



BANKSERVAFRICA



BANKSERVAFRICA PRINCIPLES FOR FINANCIAL MARKET INFRASTRUCTURES DISCLOSURE FRAMEWORK

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RESPONDING INSTITUTION:

- SOUTH AFRICAN BANKERS SERVICES COMPANY (PTY) LTD (BANKSERVAFRICA)

JURISDICTIONS IN WHICH THE FMI OPERATES/PROVIDES SERVICES:

- REPUBLIC OF SOUTH AFRICA – PAYMENT CLEARING HOUSE SYSTEM OPERATOR (PSO)
- SOUTHERN AFRICAN DEVELOPMENT COMMUNITY – REGIONAL CLEARING AND SETTLEMENT OPERATOR (RCSO)
- DEMOCRATIC REPUBLIC OF THE CONGO (DRC) – TECHNICAL SERVICE PROVIDER TO MULTIPAY

AUTHORITY(IES) REGULATING, SUPERVISING OR OVERSEEING THE FMI:

- SOUTH AFRICAN RESERVE BANK NATIONAL PAYMENT SYSTEM DEPARTMENT (SARB NPSD)

THE DATE OF THIS DISCLOSURE IS FEBRUARY 2020

THIS DISCLOSURE CAN ALSO BE FOUND AT <https://www.bankserv africa.com/website/assets/DisclosureFramework.pdf>

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EXECUTIVE SUMMARY

BankservAfrica can trace its roots to 1972 with the formation of Automated Clearing Bureau (Pty) Ltd (ACB) which was the entity that was jointly created by the founding shareholders to perform the interbank clearing function for the South African payments industry.

BankservAfrica is a leading automated clearing house in Africa and provides interbank switching, clearing and settlement services to the South African banking sector in the context of its role as a Payment Clearing House System Operator (PSO). The company facilitates interbank payment transactions for in a properly regulated system that is compliant with international banking best practice and standards, while reducing risk and complexity in the industry.

In April 2012 the Bank for International Settlements' Committee on Payments Market Infrastructure (CPMI), and the Technical Committee of the International Organisation of Securities Commissions (IOSCO) published the "Principles for Financial Market Infrastructures (PFMIs) report.

The PFMIs update, harmonise and strengthen the international risk management and associated standards applicable to systemically important payment systems (PSs), central securities depositories (CSDs), securities settlement systems (SSSs), central counterparties (CCPs) and trade repositories (TRs).

In September 2013 the South African Reserve Bank confirmed its support for the PFMIs and delegated the oversight of the PFMIs to the National Payment System Department (NPSD). In a Position Paper dated September 2018, BankservAfrica was designated as a domestic systemically important financial market infrastructure by the NPSD.

Given BankservAfrica's role as a PSO, its main risks are associated with ensuring operational resilience. To that end, BankservAfrica has invested a great deal of resources in ensuring that its technology systems are resilient and capable of processing effectively and efficiently, that it has adequate financial resources that are available in the event that it requires operating capital and that its Business Continuity Processes and its Risk Management programme is effective and robust.



BankservAfrica has used the Principles for Financial Market Infrastructures: Disclosure Framework and Assessment Methodology to draft this document for the purpose of disclosing to its stakeholders its level of adherence to the applicable principles.



SUMMARY OF MAJOR CHANGES SINCE THE LAST UPDATE OF THE DISCLOSURE

Although BankservAfrica has undertaken previous self-assessments, it has not completed a Disclosure Framework as prescribed in the Principles for Financial Market Infrastructures: Disclosure framework and Assessment methodology and accordingly this is the first such document of this nature. Future Disclosure Framework updates will address major changes, using this document as the basis for the amendments.

GENERAL BACKGROUND OF THE FMI

BankservAfrica's services are provided to customers on a fair, equitable and transparent basis. It is a trusted partner of the South African financial services industry and is an integral part of the country's National Payments System (NPS).

At its core, BankservAfrica provides interbank switching, clearing and settlement of low value retail transactions (below R5 million) to the South African banking sector. The group facilitates transactions in a properly regulated system that is compliant with international banking best practice and standards, while reducing risk and complexity in the industry.

Leading systems, infrastructure, tools and expertise have ensured that BankservAfrica remains an important role player in electronic payment and information switching services. The group's operational abilities include:

- Multiple electronic delivery capabilities
- Facilitation of connectivity
- Message management
- Billing and compiling management information

Critical to all these operational abilities is the privacy, safety and security of the data transmitted and stored, which is managed and governed as a priority.



