



THE STATE OF INCLUSIVE INSTANT PAYMENT SYSTEMS IN AFRICA

SIIPS 2025 • Case Study

NIP Nigeria

Origin Story



Challenge

The Nigeria Inter-Bank Settlement System (NIBSS) launched its instant payment system (IPS) in 2011 with the explicit goal of increasing financial inclusion. Only 30% of Nigeria's 85 million adults had access to formal financial services at that time (World Bank 2011). NIBSS Instant Payment (NIP) grew out of a strategic framework established by the Central Bank of Nigeria (CBN) in 2007, known as the Cashless Policy and Payment System Vision 2020. This framework established a roadmap for transitioning from cash-dominated to digital payment systems, with NIP as a supportive element.

At launch, NIP was available 24/7. However, its immediate impact on financial inclusion was constrained by the fact that excluded populations lacked digital access. For example, adults in rural areas had limited opportunities to access financial services due to a lack of banking infrastructure (6.8 branches per 100,000 adults) (EFInA, 2010). Internet penetration was also low, and agent networks in rural areas were sparse. As NIP evolved, however, it transformed into a financial inclusion enabler that helped address accessibility and affordability barriers.



Adding value

NIBSS was established in 1992 by the Bankers' Committee—a collaborative body for the CBN and the country's deposit-taking banks—as a shared service to help streamline interbank payments and settlements and promote electronic payments. Before the development of NIP, Nigeria's payment ecosystem was dominated by cash transactions (CBN, 2021d). The limited electronic payment options included:

- **Cheque clearance:** Processing required between three and five days through multiple clearinghouses.
- **Card payments:** Limited to ATM withdrawals.
- **Over-the-counter transfers:** Manual, paper-based processes requiring physical branch visits.

The resulting payment landscape was inefficient, with long settlement times, high operational costs, and limited accessibility, particularly in rural areas. According to the EFInA A2F survey from 2010, only 22% of Nigerian adults made electronic payments.

NIP was designed to address the heavy reliance on cash by offering an electronic alternative with comparable benefits—including immediate settlement, universal access, and continuous availability—but without the security risks and inefficiency inherent in the use of physical currency (Babalola, 2022). Since its inception, NIP has evolved significantly, expanding from a basic electronic funds transfer (EFT) service into a comprehensive payment system that is the backbone of Nigeria's digital financial ecosystem.

NIP's value proposition centers on six key elements:

1. **Immediacy and reliability:** The system provides 24/7 instant payment capabilities with a maximum transaction processing time of 20 seconds; most transactions take less than one second (NIBSS, 2025b). This represents a significant improvement from the 45-second maximum reported in SIIPS 2022, enhancing both user experience and operational efficiency.
2. **Universal interoperability:** NIP connects all financial institutions in Nigeria through a hub-switch model, ensuring seamless transactions between banks, microfinance

- **NIBSS Electronic Funds Transfer (NEFT):** A non-real-time electronic transfer system that typically took 24-48 hours to settle.

institutions (MFIs), mobile money operators (MMOs), and other non-bank payment service providers (PSPs).

