

# THE STATE OF INCLUSIVE INSTANT PAYMENT SYSTEMS IN AFRICA

SIIPS 2025 • (Case Study)

SIMO Mozambique







### **Origin Story**



#### Challenge

Mozambique's journey to establish a single payment clearance network for all payment service providers began in 2011, when it established the Sociedade Interbancária de Moçambique S.A. (SIMO) to create a single platform for interbank systems (Renpayments, 2025). SIMO launched its instant payment system (IPS) in 2012, enabling bank-to-bank transactions (i.e., as a bank IPS). Following upgrades to its payment systems in line with the strategic objectives of Mozambique's Financial Sector Development Strategy (FSDS) 2013-2022 and the National Financial Inclusion Strategy (NFIS) 2016-2022, SIMO launched a new IPS in 2022, enabling cross-domain functionality.

Before the launch of the cross-domain IPS, Mozambique's financial system had different payment processors and switches that were not interconnected and lacked transparent pricing and processes, making the overall financial ecosystem less convenient for end users. Although bilateral agreements existed between some payment service providers (PSPs), these were often based on the commercial power of the institutions involved. This resulted in limited interoperability between bank accounts and mobile money accounts, and made digital financial services (DFS) more costly and difficult for end users to access (World Bank, 2020a). Cash was often simpler and more universally accepted.

Given the financial landscape, Mozambique's financial inclusion was low: the Global Findex 2021 reported that only 39% of the adult population (15+ years) had a bank account, and 29% had an active mobile money account, resulting in an account ownership rate of 49% in 2021 (World Bank 2022g).

Under the FSDS 2013-2022 and NFIS 2016-2022, SIMO was tasked with implementing services to promote a single national and integrated network

to increase financial access in rural areas and promote financial inclusion in the country. Against this backdrop, SIMO evolved from a bank IPS into a cross-domain IPS. It began this shift by migrating to a single payment system, Ren by Euronet, in 2021. The migration first focused on commercial banks, followed by e-money issuers, specifically mobile money operators (MMOs). By November 2023, SIMO had all commercial banks and e-money issuers fully integrated onto the upgraded SIMOrede, the cross-domain IPS platform operated and managed by SIMO, the parent company (Bank of Mozambique, 2023b).



#### Value proposition

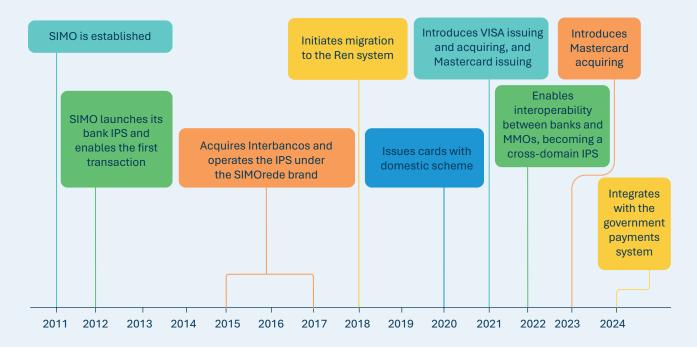
Interoperability through SIMOrede has enabled PSPs to facilitate cross-domain transactions and expand access to financial services. The percentage of the adult population with access to digital financial services through mobile money accounts grew to 46% by 2024, and the overall account ownership rate also increased to 54% (World Bank 2025b).

The value proposition of SIMO's cross-domain IPS is multifaceted, offering the following benefits to end users:

- Enhanced interoperability: Prior to the launch
  of the upgraded SIMOrede platform, users had
  to rely on over-the-counter services at physical
  bank branches or mobile money agents for
  transfers. Now they can make cross-network
  digital transactions.
- 2. Increased financial inclusion: The integration of e-money issuers onto the upgraded SIMOrede platform has facilitated inclusion for low-income citizens. In 2024, 46% of adults in Mozambique had an active mobile money account, compared to 25% of adults with a bank account (World Bank

- 2025b). Given the dominance of mobile money in Mozambique, the integration of e-money issuers onto SIMOrede is expected to drive account usage.
- 3. Shift from cash to digital payments: The market has seen an upward trend in the use of digital government payments (especially for person-to-government (P2G) payments)
- and merchant payments (person-to-business (P2B), including in informal markets.
- convenience: 4. Increased Participants on SIMOrede can facilitate payments via unstructured supplementary service data (USSD), automated teller machines (ATMs), and point-of-sale (POS) machines anytime, anywhere, to any person or merchant.