BankservAfrica serves as a PSO for the following PCHs:

- Authenticated Collections (AC)
- Authenticated Early Debit Orders (AEDO)
- Non-Authenticated Early Debit Orders (NAEDO)
- Code Line Clearing (Paper)
- Debit Card
- Credit Card
- Fleet
- Amex
- Diners
- Automated Teller Machine, Self Service Device & Over the Counter Device (ATM, SSD & OTCD)
- Electronic Funds Transfer (EFT) Credit
- Electronic Funds Transfer (EFT) Debit
- Real Time Clearing

BankservAfrica provides supplementary services such as:

- E-commerce transactions (3D Secure)
- Account Verification Services (AVS)
- Transaction Fraud Mitigation
- Integrated Cash Management Services
- Interbank billing and managing inter-bank fees and collections
- Detailed statistical trend analyses (which culminate in the economic trend indicators that BankservAfrica prepares and releases into the marketplace on a monthly basis)
- SWIFT Bureau services
- OnBase document management services
- Intix analytics services
- Data-Centre hosting services
- Independent Cash Administrator services

In addition to its role as a PSO in the domestic payments landscape, BankservAfrica has been appointed as the Regional Clearing and Settlement Operator (RCSO) for the SADC region and is also a technical service provider to Multipay, a payment service provider in the DRC.

General organisation of the FMI

The relationship between BankservAfrica, its shareholders and board of directors and their rights and responsibilities is governed by the Memorandum of Incorporation (in accordance with the relevant considerations contained in the Companies Act), and the company is structured and governed in accordance with its provisions.

BankservAfrica is owned by ABSA Bank Limited, Nedbank Limited, The Standard Bank Limited and First National Bank Limited, who collectively hold an equal share of 92.5% of the shareholding, with the remaining 7.5% being held by Dandyshelf 3 (Pty) Ltd, a consortium comprising of the following banks – Capitec, Grobank, uBank, Citigroup, Investec, Bidvest Bank, Mercantile Bank and Sasfin Bank.

Each Shareholder that holds 5% or more of the shares in BankservAfrica is entitled to nominate one Director. In addition to shareholder appointed non-executive directors, BankservAfrica’s Memorandum of Incorporation permits the Board to appoint a further five Independent Non-Executive Directors and up to four Executive Directors.

The following Board Sub-Committees have been constituted by the Board, namely - Audit and Risk Committee, Technology Committee, Human Capital Social and Ethics Committee, Nominations Committee and Remuneration Committee.

Legal and regulatory framework

In terms of Section 10 (1) (c) (1) of the South African Reserve Bank Act, the SARB is entitled to “perform such functions, implement such rules and procedures and, in general, take such steps as may be necessary to establish, conduct, monitor, regulate and supervise payment, clearing or settlement systems”.

- Clearing is defined in the NPS Act as “the exchange of payment instructions” and refers to the process through which participant banks use BankservAfrica’s services as a PSO to exchange and reconcile payment items made by customers and to calculate balances due to or from participant banks prior to settlement.



- Settlement is defined in the NPS Act as “the discharge of settlement obligations” and refers to the process through which participant banks use BankservAfrica’s services as a PSO to fulfil their clearing obligations to other banks by transferring funds between accounts held at the SARB based on the amounts owed to each other as calculated in the clearing process via a “settlement instruction’ which is an instruction given to a settlement system by BankservAfrica (as the PSO) on behalf of a (SARB) settlement system participant to effect settlement” (also as defined in the NPS Act).

These powers are affirmed by Section 2 of the NPS Act which states that “(t)he Reserve Bank, as contemplated in section 10 (1) (c) of the South African Reserve Bank Act, may exercise the powers and must perform the duties conferred and imposed on it by (the NPS Act)”, which includes, among other things, the issuing of directives in terms of Section 12 of the NPS Act. These powers and tasks are the contained in the National Payments System Department (NPSD) of the SARB.

In terms of Section 3 of the NPS Act, the SARB is empowered to recognise a PSMB to assist the SARB in fulfilling its responsibilities in terms of section 10 (1) (c) of the SARB Act. The Payments Association of South Africa (PASA) has been recognised as the PSMB by the NPSD (as per the NPS Act).

The objectives of the PSMB are to organise, manage and regulate, in relation to its members, all matters affecting payment instructions and, in connection with those objectives and to provide a forum for the consideration of matters of policy and mutual interest concerning its members. In addition to any other provisions thereof, the rules of the PSMB must empower that body to recommend for approval by the SARB, criteria subject to which any person is to be authorised to act as a PCH system operator within a payment system (“PSO Criteria”), and to authorise that person to act as a PCH System Operator in accordance with the PSO Criteria.

BankservAfrica undertakes an annual application process to PASA in accordance with the requirements contained in the PSO Criteria, to be reappointed as the PSO for the payment streams that it operates. The Payment Clearing House agreements and the schedules to these agreements govern the relationship between participants.