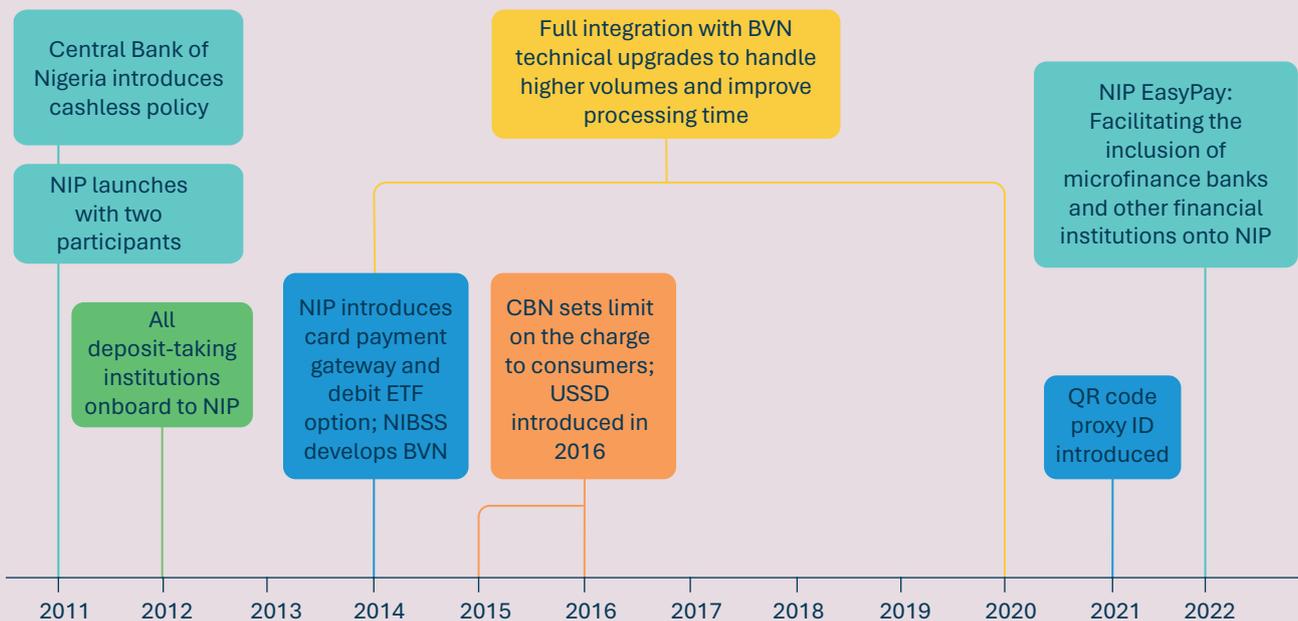
- 3. Diverse channel options:** The system supports various channels, including USSD, mobile apps, web interfaces, ATMs, POS terminals, and QR codes.
- 4. Comprehensive use cases:** NIP facilitates a wide range of payment use cases, including government collections (P2G), business-to-business transfers (B2B), salary disbursements (B2P), and government-to-person payments (G2P). Recent enhancements include cross-border payment capabilities through the Pan-African Payment and Settlement System (PAPSS).
- 5. Immediate liquidity for merchants:** Through integration with the AfriGo card scheme, NIP offers instant settlement for merchants. This rapid access to funds is particularly beneficial for small and medium-sized enterprises that require immediate liquidity.
- 6. Price reduction over time:** NIBSS has progressively reduced its pricing for participants; the current rate is a flat fee of NGN 3.75 (\$0.0024) per transaction, from NGN 46 (\$0.03

in 2021.(All dollar currency references refer to United States dollars (USD). Fee rates from 2021 were shared during AfricaNenda’s expert interviews with NIBSS.) By lowering costs, NIP aims to make digital payments more affordable for end users. This has facilitated strategies like “free transfers” by emerging fintechs and commercial banks (Sterling Bank, 2025).

Since its launch, NIP has played a crucial role in reducing Nigeria’s reliance on cash. The COVID-19 pandemic accelerated the shift to digital payment methods; stakeholders described the impact of the pandemic on the payments sector as “night and day.” Even after the crisis subsided, behavioral patterns favoring digital payments continued.

According to NIBSS leadership, “NIP has become synonymous with transactions in Nigeria.” The system continues to evolve through technological advancements, with ongoing development of a “National Payment Stack.” This aims to position NIP to support Nigeria’s broader digital public infrastructure (DPI) objectives by integrating with national identity systems and enabling enhanced data exchange across public and private sectors.

NIBSS development timeline



Before broader deployment, NIP was initially limited to two participating institutions to allow for controlled implementation and assessment. In 2012, the system onboarded all deposit-taking institutions to NIP, enabling a network effect across Nigeria's financial system. In October 2012, Nigeria issued its first National Financial Inclusion Strategy. This gave the cashless policy momentum and led to a 2012 pilot in Lagos, followed by further piloting in 2013 in five additional states and the Federal Capital Territory (FCT).

NIP achieved further regulatory and technical advancements from 2014 through 2025, as follows:

In 2014, NIP integrated card payment gateway functionality and debit Electronic Funds Transfer (EFT) options. The CBN developed the Bank Verification Number (BVN) system, which would later enhance transaction security and provide biometric identity verification for financial services, reducing fraud risk. The cashless policy helped to advance nationwide coverage in the remaining 30 states (CBN, 2014).

