



## Namibia Interbank Settlement System

### Principles for Financial Market Infrastructures

#### Disclosure

<b>Responding institution:</b>	Bank of Namibia
<b>Responding FMI</b>	NISS
<b>Jurisdiction(s) in which the FMI operates:</b>	Namibia
<b>Authority(ies) regulating, supervising, or overseeing the FMI</b>	Bank of Namibia
<b>The date of this disclosure</b>	The assessment was conducted as at 31 December 2018 and publication date is 30 September 2020
<b>This disclosure can also be found at:</b>	<a href="http://www.bon.com.na">www.bon.com.na</a>
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## I. Executive summary

This report is the Bank of Namibia's public disclosure of the self-assessment conducted on the real time gross settlement (RTGS) system, the Namibia Inter-bank Settlement System (NISS), against the Principles for Financial Market Infrastructures (PFMI). The self-assessment assesses the NISS services as at 31 December 2018. This is the first self-assessment the Bank of Namibia (the Bank) has completed for the RTGS services, following the designation of the NISS as a Financial Market Infrastructure (FMI) in January 2018.

Consistent with the objectives of the PFMI, this self-assessment has been completed by the Bank in its role as operator of the RTGS services. This publication follows a principle-by-principle narrative in alignment with the published PFMI disclosure template, to aid comparison with the disclosures published by the operators of other FMIs. However, it is important that this disclosure and self-assessment is put in a broader context.

Namibia has a well-established financial system, and activities of the NISS are supported by a strong legal basis that provides certainty to the enforceability of the rights and obligations of the Bank with predictable consequences. The Bank of Namibia Act 1 of 2020, as amended, provides the mandate for the Bank to own and operate the NISS while the Payment Systems Management Act 18 of 2003 (PSMA), as amended, accords the Bank with oversight powers and recognizes the Bank as the authority responsible for promoting the reliable, efficient and smooth operation of the national payment and settlement systems.

The self-assessment has been undertaken by the business unit that operates and manages the delivery of the RTGS services and has been reviewed by subject matter experts within the Bank as well as by external experts. The aspects of the self-assessment have primarily been undertaken against the principles that apply to payment systems.

This report contains the result of the NISS assessment against 18 principles that are applicable to payment systems. The summary of assessment ratings concluded that six (6) principles have been 'observed'<sup>1</sup>, four (4) principles have been 'partly observed', and eight (8) principles have been broadly observed'. Section IV of the report summarizes the findings of the self-assessment.

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

The Bank of Namibia Act, 2020 (Act No 1. of 2020) has been finalized and promulgated during 2020, and became effective in February 2020. Moreover, the Bank is currently working on the

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<sup>1</sup> Observed (O) – Any identified gaps and shortcomings are no issues of concern and are minor, manageable, and of a nature that can be taken up in the normal course of activities.

Broadly observed (BO) – The assessment has identified one or more issues of concern that are to be addressed and followed up in a defined timeline.

Partly observed (PO) – The assessment has identified one or more issues of concern that could become serious if not addressed promptly. High priority should be accorded to addressing these issues.

Not observed (NO) – The assessment has identified one or more serious issues of concern that warrant immediate action. Highest priority should be accorded to addressing these issues.

Not applicable (NA) – Does not apply because of the particular legal, institutional, structural, or other characteristics of the financial market infrastructure.

review of the Payment Systems Management Act (PSMA), as amended, and extensive consultations are carried out with the key stakeholders.

Work is in progress to establish a central securities depository (CSD) in Namibia, and the securities depository company has been established, owned by the Bank (49%) and the Namibia Stock Exchange (51%). The vendor to provide the CSD system services has been selected.

The Bank concluded a comprehensive costing survey during 2019, to better understand the cost of providing payment system services with the aim of enhancing standards for fees and charges in the National Payment System (NPS). Furthermore, during 2020, the Bank gazetted the Determination on Standards for Fees and Charges for Payment System Services within the NPS (PSD-10).