The legal certainty in respect of the services which BankservAfrica provides is also set out in the BankservAfrica Service Agreement which is entered into by BankservAfrica and each participant.



The operational details are contained in a series of Product Manuals and certainty on pricing is provided by a Pricing and Fee book. Both the Product Manuals and the Pricing and Fee book are binding on participants in terms of the BankservAfrica Service Agreement.

Any third party connectivity to BankservAfrica systems, which is not regulated in the BankservAfrica Service Agreement, is regulated by a NetConnect Agreement.

BankservAfrica contributes to support financial stability as set out in the various pieces of South African legislation, including Section 4 of the Financial Sector Regulation Act. On behalf of its members, BankservAfrica supports the public interest of South Africa in a resilient, efficient and fair National Payments System.

Insofar as BankservAfrica's licensing as the RCSO in SADC, it has received a license from the SADC PSMB, however there have not been any formal contractual agreements concluded with any of the potential participants in the respective payment streams as there are still many aspects that have yet to be finalised before these payment streams can become operational. The stream that is closest to becoming operational is the Transactions Cleared on an Immediate Basis (TCIB) payment stream which is currently in soft launch phase.

Insofar as the interbank card switch operations in the DRC relates, BankservAfrica has concluded contractual agreements with all the respective key stakeholders in the DRC.

System design and operations

In BankservAfrica's role as a PSO, it is licensed by PASA and is appointed by the Payment Clearing House Participant Groups (PCH PGs) for the individual payment streams in which it engages in the clearing and settlement of interbank payments between participant banks.

- Clearing is the process through which participant banks using BankservAfrica's services as a PSO exchange and reconcile payment items made by customers and the calculation of balances due to or from participant banks prior to settlement.

- Settlement is the process through which participant banks using BankservAfrica’s services as a PSO fulfil their clearing obligations to other banks by transferring funds between accounts held at the SARB based on the amounts owed to each other as calculated in the clearing process.

Although BankservAfrica is appointed as a PSO for a number of different payment streams, there are essentially two forms of payments that get processed by BankservAfrica, batch and online.

- **BATCH** is a term often used in transaction processing where a number of data records or files are bundled together (i.e. creating a ‘batch’ of records) for processing by a system. The processing of the ‘batch’ will be initiated on a predetermined or scheduled time as determined by the system owner or custodian. This offers system custodians the luxury of scheduling less urgent data processing processes at a later stage to spread the capacity load over the various systems. Similarly, it provides the system owners the luxury of prioritising processing activities to ensure optimal processing efficiency;
- **ONLINE** is a term often referred to in transaction processing where there is a need to process data records or files immediately to ensure a successful execution of the processing value chain. Online processing often happens in a matter of seconds and greatly reduces risks in the processing value chain. e.g. when someone withdraws money at an ATM, the transaction will be processed online (i.e. the card issuer will need to authorise the transaction) to ensure the customer has funds in her/his account before the ATM can dispense the cash. The customer would also be debited immediately. Therefore the entire end-to-end transaction is executed in a matter of seconds. Even though it does provide many benefits, online processing requires more processing power to be able to ensure there is always capacity to process the data.

BankservAfrica’s transactional volumes and values for the last three years is as follows:

Year	Volumes	Values (Rands)
2016 – 2017	3 133 697 957	R 10 798 768 525 270
2017 – 2018	3 421 876 521	R 11 455 735 135 351
2018 – 2019	3 793 619 110	R 12 221 791 173 930



Modernisation of payments

Payments modernisation has long been identified as critical to the South African payments landscape. BankservAfrica continues collaborating with the payments industry to develop modernisation solutions that support the South African economy.

Research is a key component to this process. An industry study tour was commissioned by BankservAfrica and PASA in 2019 to countries that would be of interest and relevance to South Africa.

The Rapid Payments Programme (RPP) is an industry project initiated by BankservAfrica to design and confirm the viability of a mobile-friendly, data-rich instant payments service that could be offered to the banks. During the 2018/2019 financial year, BankservAfrica built an API-enabled prototype of how a rapid payments service could work and this was demonstrated to the banks. A rapid prototyping approach was undertaken in designing this new service to maximise the speed of delivery to the market. This approach entailed design and prototyping happening in parallel and expediting the results as well as validating key concepts in a sandbox environment which included the banks in a co-creating programme has strong industry support, including from the regulators.

PwC were commissioned to support in the development of a commercial case for RPP in South Africa and what it could mean for the South African economy and the goal of moving to a more cashless environment.



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.

BankservAfrica operates within a sound regulatory framework, especially in its domestic PSO activities. The legal basis for BankservAfrica can be found in the National Payment System Act (NPS Act) which empowers the Payment System Management Body (PSMB) to authorise Payment Clearing House System Operators (PCH SOs) based on the entity's adherence to the Criteria for the Appointment of PCH System Operators (PCH SO Criteria). The legal framework includes the agreements that BankservAfrica has concluded with its customers (Service Agreements) and other technology service providers that connect into BankservAfrica (NetConnect Agreements).