#### SIMO development timeline



Source: SIMO 2025

SIMO's bank IPS was launched in 2012; five participant commercial banks conducted the first transactions. SIMO followed with a number of upgrades to enable interoperability between banks and e-money issuers, leading to the 2022 launch of the new cross-domain IPS. The groundwork for the cross-domain IPS began in 2018 following a nationwide 'blackout' of Mozambique's financial system, which left most ATMs, debit, and credit cards unusable. This marked the beginning of a new phase in SIMO's technological evolution to a sole national payment system.

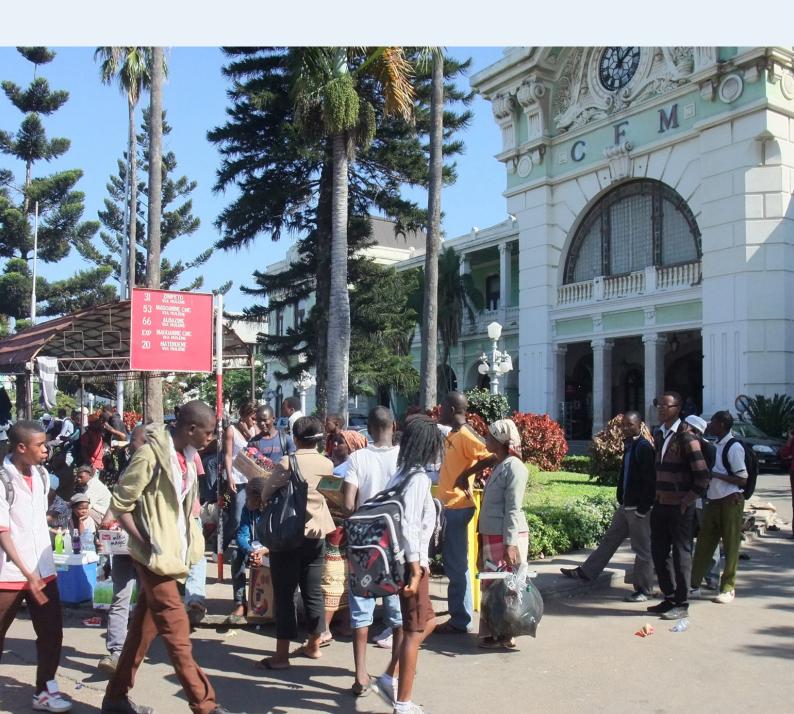
Before the introduction of SIMOrede, SIMO utilized different internal systems for processing payments (Electronic Payment Management System (EPMS) and Ponto) in a landscape where commercial banks also employed multiple networks, including Multicash. The introduction of the Ren system replaced EPMS and Ponto and integrated the Multicash network, thereby establishing SIMOrede as the sole IPS in the country. Euronet served as the solution provider for this migration.

SIMO executed its consolidation across multiple phases. SIMO began with banks and then began to integrate e-money issuers on the new IPS on July 1, 2022 (Bank of Mozambique, 2022b). This phased work culminated in November 2023, when all commercial banks and e-money issuers in Mozambique were unified under the SIMOrede IPS.

SIMOrede supports debit, credit, and prepaid cards; contactless payments with additional authentication [such as a personal identification number (PIN)]; and online payments. The migration to the cross-domain SIMOrede IPS introduced expanded functionality to support wallets through

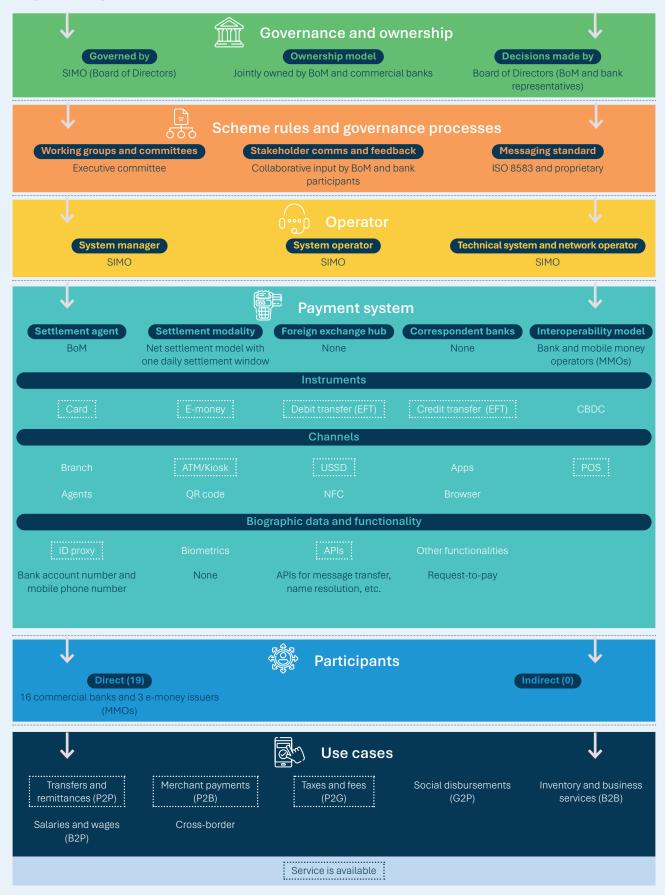
USSD. SIMOrede also introduced bill payments (P2B and P2G) and enabled mobile wallet top-ups at ATMs.