The usage of cheques and related systems in the NPS has been decommissioned effective 30 June 2019. Moreover, as at June 2020, the payments industry and the clearing house service provider (Namclear) have substantially implemented the Payments Card Industry Data Security Standards (PCI DSS) compliance requirements.

The Bank has finalised the review of the payment systems Risk-based Oversight Framework, which was published on the Bank's website during 2019. The Framework was revised to explicitly recognize the PFMI's as developed by the Bank for International Settlement's Committee on Payment and Market Infrastructures (CPMI).

In compliance with the Determination on Efficiency in the NPS (PSD-7), the payments industry undertook to develop an enhanced EFT system (NamPay)<sup>2</sup> in the Namibian financial system. The high level Features of NamPay include: The existing EFT System Replacement for all banks and the clearing house, Namclear; Implementation of international ISO 20022 standard for EFT further ensuring greater efficiency, safety and control.

The Electronic Transactions and Cybercrime legal framework to enforce the legality of the conduct of electronic transactions was promulgated during November 2019, and the Financial Institutions and Markets legal framework that will govern the licensing of the CSD operations in Namibia has been provisionally approved by Parliament, as of July 2020.

### **III. General background on the FMI**

#### **General description of the FMI and the markets it serves**

The NISS is an electronic settlement system operated by the Bank, to provide fast and efficient transfer of funds to participants. The management and operation of the NISS fall under the governance structure of the Bank, and are therefore subject to the Bank's regular oversight, decision-making and audit processes.

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<sup>2</sup> The NamPay aims to transform electronic fund transfers in Namibia and comprises of three payments streams, namely, Enhanced Debit Orders (ENDO), Enhanced Credit Payments (ENCR), and Near-Real-Time Credit (NRTC) payment transfers.

The Enhanced Debit order stream facilitates the settlement of interbank debit order transactions in NISS. While the Enhanced Credit EFT stream facilitates the settlement of transactions processed between banks where clients receive their funds within the same day. As of September 2020, all three (3) streams are operational and settling in the NISS.

### General organization of the FMI

Governance is one area in which there is necessity to apply the PFMI to central bank-owned systems. As a central bank-owned system, the NISS is not a separate legal entity, its governance is thus integrated with the broader governance arrangements of the central bank.

Even though the NISS is owned and operated by the Bank, the operations and oversight of the NISS are separated, to ensure good governance. The NISS is operated as a division under the Payment and Settlement Systems Department (PSSD), and the NISS operations reporting lines comprise of the Deputy Director who reports to the Director of PSSD, a senior NISS operator reporting to the Deputy Director, and two NISS operators reporting to the senior NISS operator.

### Legal and regulatory framework

The Bank of Namibia was given the power to regulate and supervise banking institutions through the legal mandate of the Banking Institution Act, 1998 (Act No.2 of 1998), as amended. All the same, the Bank's mandate through the Payment Systems Management Act, Act 18 of 2003 (PSM Act), as amended, provides for the management, administration, operation, regulation, oversight, and supervision of payment, clearing and settlement systems in Namibia.

### System design and operations

The NISS applications and common supporting services have been developed on a modern open services-based model, and all interfaces throughout the system operate on a "message based" processing architecture. The NISS software architecture is based on an n-tiered approach, with distinctive layers and components designed into the system.

## IV. Principle-by-principle summary narrative disclosure

**Principle1: Legal basis**

**Rating: Partly Observed**

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

#### Summary narrative

There are legislations and regulations that provide a high degree of certainty to the Bank of Namibia to establish and operate the FMI/NISS. Regulations underpinning the operations of the NISS is operated are such as: amongst others, the Bank of Namibia Determination on the Criteria for Authorization of Participants in the Clearing and Settlement System (PSD-6), the Bank of Namibia Determination on Issuing of a Payment Instrument in Namibia (PSD-1), the Bank of Namibia Determination on Issuing of Electronic Money in Namibia (PSD-3), the Bank of Namibia Determination on the Conduct of Card Transactions within the National Payment System (PSD-4), the Bank of Namibia Determination on the Efficiency of the National Payment System (PSD-7), the Bank of Namibia Directive on the Cut-Off Times within the Namibia Inter-Bank System (PSDIR-4), and the Bank of Namibia Directive on the Conduct of EFT Transactions within the National Payment System in Namibia (PSDIR-1).