BankservAfrica's processes and systems function within the ambit of the laws in which BankservAfrica operates. BankservAfrica can clearly articulate the regulatory authority by which it is governed. In the domestic context it is the NPS Act as well as the PCH SO Criteria. The agreements entered with the participants and other key stakeholders also enables BankservAfrica to articulate its regulatory authority with clarity.

BankservAfrica's procedures and contracts are clearly enforceable in the domestic context in its role as a PCH SO. To some degree it is not as certain in the other jurisdictions in which BankservAfrica operates, however this is mitigated using legal advisors in the different jurisdictions to provide clarity on the rules, procedures and contracts.

BankservAfrica's regulatory compliance awareness processes allows the organisation to be able to ascertain regulatory risks. BankservAfrica also engages the services of legal advisors in different jurisdictions to assist with providing legal guidance as and when deemed necessary.



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.

BankservAfrica's appointment as a PCH SO is based on the provisions contained in the NPS Act. BankservAfrica's Memorandum of Incorporation (MOI) states that the "business which the Company is to carry on is the provision of the Core Services and services that pursue interoperability, efficiencies and risk mitigation for the for the financial services industry by means of leveraging the Company's principal competencies, and such other services to be included in the Business as determined by Special Resolution from time to time"

The MOI furthermore states that the Company will ensure that:

- it maintains its focus on the Core Services, including but not limited to the allocation of key personnel, resources, funding, innovation and investment to the Core Services;
- it does not place the Core Services at risk through an excessive focus on any other services;
- Core Services take precedence over any other services;
- it will, as a PSO, provide Core Services to its customers on a fair, equitable and transparent basis.

BankservAfrica's MOI serves as the primary governance document in the organisation, and the Corporate Approval Framework and the Delegation of Authority Policy and the relevant procedures documents also serve as an indicator of the governance arrangements within the organisation.

BankservAfrica's MOI governs the function and role of the Board of Directors. Each Shareholder that holds 5% (five percent) or more of the Shares in the Company is entitled to nominate 1 (one) Director for so long as such Shareholder continues to hold 5% (five percent) or more of the Shares in the Company. In addition to shareholder appointed non-executive directors, BankservAfrica's MOI permits the Board to appoint 5 (five) Independent Non-Executive Directors and up to four Executive Directors.



The terms of reference of the various Board Committees govern the function of the Board Committees - these committees are the Audit and Risk Committee, the Technology Committee, the Remuneration Committee, the Nominations Committee and the Human Capital, Social and Ethics Committee. Conflicts of interest of directors are governed by the Conflicts of Interest and use of Confidential Information Policy. Directors are inducted into the organisation when they join the Board and there is continuous training and development (via membership of the IOD) as well as an evaluation of the performance of the Board of Directors every two years.

BankservAfrica follows a comprehensive process to ensure that its Independent Non-Executive directors are suitably qualified to serve as directors on the Board of Directors. The factors that are taken into consideration when assessing the independence of its Independent Non-Executive Directors are rigorously adhered to as is compliance with the declaration of interests in terms of the Conflicts of Interest and use of Confidential Information Policy.

The Executive Committee (ExCo) are individuals that are appropriately skilled and experienced to manage the company per the advice and guidance of the Board and in accordance with their key performance areas and as per the authority delegated to them by the CEO (who is in turn duly authorised and empowered by the Board). The performance of these senior members of management are assessed twice a year as part of the appraisal process.

BankservAfrica has a comprehensive Risk Management Framework that gets formally noted at the Board. There are several different role-players in the risk management process, but it is ultimately the Board of Directors that is responsible for the management of risks in the organisation. BankservAfrica subscribes to the ISO 31000:2009 framework and the top strategic risks as well as operational risks are reviewed regularly.

BankservAfrica's key stakeholders get consulted by management during the development of the strategy, thereby ensuring that broader industry interests get encapsulated in this process.



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.

BankservAfrica subscribes to the ISO 31000:2009 framework and the top strategic risks as well as operational risks are reviewed regularly.

BankservAfrica has a comprehensive risk management process in place which includes documented and tested Resilience Processes and Business Continuity Plans. All documents are reviewed, updated and approved on an annual basis by the Management Forums, the Board Committees and the Board of Directors in terms of the Corporate Approval Framework. An annual strategic risk analysis exercise takes place in which the key strategic risks are identified for the organisation and these are reviewed on a quarterly basis at the Audit and Risk Committee meetings. Operational risks are reviewed on a monthly basis by the various business units. Extensive focus is placed on the availability of the clearing and settlement services that are provided by BankservAfrica and a great deal of effort is taken to reducing single points of failure. The control environment is monitored on an on-going basis and regularly reviewed by the Internal Audit function and other external assurance providers.