SIMO plans to expand interoperability to include other PSPs, such as fintechs operating as either e-money institutions, funds transfer institutions, or payment aggregators, under the PSP license issued by BoM. SIMO also plans to introduce a standardized quick-response (QR) code solution for all participants. In 2025, SIMO also tested and certified "Visa Transfer Money," a service for international wallet transfers to local accounts. This indicates SIMO's intention to facilitate cross-border flows in the short-to-medium term.



### **Governance and operations**

#### **Payment system overview**



Currently, 19 direct participants (16 commercial banks and three e-money issuers) are onboarded on the SIMO IPS. The IPS leverages standardized application programming interfaces (APIs) that enable integration between PSPs and technical service providers using ISO 8583 standards for messaging. SIMOrede operates on a net settlement model, with settlements occurring once a day at 3:00 p.m. Greenwich Mean Time (GMT) +2.



#### Governance structure

SIMO is owned by Mozambique-based commercial banks and the BoM, with the central bank holding the majority of shares. The SIMOrede IPS is a service operated by SIMO with technical support from Euronet, a technology vendor. PSPs can become part-owners by buying a share in SIMO. The IPS is therefore jointly owned and operates under a public-private partnership governance model.

E-money issuers are direct participants on the network but are not shareholders of SIMO. All direct participants maintain settlement accounts at the BoM.

SIMOrede is operated under a national switch license issued by the central bank. A board of directors governs the IPS and includes bank CEOs led by a chairperson appointed by the BoM. Large commercial banks have direct representation on the board, while medium and smaller banks have representation by rotation. The board meets monthly to make IPS-related decisions under the BoM's regulatory guidance. SIMO's executive commission communicates board decisions to stakeholders who are not board members, such as e-money issuers.



#### **Functionality**

SIMOrede supports multiple interoperable channels across banks and e-money issuers. The system

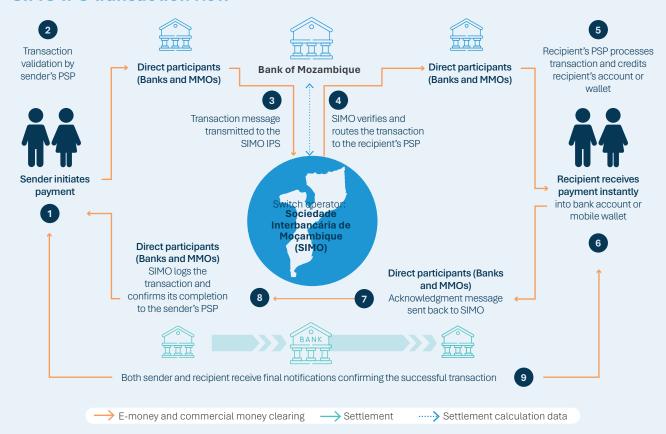
accommodates payments through feature phones, enabling transactions through USSD, as well as through POS terminals and ATMs. In addition, SIMOrede provides infrastructure to support mobile wallets provided by banks and e-money issuers. While SIMO does not manage these wallets, mobile wallets owned and operated by participants must route transactions through SIMOrede to comply with regulations. Channel selection is determined by individual PSPs based on their customer needs. SIMOrede includes an API gateway that enables the IPS to extend and streamline relationships with PSPs.

