001, ISO 9001:2015, ISO 22301, ISO 14001:2015, and ISO 50001. The Data Center is classified as a Tier 3 facility, incorporating robust mechanisms for physical, technical, and organizational security, including Perimeter Security, Colocation Area Security, Private Cages, Secure Cabinets, Security Systems, and Security Breach Notifications.

  Additionally, Buna is performing an extensive physical security assessment for its Headquarters in compliance with ISO 27001:2022 to further strengthen its security posture.

  The Network and Security Operations functions monitor incidents and security breaches proactively on a 24/7 basis, employing risk management, escalation protocols, and an incident management process. In addition, Buna enforces strict change management protocols, requiring all system changes to be approved by the Change Advisory Board (CAB) and rigorously tested before deployment in production. Security vulnerability scans are conducted whenever new releases or significant patches are introduced into the system.

  Furthermore, Buna has established a vulnerability management policy, which includes vulnerability assessments, compliance scans, and penetration testing. Aligned with international standards and best practices such as ISO/IEC 27001:2022, SWIFT CSP, and CIS/NIST, vulnerability assessments are conducted quarterly, or as needed, while annual penetration testing covers both internal/external infrastructure and detailed application assessments.

- ***Key consideration 6: An FMI should have a business continuity plan that addresses events posing a significant risk of disrupting operations, including events that could cause a widescale or major disruption. The plan should incorporate the use of a secondary site and should be designed to ensure that critical information technology (IT) systems can resume operations within two hours following disruptive events. The plan should be designed to enable the FMI to complete settlement by the end of the day of the disruption, even in case of extreme circumstances. The FMI should regularly test these arrangements.***

  As part of ARPCSO's operational risk mitigation, in coordination between the Risk Management, Information Technology, and the Business Functions, a Business Continuity Management Program (BCP) was developed, with the PFMI considered as the foundation of the program. The Program is designed to provide ARPCSO with a robust framework to sustain operations, with a tolerable level of downtime and data loss, in the event of unforeseeable disruptions or crises. It defines a broad framework for the implementation of the Program; it outlines how the business will continue operating during unforeseen circumstances and it contains contingencies for all aspects affecting Buna and its operations during a disaster.

The scope of ARPCSO Business Continuity Management Program focuses on managing disruptions or crises caused by the deficiency or unavailability of one or more of the following aspects:

- Data Centers: Unforeseen disasters taking place at the Data Centers (DC) could cause partial or complete unavailability of Buna’s core services/activities/applications, internally and/or externally, including Participant’s connectivity.

- Connectivity: Unforeseen disasters related to connectivity could cause partial or complete disconnection Buna’s staff to the Organization’s services / applications.

- Personnel: Unforeseen people-related disasters could cause partial or complete disruption of critical functions within the Organization.

In addition, the program also covers the appropriate business continuity recovery strategies and communication procedures required to effectively respond to varying levels of disruptions or crises.

- Recovery Strategy 1: Disaster Recovery Plan (DRP)

  The DRP outlines the disaster recovery methodologies required to ensure the continuity of Buna's critical services in the event of a disaster, including contingency procedures regarding the recovery of financial transactions (lost transactions).

  Instant replication is established between primary data center and the disaster recovery site, along with backup mechanisms on tapes stored outside the data centers. In case of data loss, these backups can be utilized to retrieve the data. Additionally, ARPCSO can retrieve lost messages directly from the SWIFT network using the message recovery service.

  The geographical distance between the primary and disaster recovery sites meets applicable standards, ensuring that the disaster recovery site has a distinct risk profile from the primary site.

  The disaster recovery site is an identical setup to the primary data center and includes replication and failover mechanisms to ensure readiness as per the agreed RTO (2 hours) and RPO (Zero).

- Recovery Strategy 2: Remote Connectivity

ARPCSO has several alternatives and turnaround solutions that are triggered, as appropriate, in case the primary connectivity is unavailable.

- Recovery Strategy 3: Personnel Back-up Plan

  For the sake of business continuity and to ensure transfer of intellectual knowledge, ARPCSO built a matrix of key and back up personnel that is updated at least once every quarter. At the event of unavailability of critical staff to perform key operations, back up staff should be available.

Taking into consideration that disruptions to a business often come in all different shapes and sizes, it is crucial for the Organization to set robust standards and communication procedures which make a difference in how quickly the organization can return back to business as usual. To achieve this objective, ARPCSO developed its Business Continuity Communication Matrix to ensure proper transfer to knowledge, instructions, and expectations during a disaster or planned activity to all the relevant stakeholders, including Internal Stakeholders, Direct External Stakeholders, and the Public.