In 2015, the CBN established transaction fee limits for instant payments to ensure affordability while maintaining system sustainability.

In 2016, NIP integrated USSD as a transaction channel, significantly broadening NIP's reach to include basic phone users without smartphone or internet access. The system also increased

the number of settlement windows from once to twice daily (it would later expand to four times daily in 2020), improving liquidity management for participating institutions and mitigating settlement risk. The settlement requirements were formalized in the 2018 Regulation on Instant (Inter-Bank) Electronic Funds Transfer Services in Nigeria, a regulatory framework for instant payments (CBN, 2018).

In 2020, NIP integrated with the Bank Verification Number (BVN) system. By 2021, QR code functionality expanded accessibility and use cases, particularly for merchant payments.

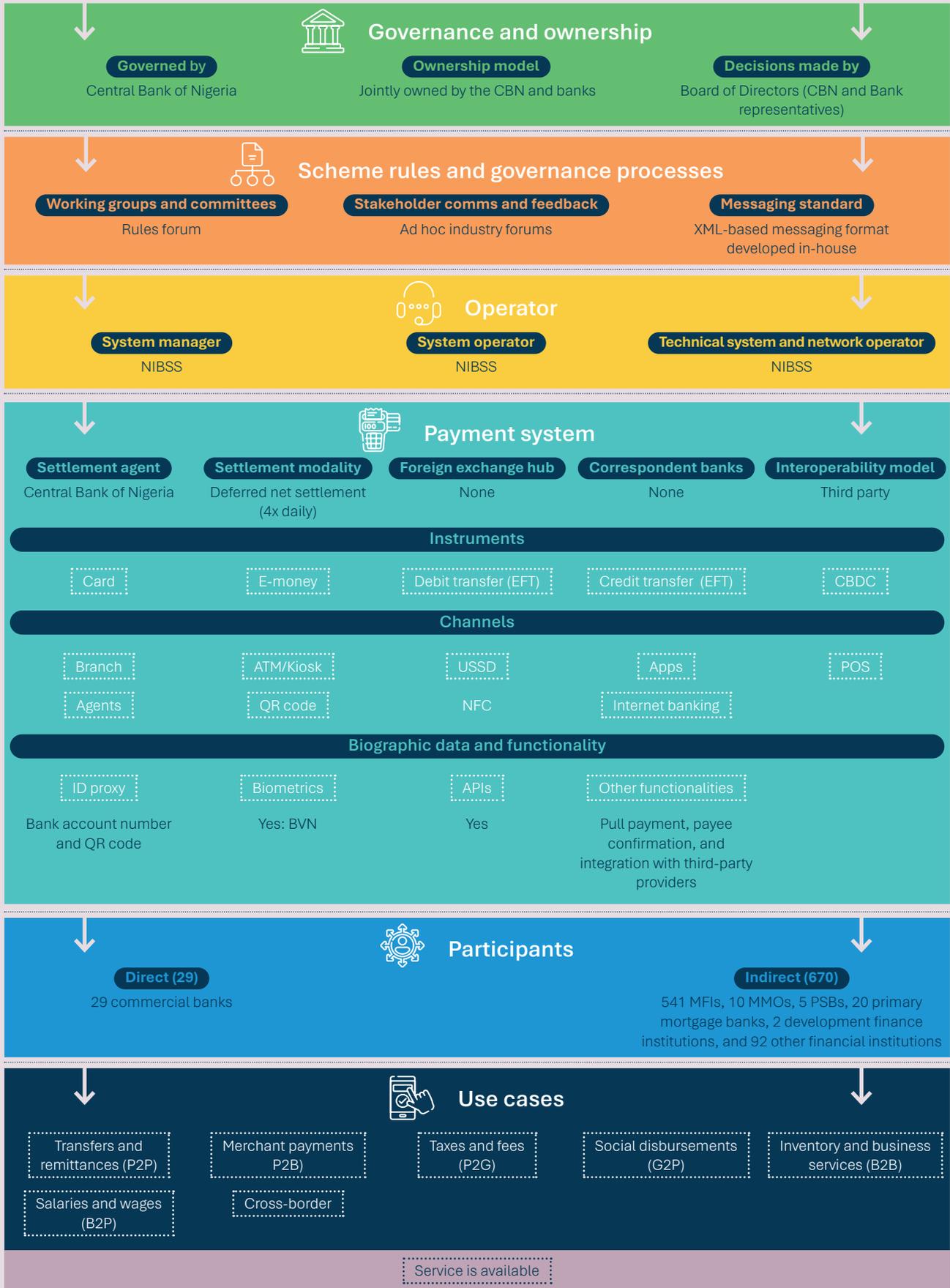
In 2022, NIP assumed the role of aggregator for PAPSS in Nigeria, positioning it as a central component of the regional financial infrastructure. Easy Pay and AfriGo launched in 2023. EasyPay facilitates instant payments for non-bank financial service providers (FSPs). AfriGo is Nigeria's domestic card scheme linked to NIP for instant merchant settlement (Afrigopay, 2023a).