BankservAfrica sanctions participants in the form of penalties for those participants whose behaviour introduces risk into the national payment system. New participants are trained on the systems and rules and processes so as to ensure that they are aware of the type of behaviour that would introduce risk into the system. Extensive testing is done to ensure that the connectivity with the participants is robust. In addition, there is Resilience Testing and Business Continuity Planning simulations to ensure that the risks are adequately mitigated. Participant banks can access the information regarding their own volumes and values that have been processed by BankservAfrica via a secure online portal which restricts them to information regarding their own volumes and values. Information is also shared to the PCH PG's on participants that are introducing risk into the system.

BankservAfrica is aware of the risks associated with network connections and accordingly monitors the risks that are posed to it by other connected parties as well as the risks that it poses to other parties to whom it is



connected. Extensive network connectivity testing is done with its participant banks to minimise this risk. Several tools are used to monitor the connectivity with participants and a Short Message Service (SMS) system has been implemented to communicate with participants in the event of any incidences. Maintaining the industry agreed SLA's in respect of the payment streams for which it is appointed as a PSO is at the forefront of BankservAfrica's priorities. Risks associated with connectivity interdependencies are discussed at the various risk as well as management forums in BankservAfrica, all the way up to the Audit and Risk Board Committee.

BankservAfrica uses Resilience and Business Continuity Planning testing/simulation exercises to test the organisation's ability to recover from various potential risk scenarios that could potentially impact processing.

- The Resilience Policy and the Resilience Manual cover the continuation of all BankservAfrica services and contains information such as a list of the various critical BankservAfrica Information Technology services, the time available for recovery, the recovery strategy as well as all the contact numbers of all critical support staff, vendors and customers in the event of a disaster.
- The Business Continuity Plan covers the relocation and recovery of all business operations. It defines the membership, roles and responsibility of the various recovery teams that will manage the recovery processes in the event of a disaster.



PRINCIPLE 13: PARTICIPANT-DEFAULT RULES AND PROCEDURES

AN FMI SHOULD HAVE EFFECTIVE AND CLEARLY DEFINED RULES AND PROCEDURES TO MANAGE A PARTICIPANT DEFAULT. THESE RULES AND PROCEDURES SHOULD BE DESIGNED TO ENSURE THAT THE FMI CAN TAKE TIMELY ACTION TO CONTAIN LOSSES AND LIQUIDITY PRESSURES AND CONTINUE TO MEET ITS OBLIGATIONS.

BankservAfrica is responsible for the clearing of transactions that are processed between the various participants, and the submission of the settlement files to the SARB via the SAMOS system where settlement takes place. BankservAfrica's processes are based on industry-wide rules that are developed by the PCH PG's and which clearly indicate that in the event of a default, the regulators (SARB and/or the PSMB) will step in and provide instructions on how to deal with the situation.

Given the way the service is provided by BankservAfrica, it would not be exposed to settlement risk if any of its participants were to default. Testing of the default processes gets conducted by the SARB's SAMOS Department in its capacity as the settlement system operator and BankservAfrica and the affected participant banks are required to participate as directed by SAMOS. The results of the tests are shared as appropriately with the relevant governance forums and regulatory authorities.

BankservAfrica's Business Continuity Plan contains adequate discretionary processes which delineates roles and responsibilities and details communication procedures to all relevant stakeholders that will be implemented in the event of any incident occurring.



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 MATERIALISE. FURTHER, LIQUID NET ASSETS SHOULD AT ALL TIMES BE SUFFICIENT TO ENSURE A RECOVERY OR ORDERLY WIND-DOWN OF CRITICAL OPERATIONS AND SERVICES.

BankservAfrica has a well-developed risk management programme which incorporates, among other things, the annual strategic risk assessment workshop at which risks are assessed against current controls and evaluated for residual risk level. In addition, there are monthly risk assessment workshops, which feed into the quarterly Audit and Risk Committee meetings. These different processes and forums are sufficient to enable the identification of the risks specifically mentioned in this principle.

Although BankservAfrica retains at least 6 months' worth of operating costs in liquid net assets (which is in keeping with the recommendations contained in the PFMI), there is very minimal risk of BankservAfrica being directly affected by a defaulting participant, save for the possibility of credit risk arising out of participants failing to pay BankservAfrica services rendered. BankservAfrica has adequate insurance cover to mitigate potential losses arising out of commercial activities.

BankservAfrica's Business Continuity Plan and Resilience Plan address the processes to be adopted by BankservAfrica in the event of an incident that could potentially impact the sustainability of the organisation.