The PSM Act 18 of 2003, as amended, contain provisions on irrevocability, finality, and protection of the payment system against insolvency for any participant. Moreover, the enforceability of repo transactions in the event of participant default within the NISS requires a high degree of legal certainty. The intraday credit extension by the Bank to the NISS participants are governed by the International Securities Market Association Master Repurchase Agreement (ISMA) between the Bank and eligible NISS participants.

The Bank participates in the payments industry user structures as established by the payments regulatory body, the Payments Association of Namibia (PAN), to observe, contribute to and oversee such functionalities. For consultative purposes on mutual regulatory matters, the Bank has a Memorandum of Understanding (MoUs') with other regulatory authorities such as the Namibia Financial Institutions Supervisory Authority (NAMFISA), Communications Regulatory Authority of Namibia (CRAN) and the PAN.

To bind participants to settlement provisions and related obligations, the Bank enters into settlement agreements with each participant during onboarding, in line with the provisions of the PSM Act 18 of 2003, as amended. The Bank also has rules, procedures and contracts in place that are enforceable in Namibia, to ensure orderly operation and manage participant conduct within the NISS.

**Principle 2: Governance**

**Rating: Observed**

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

Summary narrative

The strategic plan of the Bank is to support the stability of the national financial markets. The Bank's specific objective on payment system is to provide the infrastructure through which settlement obligations of payments can be completed in a safe and efficient manner. In this regard, and to ensure resilience and continuity of settlement services, the Bank operates the NISS at a target level of 99.9% availability.

To participate in the NISS as either a direct or indirect participant, eligible entities are assessed through the criteria set out in the Determination on the Criteria for Authorization of Participants in the Clearing and Settlement System (PSD-6).

The Bank's Audit Committee is responsible for evaluating the adequacy and efficiency of the Bank's corporate governance practices, including its internal control systems, risk control measures, accounting standards information systems and auditing processes. Whereas the Risk Management Committee assists the Audit Committee to ensure that the Bank has implemented an effective risk management policy. Moreover, the Remuneration Committee is responsible for overseeing and coordinating the Bank's remuneration policy and strategy to ensure its competitiveness and comprehensiveness.

The Governor, appointed by the President, is responsible for the management of the Bank and is therefore responsible for the operation of the NISS. The Governor is assisted and supported in this responsibility by the Management Committee (MC), which is comprised of the Deputy Governor and all the heads of the various departments of the Bank. Moreover, the Management Committee is responsible for reviewing and approving the Bank's policies relating to regulations and determinations resulting from the regulatory duties of the Bank.

Various other committees that exist at the Bank are such as the Monetary Policy Committee (MPC), which determines an appropriate monetary policy stance to be implemented by the Bank, the Financial System Stability Committee, that is set up between the Bank and NAMFISA to assess vulnerabilities and risks related to the entire financial system. Furthermore, the Investment Committee is responsible for amongst others, reviewing the management of

Namibia's foreign exchange reserves. The Bank also has the Budget Committee which oversees the budget deliberations of the Bank.

Decisions affecting the day-to-day operations, customer relations and development of the NISS have been delegated to the Bank's Payment and Settlement Systems Department (PSSD). The PSSD is led by the Director, reporting to the Deputy Governor. Clear internal procedures are in place to evaluate day-to-day operational matters within the PSSD and other areas of the Bank, as appropriate. The oversight of the NISS is carried out by the Oversight and Policy Research Division within the PSSD. The Oversight and Policy Research Division and NISS Operations Division have separate reporting lines to the Director of the PSSD.