The BoM is SIMO's settlement agent. The system leverages central bank liquidity through direct connection to the BoM-managed RTGS (Real-Time Gross Settlement) system for final settlement. The BoM's RTGS system is integrated with Automated Payment Systems (SPAs) to comply with ISO 20022 standards.

The instant payment process begins with the sender initiating a payment through their preferred channel, such as POS, ATMs, and USSD. The PSP validates transaction details, including identity verification and fund availability. The payment instruction is transmitted to SIMOrede via the PSP API. The IPS routes the message from the sender's PSP to the receiver's PSP. After the receiver's PSP authenticates, authorizes, and verifies the account, the IPS forwards payment status to the sender's PSP, which notifies the consumer through short message service (SMS) channels. An acknowledgment message returns to the IPS for transaction logging and completion confirmation. Both the sender and the recipient receive final transaction confirmations from their respective PSPs.

Settlement and clearing of accounts begin at 3:00 PM GMT+2, with SIMO gathering all the transaction information from the business day for all participating institutions. SIMO shares a daily transactions report with each of the 19 participants to assist them with reconciling their transactions. A single file containing all the transactions routed through SIMOrede is sent to the BoM to determine the credits and debits for each participating institution and facilitate the final settlement process.

#### SIMO IPS transaction flow





The IPS system utilizes ISO 8583 as well as proprietary messaging standards for payment instruction transmission between PSPs. SIMO provides an API gateway that enables participants to interact with a single endpoint while the SIMOrede IPS manages underlying routing and processing.

SIMO implemented a phased use case deployment strategy, beginning P<sub>2</sub>P payments in 2012, when the IPS had only enabled bank-to-bank functionality. Today, P2P support includes transfers between bank accounts and all-to-all interoperability between bank accounts and e-money issuers (P2P wallet-to-wallet, wallet-to-account. and account-to-wallet transfers). SIMO implemented P2B functionality in 2022, when the IPS enabled cross-domain transactions. More recently, it added P2G in 2024. The next development phase will introduce the G2P payment use case.



The initial capital for the development of SIMO's first IPS was provided in 2012 by participants (BoM and banks) through the purchase of company shares. The upgrades to evolve the initial bank IPS into the cross-domain IPS were financed using SIMO's internal funds, approved by shareholders.

SIMO operates on a not-for-loss revenue model that charges fees sufficient for cost-recovery while also generating funds for the sustainability of the IPS. SIMOrede's fees are structured into three main categories: communication fees, processing fees, and fixed transaction fees, regardless of transaction value. While SIMO charges a fee per transaction, the final fee paid by end users includes an added fee on top of SIMO's fee to PSPs. The BoM approves SIMO's fees and pricing structure for participants before the market adopts them.



#### Scheme rules

The SIMO scheme rules that govern SIMOrede and its participants outline the procedures and operational guidelines of the IPS, as well as the procedures for addressing customer concerns and disputes. The scheme rules are not disseminated publicly and are only available to participants.

As the arbitrator on the IPS, SIMO has a dedicated team that handles disputes and addresses complaints that participants receive from their clients (i.e., end users). Dispute resolution services are also governed by the IPS scheme rules.

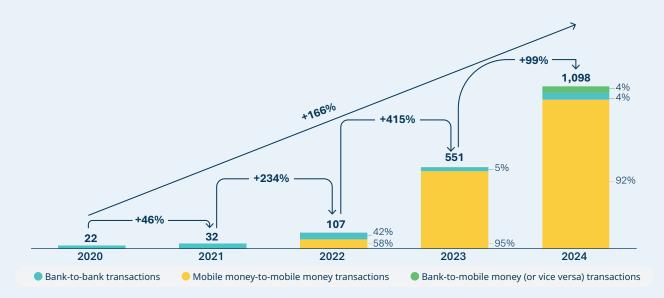
Participants are responsible for compliance requirements, such as know your customer (KYC) and anti-money laundering (AML) limits, as mandated by the BoM. SIMO also has AML

and security policies embedded in its scheme rules, which are reviewed annually by the board of directors.



The volume data shows an increase in the number of IPS transactions, especially with the introduction of e-money issuers on the network. SIMOrede experienced a 166% compound annual growth rate (CAGR) between 2020 and 2024, from approximately 22 million transactions to 1.1 billion transactions. Growth was higher between 2021 and 2022 as a result of the scheme beginning to approve and onboard e-money issuers; that year saw a 234% annual increase from 32 million to 107 million. All commercial banks and e-money issuers were fully integrated into SIMOrede by November 2023.