Assets that are invested for the management of general business risk are of a high quality and are managed through various investment portfolios. The status of investment portfolios is monitored at the requisite platforms and by the Audit and Risk Board Committee on a quarterly basis as part of its review of the financial affairs of the organisation.

The development, implementation and strict adherence to the Investment Policy and Enterprise Risk Management processes and practices ensures no issues of concern or identified gaps or shortcomings or deficiencies of the key considerations the PFMI.



BankservAfrica's Investment Policy and Enterprise Risk Management processes and practices as well as the various internal committees and forums ensures that the investments and financial affairs are well managed and that there is strict oversight to ensure that assets that are invested for general business risk are adequate. In the event that it was to ever raise additional capital as a result of the assets that are being retained being less than its business needs, this would be addressed with its Board and its Shareholders in terms of its Memorandum of Incorporation.

PRINCIPLE 16: CUSTODY AND INVESTMENT RISKS

AN FMI SHOULD SAFEGUARD ITS OWN AND ITS PARTICIPANTS' ASSETS AND MINIMISE 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.

BankservAfrica does not hold any assets on behalf of its participants, all assets referred to in this particular principle relates to BankservAfrica's own asset. Custody risk is dealt with by ensuring BankservAfrica only holds cash at, or invests surplus cash in, listed registered banks or financial institutions.

The liquidity of its investments (as well as the safety of the funds that it has invested) are all addressed in BankservAfrica's Investment Policy, which gets reviewed on an annual basis, thereby ensuring that BankservAfrica will have prompt access to its investments.

BankservAfrica's Investment Policy covers credit risk, which ensures that investment institutions are pre-qualified and that portfolios are diversified so that potential losses will be minimised.

BankservAfrica puts the principle of safeguarding its investments at the top of its investment priority. The Investment Policy sets out investment parameters such as portfolio diversification, which is meant to minimise the risk of loss resulting from over-concentration of assets. The policy also deals with liquidity and the restriction of the types of entities with whom BankservAfrica can invest in.



PRINCIPLE 17: OPERATIONAL RISKS

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.

BankservAfrica has made large investments in recent years towards sustaining system availability and minimising downtime. All known single points of failure have been eliminated through on-site resilience, data replication and dual processing. The participants connect to the primary and/or secondary production sites for processing real-time transactions and an immediate switch over is done for batch processing if required.

BankservAfrica has a comprehensive operational risk-management framework with appropriate systems, policies, procedures, and controls to identify, monitor, and manage operational risks. BankservAfrica conforms to the ISO 31000 risk management standard. Given BankservAfrica's role in the national payment system, its IT operations are closely monitored and there is a focus on adherence to policies and standards. Change management processes as well as the skills and experience of staff, particularly the staff engaged in the operations of its key services, are also very important in minimising the operational risks.

BankservAfrica's Board is involved in the approval of its risk management framework and the Audit and Risk Committee is directly involved in the oversight of risk management in the organisation. In addition, operational risk is addressed at a technical level at the Technology Committee. The systems and processes are subjected to scrutiny by the Internal Audit department as part of its three year rolling internal audit programme.

BankservAfrica agrees its own annual operational service level targets with the Board and which is tracked by the Operations Manager on a monthly basis. These Service Level Agreement (SLA) targets are formally recorded and presented to the respective Audit and Risk Committee, the Technology Committee and the main Board. All incidents that fail to meet the agreed SLA's are communicated to all relevant stakeholders.



Capacity utilisation is measured and monitored on an on-going basis by the Infrastructure Department, especially around peak processing periods. The monitoring of BankservAfrica's capacity is overseen by the Technology Committee. Capacity is addressed in BankservAfrica's annual capital expenditure programme to ensure that the organisation's capacity is at optimal levels and capacity performance is measured on a 24x7x365 basis by the Operations Department.

BankservAfrica has the requisite policies and procedures in place to address both physical and information security vulnerabilities. The former is addressed in terms of its Security Manual and the latter by the Information Security policies which are based on PCI DSS standards as well as ISO 27001. There are numerous platforms and forums at which information security is addressed. External consultants are used on an advisory basis as well as to undertake testing of BankservAfrica's systems. The Internal Audit department undertakes reviews of the policies and processes to ensure that there is strict compliance and the Change Advisory Board (CAB) facilitates the change management processes whilst taking into consideration risks being introduced.

BankservAfrica has a secondary site which is more than 16 km's from the primary processing site. Redundancy in respect of BCP is by virtue of dual operational sites in both Selby and Randburg. Replication between the sites is real time on a 24x7x365 basis. Dual Connectivity exists between the Selby and the Randburg sites. Accordingly, in the event of any issues affecting processing of real-time transactions at any one of the sites, the processing will continue as normal due to the banks processing to both sites in parallel. In the case of any issues relating to the processing of batch transactions, BankservAfrica will relocate from one site to the other and continue to process all unprocessed input files for the day.