The PSSD contributes to the Bank's Financial Stability Report, on aspects related to financial market infrastructures such as the NISS, and regulatory developments in the NPS. Stakeholder engagements take place between the NISS participants and the Bank as a NISS operator, on issues affecting NISS, with the aim of fostering cooperation, transparency, and accountability.

The Bank of Namibia Act, Act 1 of 2020 allows for the constitution of the Bank's Board of Directors (the Board), which constitutes the Governor and Deputy Governor as Chair and deputy Chair, permanent secretary of Ministry of Finance, one individual from the public service and 4 individuals appointed by the President in consultation with the Minister of Finance. The Board's term is 5 years, and members are eligible for reappointment. The Board is accountable for the operation and risk management of the Bank, and for overseeing and monitoring the risk management processes established for the Bank. In addition, the Board delegates the powers to its sub-committees (the Audit Committee, the IT Governance Committee, and the Remuneration Committee), which are crucial elements of the governance structure. There are provisions in the Bank of Namibia Act 1 of 2020, that provide guidance on managing Board members conflict of interest. Board performance is evaluated at both the individual and collective level every 2 years.

The Board members are appointed through advertisements placement in the media. The Board members are remunerated fairly, with benchmark guidance from the Public Enterprises Governance Act, as amended. The Board members subcommittee members are remunerated monthly retainer fees in line with their roles. The Governor and Deputy Governor do not benefit from these incentives as they are on the Bank's payroll as employees of the Bank.

Recruitment and selection at the Bank are based on the suitability of an applicant to carry out the specific requirement of the position to be filled, having regard to the applicant's ability to perform the required duties. Prior to appointment, all potential employees undergo a vetting process in order to examine the integrity of the individual. Bank staff are subject to the Bank's Code of Conduct which is approved by the Board. The Board determines the remuneration, and the Human Resources Director proposes the Bank employees' salary scales for Board approval. The Bank's human resource policies in place ensure that management positions are filled with employees with appropriate skills, experience, and integrity to perform their duties.

The Board Audit Committee approves the Risk Management Framework and delegates the function of risk management oversight to the Risk Management Committee (which is one of the management committees of the Bank). The Risk Management Committee is assisted by the Risk Management Department to facilitate the work for Bank wide risk management.

In circumstances including a significant disruption to the Bank's operation that affects several business areas including the NISS, the Governor may delegate responsibility for coordination of the Bank's response, to the Bank's Crisis Management Team which comprise heads of various departments within the Bank. The PSSD also maintains plans that address decision-

making in case of a crisis and emergencies. These plans cover operational disruption and default events of the FMI (NISS) participants.

The Bank's governance arrangements therefore ensure accountability and transparency to NISS participants and other relevant parties ensuring the interest of relevant stakeholders are considered.

<b>Principle 3: Framework for the Comprehensive management of risks</b>	<b>Rating: Broadly Observed</b>
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**An FMI should have a sound risk-management framework for comprehensively managing legal, credit, liquidity, operational, and other risks.**

Summary narrative

The NISS has an in-build liquidity optimization module that allows for the participants to effectively manage their liquidity in real time. The Bank's Lending Policy allows eligible NISS participants to request for credit extension in the NISS.

NISS has rules, procedures and agreements in place that bind participants in and around the NISS to manage associated risks. Reviews of agreements and procedures are conducted periodically, to ensure they are up to date with current developments.

The Bank's disaster recovery site located over 10 kilometers away from the head office, is in place to ensure business continuity in case of major services disruption at the head office. The NISS operator conducts periodic disaster recovery tests to ensure the resilience of the FMI. The NISS participants are required to connect to the Bank's disaster recovery site as part of the Bank's business continuity plans, which is enforced by the Bank's payment systems oversight function.

The Bank is guided by the Risk-based Oversight Policy Framework on managing risks within the NPS, which includes NISS.