To ensure the adequacy and appropriateness of the Program, various testing scenarios are being continuously developed and enhanced including Data Centers' failover and failback, remote connectivity testing, evacuations plan, call tree, and others. An annual comprehensive testing of the program should be conducted; however, some components may be tested more frequently or at different intervals during the year.

In addition, at least once annually, the Business Continuity Management program is enhanced through:

- Pre-Disaster enhancement of the Program through a planned annual review.
- Post-Disaster enhancement of the Program from lessons learnt and implementation of turnaround solutions.

- ***Key consideration 7: An FMI should identify, monitor, and manage the risks that key participants, other FMIs, and service and utility providers might pose to its operations. In addition, an FMI should identify, monitor, and manage the risks its operations might pose to other FMIs.***

Buna is exposed to and continuously monitors the following risks arising due to interdependencies. Similar to all other types of risks applicable to Buna, ARPCSO continuously identifies, monitors, and treats risks of interdependencies in line with the Risk Management Policy.

Dependency on Critical Service Providers (CSP):

Currently, Buna's only CSP is SWIFT, being the system's sole message network carrier. Cyclical risk assessments are performed in collaboration with SWIFT to evaluate the risk exposure and the effectiveness of the existing control setup associated with this dependency.

In addition, Buna undertakes continuous re-assessment of its CSPs to ensure proactive monitoring of associated risks and to implement appropriate mitigation strategies in the event that new CSPs emerge.

- Dependency on Fund Holding Institutions (FHIs):

  Buna's reliance on FHIs for liquidity management of Participants presents a risk to settlement processes in the event that an FHI becomes unavailable. Furthermore, should an FHI enter bankruptcy, it may disrupt settlement for a specific currency until a new FHI is secured.

  Buna mitigates dependence on FHIs by implementing stringent selection criteria. Whenever feasible, Buna utilizes Central Banks of the respective eligible currencies for fund-holding services. In cases where the Central Bank cannot serve as the FHI, a Commercial Bank is engaged to manage Participants' funds. To ensure the reliability of these commercial banks, Buna is developing a monitoring mechanism to assess their performance, focusing on financial stability, regulatory compliance, adherence to risk management practices, endpoint security, and business continuity management.

- Dependency on other service providers:

  Buna engages with Service Providers to deliver specific outsourced services for the organization. To effectively monitor and mitigate the associated risk exposure, various contractual agreements and service level agreements (SLAs) are established, along with timely monitoring mechanisms.

Buna hasn't identified dependency on, or any risks it may pose to, other FMIs since it doesn't enter into any link arrangements.

PRINCIPLE 18: ACCESS AND PARTICIPATION REQUIREMENTS

An FMI should have objective, risk-based, and publicly disclosed criteria for participation, which permit fair and open access.

- ***Key consideration 1: An FMI should allow for fair and open access to its services, including by direct and, where relevant, indirect participants and other FMIs, based on reasonable risk related participation requirements.***

  Buna's criteria and requirements for participation, including fees and other costs, are outlined in the organization's Rulebook, which is shared with relevant stakeholders during the onboarding process. The Rulebook provides financial institutions with the necessary information and documents required to assess their eligibility to participate in the Buna platform, based on risk-related part requirements.

- ***Key consideration 2: An FMI's participation requirements should be justified in terms of the safety and efficiency of the FMI and the markets it serves, be tailored to and***

commensurate with the FMI's specific risks and be publicly disclosed. Subject to maintaining acceptable risk control standards, an FMI should endeavor to set requirements that have the least-restrictive impact on access that circumstances permit.

Buna's participation requirements are risk-based and designed to ensure the safety and efficiency of the ecosystem. These criteria encompass operational and technical capabilities, capital requirements, and compliance requirements. The operational and technical capabilities adopt a dual approach, addressing both risk-based considerations and technical readiness to connect to the system.

The participation criteria apply to financial institutions, with the possibility for Central Banks, International Financial Organizations, or System Operators of other Financial Market Infrastructures/Payment Systems to join for interoperability, subject to specific requirements based on the nature of these organizations.

ARPCSO regularly reviews its eligibility criteria to adapt to market trends, evolving regulations, and new product offerings. This includes introducing new opportunities and removing barriers to entry. Buna's Rulebook was shared early on with relevant stakeholders, including Central Banks and financial institutions, providing transparency and explanation of the participation criteria and any restrictions.