BankservAfrica understands the risks posed on it by other parties. BankservAfrica has a robust infrastructure providing on-site resilience, bi-directional replication and dual processing. BankservAfrica monitors all transmission networks on behalf of the participants. Failures are escalated to the relevant participant the moment that it is detected. Any delays in processing are escalated via a bulk SMS and e-mail service.

BankservAfrica has introduced a Managed Network Service (MNS) which enables it to have control over the network. This service was introduced to reduce service outages as a result of network issues and consequently serves to promote better service levels.



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.

BankservAfrica takes guidance and instruction from the SARB NPSD, the Payment System Management Body and PCH PGs when it comes to aspects such as participants (or prospective participants) gaining access to BankservAfrica.

BankservAfrica's processes and procedures are aligned to these guidelines and/ or instructions and it reports back to the SARB NPSD, the Payment System Management Body and the PCH PGs upon completion.

The following aspects are worth noting in respect of the key considerations:

- The prospective participant must agree to the adherence of the criteria as stipulated by the SARB NPSD, the Payment System Management Body and PCH PGs. All participants are subjected to the same rules and provisions and there is a level and transparent pricing structure (which is shared with the participant banks using BankservAfrica's services) so as to ensure fairness (and to prevent any particular participant from gaining an unfair competitive advantage over other participants).
- BankservAfrica is governed by the PCH PG clearing rules which conform to the SARB's mandate of ensuring the stability of the National Payments System. Accordingly, any approach by a prospective participant is undertaken in accordance with such risk mitigation measures as contained in these rules.
- Furthermore, BankservAfrica's risk and internal audit processes ensure that acceptable risk control standards are in place.
- The participants are monitored by the SARB NPSD, the Payment System Management Body and PCH PGs however BankservAfrica would be compelled to assist with providing information pertaining to participants not adhering to participation criteria posing a risk to the national payment system. If a participant's risk profile deteriorates extensively, it gets noted onto BankservAfrica's risk register (which gets reviewed by the Audit and Risk Committee). BankservAfrica takes instructions from the SARB in the event of a participant being suspended.

PRINCIPLE 19: TIERED PARTICIPATION ARRANGEMENTS

AN FMI SHOULD IDENTIFY, MONITOR, AND MANAGE THE MATERIAL RISKS TO THE FMI ARISING FROM TIERED PARTICIPATION ARRANGEMENTS.

BankservAfrica's tiered participation arrangements are premised on the ability of participant banks to themselves be able to sponsor indirect participants into the National Payments System.

The following pertinent factors relate to the key considerations:

- BankservAfrica is dependent on the participant's risk management processes to ensure that indirect participant risks are appropriately managed. BankservAfrica does however get involved from a user specification perspective to ensure that the tiered participants are able to, among other things, connect to BankservAfrica. It is also then able to access technical information of the tiered participants.
- The first tier participants are supervised by the SARB, the Payment System Management Body and PCH PGs and all the subsequent tiers are bank approved and require a due diligence to be undertaken by the sponsoring bank to ensure that they do not introduce systemic risk into the National Payments System.
- All settlement data is submitted via SAMOS to the SARB, and the SARB monitors the proportion of activity that is occurring in respect of both direct and indirect participants. BankservAfrica reporting reflects the settlement breakdown between sponsored and sponsoring banks per service per settlement window. BankservAfrica provides this information to the sponsoring banks (as it is responsible for managing the risk profile of the indirect participant) as well as in certain instances to the Payment System Management Body.
- BankservAfrica has a mature Risk Management Framework and standard risk management processes will apply if any tiered participant does pose an obvious risk to BankservAfrica's operations, which may include approaching a sponsoring bank to discuss the risks that an indirect participant poses should it be deemed necessary to do so.

PRINCIPLE 21: EFFICIENCY AND EFFECTIVENESS

AN FMI SHOULD BE EFFICIENT AND EFFECTIVE IN MEETING THE REQUIREMENTS OF ITS PARTICIPANTS AND THE MARKETS IT SERVES.

BankservAfrica's commitment to efficiency and effectiveness is borne out by its efforts and the resources that it invests into the process.

Engagements are undertaken widely across the industry when developing or making changes to its systems and products, thereby ensuring that it remains relevant and appropriate to the needs of its regulators, participants and other key stakeholders.

BankservAfrica's goals and objectives are to get as close to 100% service levels as possible (hence the internal target of 99.999%), thereby being effective in its role as a PSO in the National Payments System (NPS). To this end, it has invested in the requisite systems and processes to ensure the effectiveness of its operations as well as to continually monitor that these goals are being achieved.