In terms of power outage that could disrupt operations of the NISS, the Bank's setup consists of Uninterrupted Power Supplies (UPSs) and generators at both the primary and secondary sites which are regularly tested as back-up for business continuity. The Bank also has additional power supply source through solar power energy infrastructures.

The Bank's internal audit function reviews risk management policies, procedures, and systems, and conducts effective risk-based internal audits.

The Bank periodically reviews the material risks that affect the NISS and develops measures to manage risks from other entities through service level agreements, risk event reports, customer support packages and documented operational and contingency procedures. Lastly, there is a Bank-wide business continuity plan that guides the Bank's operation in case of an emergency.

<b>Principle 4: Credit risk</b>	<b>Rating: Observed</b>
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**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. In addition, central counterparty clearing house (CCP) that is involved in activities with a more-complex risk profile or that**

**is systemically important in multiple jurisdictions should maintain additional financial resources sufficient to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the two largest participants and their affiliates that would potentially cause the largest aggregate credit exposures to the CCP in extreme but plausible market conditions. Moreover, all other CCPs should maintain, at a minimum, total financial resources sufficient to cover the default of the one participant and its affiliates that would potentially cause the largest aggregate credit exposures to the CCP in extreme but plausible market conditions.**

Summary narrative

As the operator of the NISS, the Bank faces minimal credit risk exposure as it does not act as a central counterparty. The Bank extends intra-day and overnight credit to the NISS participants against eligible collateral. To mitigate credit risk, the Bank accepts high quality collateral from participants in exchange for the intraday and overnight credit extension, subject to a lending haircut.

The Master Repurchase Agreement entered between the Bank and each eligible NISS participant obligates the borrower/NISS participant(s) to pay back the borrowed funds within one business day, failure which warrants the Bank to permanently retain ownership of the collateral instrument used to secure such credit.

**Principle 5: Collateral**

**Rating: Partly Observed**

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

Summary narrative

The Bank requires NISS participants to pledge eligible securities to serve as collateral for lending within the NISS (intra-day and overnight lending) or 7-day lending. Such securities are divided into two categories namely: Category 1, which consists of Namibian Government Treasury Bills; Namibian Government Internal Registered Stock; Bank of Namibia Bills; Securities fully guaranteed by the Namibian Government; and Separate Trading of Registered Interest and Principal of Securities (STRIPS) stripped by the Government. Category 2 consists of Investment graded debt papers of State-Owned Enterprises; Separate Trading of Registered Interest and Principal of Securities (STRIPS) not stripped by the Government.

The Bank subjects the pledged collateral securities to appropriate hair-cut and periodic valuations to cushion the Bank against principal risk in case of extreme negative market conditions affecting the market value of such securities.

The collateral management function for the Bank for purposes of lending within the NISS leaves room for improvement as collateral security records for intra-day and overnight lending are maintained in the Bank's Book Entry System as well in other records that are not interfaced to the NISS.

**Principle 7: Liquidity risk**

**Rating: Partly Observed**

**An FMI should effectively measure, monitor, and manage its liquidity risk. An FMI should maintain sufficient liquid resources in all relevant currencies to effect same-day and,**

**where appropriate, intraday and multiday settlement of payment obligations with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would generate the largest aggregate liquidity obligation for the FMI in extreme but plausible market conditions.**

Summary narrative

As the operator, the Bank faces no liquidity risk as it does not guarantee settlement to the NISS participants. Liquidity risk could however materialize to the NISS participants when a participant's inability to pay triggers resulting effects on other participants' ability to meet their payment obligations in a timely manner. To address such liquidity risk, the Bank provides the intraday and overnight liquidity facility against eligible collateral.

The NISS is a credit-push payment system, and thus participants use payment scheduling function available in the NISS as well as pro-actively monitor their liquidity positions in real time to avoid settlement default.

**Principle 8: Settlement Finality**

**Rating: Observed**

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

Summary narrative

The PSM Act 18 of 2003, as amended clearly defines settlement finality and irrevocability of all amounts credited and debited from the NISS participants' settlement accounts. This means that notwithstanding anything to the contrary in any written law or rule of law, these transactions shall not be reversed, repaid, or set aside.