In 2025, NIBSS is actively transitioning to the ISO 20022 messaging standard. It expects the initial transactional phases to be completed within the year. Strategically, the CBN positions NIP as a comprehensive "National Payment Stack," forming the payment component of Nigeria's digital public infrastructure (DPI). This evolution aligns with the global trend toward integrated digital infrastructure to support economic progress.



Governance and operations

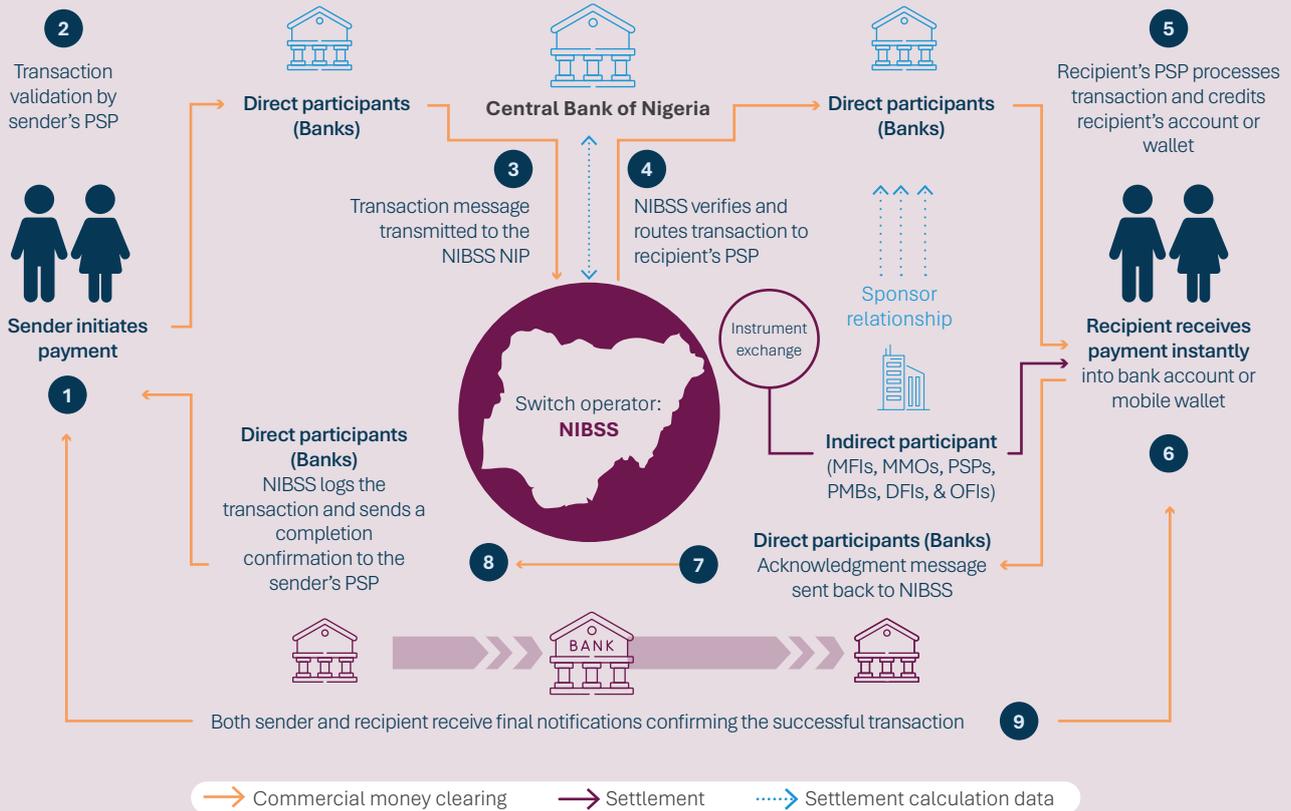
Payment system overview



The NIP system operates a centralized hub-and-spoke clearing model that connects all licensed financial institutions and PSPs in Nigeria. The system integrates 29 commercial banks directly and 670 non-bank financial institutions, including 541 MFIs, 10 MMOs, five PSBs, 20 primary mortgage

banks, two development finance institutions, and 92 other financial institutions. Participation is mandatory for all deposit-taking institutions, per the Regulation on Instant (Inter-Bank) Electronic Funds Transfer Services in Nigeria 2018.

NIBSS NIP transaction flow



NIP transactions are available 24/7/365, with real-time funds availability to beneficiaries regardless of settlement timing. Recipient institutions provide immediate credit to beneficiaries, while settlement between institutions occurs at predefined intervals.

Settlement operations utilize a deferred net settlement (DNS) mechanism through the CBN Real-Time Gross Settlement (RTGS) system. All participating institutions maintain dedicated settlement accounts at the CBN, ensuring that final settlement occurs with central bank money, eliminating counterparty risk, and providing settlement finality. The system processes settlements four times daily at 10:00, 15:00, 15:30, and 18:00 local time (CBN, 2020). To mitigate associated credit risk, participating institutions

must maintain collateral in the form of Federal Government Treasury Bills at levels corresponding to 110% of their largest historic net debit positions.

As mentioned, NIBSS functions as the designated aggregator for cross-border payments through PAPSS. The system converts ISO 20022 messaging formats used by PAPSS into local messaging formats used by Nigerian institutions to enable currency conversion and settlement. Domestic transactions settle in Nigerian Naira (NGN); cross-border transactions settle through corresponding arrangements with central banks in participating countries and are coordinated through PAPSS. This eliminates the need for dollar-denominated intermediation, reducing transaction costs and foreign exchange dependencies while promoting intra-African trade.