#### SIMOrede volume (millions) transactions



In 2024, the volume of transactions processed by SIMOrede reached the billion landmark, driven by wallet-to-wallet transactions (i.e., mobile money-to-mobile money transactions). Mobile money transactions constitute 92% of the total volume of transactions processed by the IPS in 2024, commensurate with the growing strength of mobile money in Mozambique. Bank-to-bank and bank-to-mobile money or mobile money-to-bank transactions are less common.

Another trend is the growth in transactions between bank accounts and mobile money wallets. In 2022, SIMOrede reported that only 244 transactions were between banks and mobile money. This number has since increased, reaching 43 million transactions in 2024.

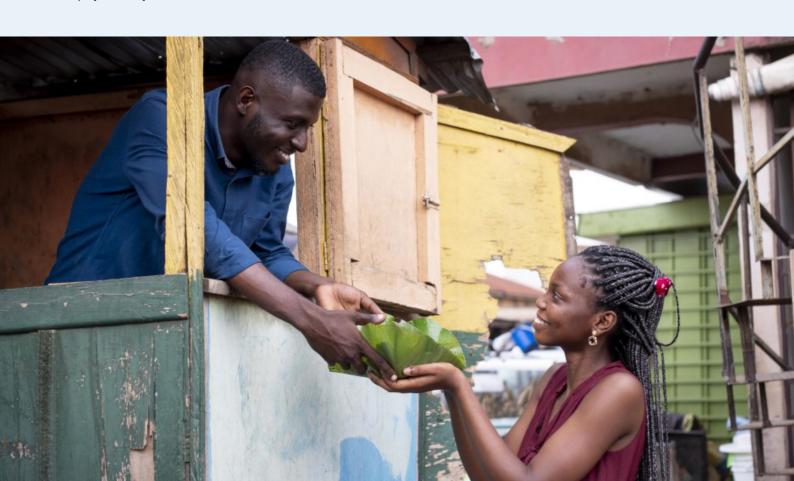


SIMO's operations and its participants are subject to various laws and decrees related to the national payment system and electronic transactions. This

includes Law No. 2/2008, of February 27, which established the National Payment System (NPS) and created the coordination committee of the NPS. The BoM is currently revising this law to adjust the framework to the current context of the payment system, particularly with the launch of the Real Time Gross Settlement (RTGS) system in 2023 and the modernization of SIMO.

In 2015, the BoM mandated financial institutions to integrate their internal banking operations management systems into SIMO via a Notice published on 22 April 2015. The directive outlined the terms and conditions to which banks should adhere to achieve interoperability through a unified, common, and shared infrastructure.

Additionally, the activities of SIMO align with the strategic objectives of the BoM, as outlined in the country's national payment system strategy and financial inclusion strategy.



### **Inclusivity learnings**

Similar to 2024, SIMO is ranked at basic inclusivity on the 2025 AfricaNenda Inclusivity Spectrum. The only development since July 2024 is that P2G payments have been enabled following SIMO's integration with government payment systems (Electronic State Financial Administration System (e-SISTAFE)).

While SIMO is ranked as basic, it meets some criteria for progressed inclusivity, such as cross-domain functionality and the involvement of the central bank in IPS governance. It also meets the mature inclusivity criterion of operating on a not-for-profit model.

## The following drivers of inclusivity have been identified:

• SIMO has met the minimum primary channel requirement by enabling USSD for end-users to engage with the payment system, which is consistent with Mozambique's status as a mobile money-dominated country. SIMOrede has enabled minimum use-case functionality, including P2P payments through USSD, POS, and ATM.

- SIMO fulfills the cross-domain criteria for progressed inclusivity. By November 2023, all commercial banks and e-money issuers were fully integrated. In addition, SIMO meets the central bank governance involvement requirement of progressed inclusivity. As the majority shareholder of the IPS, BoM appoints the chairperson of the board of directors and approves the fees and pricing structure of the IPS to deliver inclusive and affordable digital payment services.
- SIMO has yet to implement a pro-poor governance structure in which all participants have input into decision-making. Currently, only banks are represented on the board of directors and are involved in the decision-making process. For this reason, SIMO has not yet achieved the progressed inclusivity ranking.
- From a mature level of inclusivity, SIMO offers low cost for end users. SIMO operates within a not-for-loss business model. SIMO's fees are aimed at generating revenue for cost recovery and ensuring the sustainability of the IPS (i.e., raising funds for future upgrades).



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