- ***Key consideration 3: An FMI should monitor compliance with its participation requirements on an ongoing basis and have clearly defined and publicly disclosed procedures for facilitating the suspension and orderly exit of a participant that breaches, or no longer meets, the participation requirements.***

Buna has established a comprehensive Applicants and Participants Due Diligence process to ensure the safety and compliance of its payment system and network. This process includes pre-approval of prospective Applicants to avoid engaging with non-eligible entities. It also involves onboarding and periodic due diligence to continuously monitor the compliance of new and existing Participants with Buna's eligibility requirements.

An event-driven review process is triggered whenever changes occur on Participants' profiles, such as ownership changes, adverse media news, regulatory fines, or findings from the Transaction Monitoring Process.

The Onboarding and Periodic Due Diligence process includes a risk assessment based on various factors, such as geographical, regulatory, product, sanctions, and AML considerations. Participants are assigned a risk level (High, Medium, or Low), and the frequency of due diligence reviews varies accordingly.

Buna has established a process for making decisions on suspension and termination of Participants. This internal process ensures alignment in the methodology used across different departments and stages.

PRINCIPLE 19: TIERED PARTICIPATION ARRANGEMENTS

An FMI should identify, monitor, and manage the material risks to the FMI arising from tiered participation arrangements.

This principle is not applicable since BUNA, in its current state, does not support indirect participation.

PRINCIPLE 20: FMI LINKS

An FMI that establishes a link with one or more FMIs should identify, monitor, and manage link-related risks.

This principle is not applicable since BUNA, in its current state, does not have any link arrangements.

PRINCIPLE 21: EFFICIENCY AND EFFECTIVENESS

An FMI should be efficient and effective in meeting the requirements of its participants and the markets it serves.

- ***Key consideration 1: An FMI should be designed to meet the needs of its participants and the markets it serves, in particular, with regard to choice of a clearing and settlement arrangement; operating structure; scope of products cleared, settled, or recorded; and use of technology and procedures.***

  During the design phase, Buna conducted surveys and interviews with Central Banks, potential participants, and other stakeholders to understand their needs and requirements. This interaction continued during the system implementation phase and is ongoing during the operational phase through workshops, bilateral meetings, and sharing of documentation.

  To better structure and formalize the interaction and consultation process with its community, ARPCSO established an Advisory Group, which supports the Executive Committee (ExCo) of ARPCSO in making informed decisions that consider users' interest. The Advisory Group shall also serve as a forum for dialogue and exchange on key industry topics.

  Additionally, ARPCSO plans has a streamlined process for communication with its community through satisfaction surveys to keep the Advisory Group and management informed of new trends and requirements in the market. These efforts aim to ensure that Buna remains responsive to the needs of its participants and the markets it serves.

- ***Key consideration 2: An FMI should have clearly defined goals and objectives that are measurable and achievable, such as in the areas of minimum service levels, risk-management expectations, and business priorities.***

Buna aims for immediate settlement when funds are available, ensured through continuous transaction monitoring, incident reporting, and SLA measurement. To enhance objective achievement visualization, ARPCSO is working on and continuously enhances its objective setting and monitoring framework.

- ***Key consideration 3: An FMI should have established mechanisms for the regular review of its efficiency and effectiveness.***

  Buna is designed to achieve immediate settlement whenever funds are available. To ensure this objective is met, ARPCSO implements several monitoring mechanisms. These include daily monitoring of transactions, registration and reporting of incidents and disruptions, and measurement and monitoring of SLAs related to technical availability, reliability, and stability.

  To further enhance the visualization of achievement, ARPCSO is developing a framework for objective setting and monitoring. This framework aims to provide a clearer and more structured approach to assess the success of Buna's objectives and ensure its continued efficiency and effectiveness.

PRINCIPLE 22: COMMUNICATION PROCEDURES AND STANDARDS

An FMI should use, or at a minimum accommodate, relevant internationally accepted communication procedures and standards to facilitate efficient payment, clearing, settlement, and recording.

- ***Key consideration 1: an FMI should use, or at a minimum accommodate internationally accepted communication procedures and standards.***

  Buna has designed its financial and non-financial messages for cross-border payments to align with standard payment formats such as FIN and FIN Plus, for our region and beyond. The minor changes made to the messages do not remove any mandatory fields required by SWIFT's standard rules.

  The system is capable of translating messages received from local RTGS systems that do not use SWIFT into SWIFT standard messages and vice versa, facilitating interoperability between different payment systems.

  Buna exclusively uses the SWIFT Network for financial message exchange and accepts both MTs and MXs message types. It utilizes SWIFT Alliance Access and Alliance Gateway to connect with customers and process SWIFT message flows efficiently.

  The system uses BIC code standards for identifying counterparties following the standards. Messages are designed to identify the roles of each counterparty based on SWIFT standards.