BankservAfrica has a well-developed process to evaluate the efficiency and effectiveness of its operations, incorporating measuring its SLA's for effectiveness and its efficiencies via monitoring, among other things, system performance against volumes received and effective price per transaction.

BankservAfrica conducts an annual stakeholder relationship assessment survey which assesses among other things, the respondents' opinion of the effectiveness and efficiency of the services that BankservAfrica provides to its participant banks and the markets that it serves. The results of this survey get shared with the Board.

PRINCIPLE 22: COMMUNICATION PROCEDURES AND STANDARDS

AN FMI SHOULD USE, OR AT A MINIMUM ACCOMMODATE, RELEVANT INTERNATIONALLY ACCEPTED COMMUNICATION PROCEDURES AND STANDARDS IN ORDER TO FACILITATE EFFICIENT PAYMENT, CLEARING, SETTLEMENT, AND RECORDING.

BankservAfrica operates in a closed domestic user group environment and accommodates both local and international communication standards either natively (for local processing) or through international standards based translation products (when using SWIFT interface).

BankservAfrica is able to use or accommodate international standards and processes card transactions and real time payments using ISO 8583 based standard.

The industry initiative to replace the domestic batch payment message standards with the ISO 20022 message standard is still underway. BankservAfrica is actively involved in driving this process in the industry as part of the modernisation of payments programme.

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.

BankservAfrica has Product Manuals and guidelines on the operations of its systems and these get disseminated to the relevant stakeholders and participants. BankservAfrica also discloses its change management processes to the participants should they require it. The participants are also informed of their rights and obligations in the respective agreements and annexures that are signed.



Although BankservAfrica discloses these documents as well as the relevant technical specifications to the participants and other relevant stakeholders, it does not disclose this level of information to the public at large (there are however product fact sheets that are available on its website which is accessible to the public).

The Payment System Management Body rules stipulate that every new participant has to come on board with a mentoring bank that is supposed to provide the new participants with the necessary training and guidance. The mentoring bank is responsible for ensuring that the new participant understands the rules and the procedures. BankservAfrica serves as one of the facilitators to providing the participants with the necessary training and information and will escalate to the regulator if it finds that a participant does not understand the rules as it ought to.

BankservAfrica discloses its pricing to its participants (and prospective participants after they've signed the relevant non-disclosure agreements) in its Pricing and Fee book which discloses all relevant fees. It does not disclose its pricing to the public, and any changes to services and fees are undertaken via the bank notices. Information relating to costs of operating BankservAfrica gets disclosed to its Board.



APPENDIX I

PRINCIPLES 'NOT APPLICABLE' TO BANKSERVAFRICA

- Principle 4: Credit risk BankservAfrica is a PCH SO and, owing to the nature of its operations, is not exposed to credit risk.
- Principle 5: Collateral BankservAfrica does not utilise collateral to manage its own or its participants' credit exposures.
- Principle 6: Margin This principle within the PFMI is not applicable to PSs.
- Principle 7: Liquidity risk BankservAfrica is a PCH SO and, owing to the nature of its operations, is not exposed to liquidity risk.
- Principle 8: Settlement finality BankservAfrica is a PCH SO and does not facilitate settlement. Elements pertinent to BankservAfrica's impact on settlement finality in the SAMOS system are addressed in Principle 17.
- Principle 9: Money settlements BankservAfrica is a PCH SO and does not facilitate settlement.
- Principle 10: Physical deliveries This principle within the PFMI is not applicable to PSs.
- Principle 11: Central securities depositories This principle within the PFMI is not applicable to PSs.
- Principle 12: Exchange-of-value settlement systems BankservAfrica is a PCH SO and does not operate as an exchange-of-value settlement system.
- Principle 14: Segregation and portability This principle within the PFMI is not applicable to PSs.
- Principle 20: Financial market infrastructure links This principle within the PFMI is not applicable to PSs. The operational link with the SAMOS system is addressed under Principles 3 and Principle 17.
- Principle 24: Disclosure of market data by trade repositories. This principle within the PFMI is not applicable to PSs.



APPENDIX II

LIST OF PUBLICLY AVAILABLE RESOURCES

BANKSERVAFRICA GENERAL INFORMATION

- Background information - <https://www.bankservafrika.com/website/about-us/what-we-do>
- BankservAfrica pricing philosophy – <https://www.bankservafrika.com/website/about-us/our-pricing-philosophy>
- BankservAfrica payments modernisation – <https://www.bankservafrika.com/website/about-us/future-of-payments>
- BankservAfrica Business Review – <https://businessreports.bankservafrika.com/>
- BankservAfrica data insights – <https://www.bankservafrika.com/website/data-insights>
- BankservAfrica footprint – <https://www.bankservafrika.com/website/our-reach>