Settlement finality in the NISS is also ascertained as it takes place continuously throughout the day whenever a payment is accepted by the system and participants have sufficient funds in their settlement accounts or eligible collateral.

**Principle 9: Money Settlements**

**Rating: Observed**

**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.**

Summary narrative

Payments in the NISS takes place on a real-time gross settlement basis in central bank money.

**Principle 13: Participant-default rules and procedures**

**Rating: Partly Observed**

**An FMI should have effective and clearly defined rules and procedures to manage a participant default. These rules and procedures should be designed to ensure that the FMI can take timely action to contain losses and liquidity pressures and continue to meet its obligations.**

Summary narrative

Settlement finality is clarified by provisions of the payments law. In the event of insolvency, all transactions settled on the day of the insolvency are irrevocable and cannot be unwound. There are penalties within the NISS that are instituted against a defaulting NISS participant(s).

The NISS Operational Procedures provide for the management of default of payment clearing house (PCH) batches for one or more NISS participants, with a clear outline of the entire process including the escalation process between the defaulting participant(s), the NISS operator, Bank management, and other related entities.

**Principle 15: General Business Risk**

**Rating: Observed**

**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. Furthermore, liquid net assets should at all times be sufficient to ensure a recovery or orderly wind-down of critical operations and services.**

Summary narrative

The Bank manages the general business risks of operating the NISS based on the enterprise-wide budgeting and accounting processes. This allows for the clear monitoring, management and control of the NISS operating expenses. The Bank's accounting processes are subject to internal and external audit. The Bank recovers the basic NISS operating costs from participants through fees and charges.

**Principle 16: Custody and investment risks**

**Rating: Broadly Observed**

**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.**

Summary narrative

The Bank, as the operator of the NISS, does not use commercial custodian services for its own or participants' assets (cash, Government Treasury Bills, Government Bonds and Bank of Namibia Bills). There are procedures and internal controls to protect participants' assets in the NISS. These include segregation of duties, controls on accesses to the NISS (such as periodical review of access rights) and the conduct of internal and external audits. In addition, NISS participants have access to their NISS accounts in real time. Participants can also request for electronic statements of accounts at any time for their reconciliation.

**Principle 17: Operational risk**

**Rating: Broadly Observed**

**An FMI should identify the plausible sources of operational risk, both internal and external, and mitigate their impact through the use of appropriate systems, policies, procedures, and controls. Systems should be designed to ensure a high degree of security and operational reliability and should have adequate, scalable capacity. Business continuity management should aim for timely recovery of operations and**

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

Summary narrative

The Bank manages the operational risks arising from the NISS within its organization-wide risk management framework.

The Bank identifies operational risks by a historical approach, drawing lessons from issues that have occurred in the past and a theoretical approach where experienced staff members seek to identify possible additional sources of risk. The Bank assesses the probability of the identified operational risk and crystalizes its potential impact on NISS.

Operational controls are documented in the Bank's procedure manuals, administration guides, and daily checklists. These controls and contingency plans are reviewed periodically and signed off by management.

The NISS is designed to achieve a very high standard of operational reliability, with comprehensive policies, procedures, and controls in place to ensure reliability of IT infrastructure, monitor performance in real time, address potential issues promptly, and manage changes effectively.

The management of NISS operations is delegated to the Payment and Settlement Systems Department which approves and reviews NISS operational risk management policies, under the governance of the Bank's Risk Management Committee.

Risks and controls around NISS are identified and tested via internal, external audits, regulatory assessments, and through the daily operational management of NISS as well as incidents management around NISS.