PRINCIPLE 23: DISCLOSURE OF RULES, KEY PROCEDURES, AND MARKET DATA

An FMI should have clear and comprehensive rules and procedures and should provide sufficient information to enable participants to have an accurate understanding of the risks, fees, and other material costs they incur by participating in the FMI. All relevant rules and key procedures should be publicly disclosed.

- ***Key consideration 1: An FMI should adopt clear and comprehensive rules and procedures that are fully disclosed to participants. Relevant rules and key procedures should also be publicly disclosed.***

  Buna has established its Rulebook, consisting of the Rules and Procedures, which govern its relationship with all participants and fund-holding institutions (FHIs). The Rules outline the rights and obligations of the participants and the system operator, covering participation criteria, liabilities, eligible currencies, governing law, jurisdiction, and dispute resolution. The Procedures define the operational and technical aspects of the system.

  The Rulebook includes sections dedicated to describing the process of changing rules and procedures and managing non-routine events such as downtime, incident handling procedures, site contingencies, fees, and other material costs.

  The Rulebook is disclosed to participants and FHIs during the onboarding process and is part of the Participation Agreement signed by all participants. ARPCSO also shares the Rulebook with relevant stakeholders, such as central banks, and makes the relevant information available to the public through its official website.

- ***Key consideration 2: An FMI should disclose clear descriptions of the system's design and operations, as well as the FMI's and participants' rights and obligations, so that participants can assess the risks they would incur by participating in the FMI.***

  The documents comprising information about the system's design and operations include Buna's Business Model, Message Formats' Section, Buna's Rulebook, and Buna's Presentations (such as Online Workshops). These documents outline the operational and technical aspects of the system and govern the relationship between Buna and its participants, including their rights and obligations.

  ARPCSO discloses information about Buna's design and operations to relevant stakeholders, such as participants, FHIs, and central banks, through the onboarding pack. Additionally, the organization plans to share generic principles with the public through its official website.

  The Rulebook and Procedures contain sections that describe the process of altering rules and procedures, which are shared with participants in the onboarding pack and will be uploaded to the organization's website in the future.

The Rulebook is complemented by the Participation and FHI Agreements, providing the legal and regulatory basis for the governing relationships. ARPCSO's communication with participants is adaptable to their needs and behavior.

- ***Key consideration 3: An FMI should provide all necessary and appropriate documentation and training to facilitate participants' understanding of the FMI's rules and procedures and the risks they face from participating in the FMI.***

  ARPCSO facilitates participants' understanding of Buna's rules, procedures, and associated risks throughout the Participant Onboarding Process. The process includes providing an Onboarding Pack, conducting general overview sessions, and offering training and awareness sessions. The Compliance Division takes part in initial business sessions to address compliance-related queries, and ARPCSO's Compliance Officer(s) establish a separate stream of communication for legal and compliance requirements.

  Participants' understanding is evidenced through their correspondence and communications with ARPCSO's teams, including direct contact (calls and emails) and questions shared during Buna's public presentations, such as online workshops. The volume of questions varies based on the bank's readiness and experience in using Buna instead of traditional correspondent banking.

  In addition to meetings and training sessions, ARPCSO staff respond to ad hoc emails and meetings as required by participants for further understanding. The organization also engages with the community and external stakeholders through timely workshops in addition to the appropriate publications on the website and official LinkedIn profile.

- ***Key consideration 4: An FMI should publicly disclose its fees at the level of individual services it offers as well as its policies on any available discounts. The FMI should provide clear descriptions of priced services for comparability purposes.***

  ARPCSO discloses Buna's pricing schedule with the relevant stakeholders (Participants, Fund Holding Institutions (FHIs), Central Banks, etc.) during the onboarding process and whenever amendments are applied to the schedule, if any.

  In the event of a change in its pricing scheme, pricing structure, or fees, Buna notifies its relevant stakeholders (Participants, Fund Holding Institutions (FHIs), Central Banks, etc.) of such changes, modifications, additions, or removals in advance, before the changes are implemented.

- ***Key consideration 5: An FMI should complete regularly and disclose publicly responses to the CPSS IOSCO Disclosure framework for financial market infrastructures. An FMI also should, at a minimum, disclose basic data on transaction volumes and values***

ARPCSO discloses Buna’s Disclosure framework for financial market infrastructures on its webpage, along with basic data on transaction volumes and values.

PRINCIPLE 24: TRANSPARENCY

A TR should provide timely and accurate data to relevant authorities and the public in line with their respective needs.

This principle does not apply to a payment system like Buna, as it is specific to Trade Repositories.