**Principle 18: Access and participant requirements**

**Rating: Broadly Observed**

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

Summary narrative

The criteria for access to the NISS is documented in the regulation, Criteria for Authorization of Participants in the Clearing and Settlement System (PSD-6). In assessing an entity's application, the Bank reviews the applicant's creditworthiness, and risks posed to the NISS and other participants amongst other strict admission criteria. Existing participants are required to exhibit a good track record with respect to fulfilment of financial obligations. Participants are also required to demonstrate their operational readiness to participate in the NISS, such as having a SWIFT membership as well as the necessary hardware, software, systems and capability to send and receive messages from others in the SWIFT network. Participants are required to have adequate levels of business continuity management in the form of disaster recovery facilities.

<b>Principle 19: Tiered Participation Arrangements</b>	<b>Rating: Broadly Observed</b>
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**An FMI should identify, monitor, and manage the material risks to the FMI arising from tiered participation arrangements.**

Summary narrative

Direct participants are those that have executed the NISS Service Level and Settlement Agreements and are able to settle payments in the NISS directly on their settlement accounts. Indirect participants are the financial institutions that submit NISS payments through the direct participants. The Bank's regulation, (Criteria for Authorization of Participation in the Clearing and Settlement Systems, PSD-6), allows for both direct and indirect participation into the NISS.

<b>Principle 20: FMI Links</b>	<b>Rating: Observed</b>
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**An FMI that establishes a link with one or more FMIs should identify, monitor, and manage link-related risks.**

Summary narrative

The NISS has a link arrangement to Namclear. This relationship is managed by a Service Level Agreement that is periodically reviewed. Any related risks arising between the NISS operator and Namclear are identified and mitigated regularly as part of the ongoing risk management.

<b>Principle 21: Efficiency and effectiveness</b>	<b>Rating: Broadly Observed</b>
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**An FMI should be efficient and effective in meeting the requirements of its participants and the markets it serves.**

Summary narrative

To ensure that the needs of its participants and the markets its serves are met, the Bank consults widely on any major changes to the NISS operational procedures or rules.

Efficiency-enhancing features of the NISS include the liquidity management tools such as queuing and diarizing mechanism.

In addition, the NISS and its participants use the SWIFT message standards for all fund settlement instructions. The use of common message standards aids in the facilitation of straight-through-processing, resulting in higher efficiency and smoother flow of payments.

<b>Principle 22: Communication procedures and standards</b>	<b>Rating: Broadly Observed</b>
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**An FMI should use, or at a minimum accommodate, relevant internationally accepted communication procedures and standards in order to facilitate efficient payment, clearing, settlement, and recording.**

Summary narrative

The NISS uses internationally accepted communication procedures and standards provided by SWIFT to communicate with its participants.

<b>Principle 23: Disclosure of rules, key procedures, and market data</b>	<b>Rating: Broadly Observed</b>
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**An FMI should have clear and comprehensive rules and procedures and should provide sufficient information to enable participants to have an accurate understanding of the risks, fees, and other material costs they incur by participating in the FMI. All relevant rules and key procedures should be publicly disclosed.**

Summary narrative

The NISS operating rules and procedures are documented in the NISS Service Level Agreement, Settlement Agreement, the NISS Operational Procedures and other relevant documents for NISS participants. These documents are not published on the Bank's website, but they are shared with the participants. To ensure that the NISS rules and procedures are clear and comprehensive, the Bank regularly consults the NISS participants when there are major changes to the NISS procedures, processes, and rules.

**V. Publicly available resources**

Publicly available resources include the Bank of Namibia Annual reports, Financial Stability Reports, Article 128 of the Namibian Constitution, Bank of Namibia Act 1 of 2020, Banking Institutions Act 2 of 1998, Employment Services Act No. 8 of 2011, Labour Act, Act No. 11 of 2007, Payment Systems Management Act 18 of 2003, as amended, PSD-1, PSD-2, PSD-3, PSD-4, PSD-6, PSD-7, PSD-8, PSD-10, PSDIR-1, PSDIR-4, The Principles for Financial Market Infrastructures, The Payment Systems and Bank of Namibia governance structures and the Risk-Based Oversight Policy Framework.