Governance structure

The NIP system operates under a hybrid governance structure that combines industry participation with central bank oversight. This structure reflects the NIBSS ownership model, which includes all licensed commercial banks in Nigeria and the Central Bank of Nigeria (CBN), creating a collaborative governance framework.

The NIBSS board of directors includes a deputy governor from the CBN (in charge of financial system stability) and the CEOs of deposit-taking banks as non-executive directors. This structure encourages shared responsibility across industry and regulators for guiding NIP's strategic direction and major policy decisions.

As the operator of the NIP system, NIBSS is responsible for the day-to-day functioning of the payment infrastructure, including processing transactions, maintaining the technology platform, and ensuring interoperability among participants.

As chief regulator of NIP, CBN is responsible for regulatory supervision, ensuring compliance with relevant laws and guidelines, and monitoring the system's overall stability and efficiency. The CBN also functions as the settlement agent for the NIP system and is responsible for the final and irrevocable transfer of funds between participating financial institutions to settle payment transactions.

The NIBSS board of directors holds significant decision-making power. NIBSS ensures broader participation from other stakeholders through focus group meetings and regular industry engagement sessions, allowing for input from all system participants regarding development and operations.



Functionality

NIP serves as a real-time interbank payments system in Nigeria, designed to handle high volumes of retail transactions.

The NIP system supports a wide array of channels, including USSD, agent networks (e-money and banking), apps, browsers, QR codes (both static and dynamic), POS terminals, and ATMs. The system also enables transactions using various instruments such as credit EFT, debit EFT, e-money, and central bank digital currency (CBDC).

Identity aliases/proxies, including account numbers and QR codes, are a key feature. NIP has integrated the Bank Verification Number (BVN), a biometric-based financial sector ID, to enhance security and enable convenient authentication at ATMs. Furthermore, NIBSS introduced the NQR platform to facilitate real-time, account-based QR payments for the person-to-business (P2B) use case. The system also supports requests to pay and integration with third-party providers, such as Google Wallet and Apple Pay.

Operationally, NIP has a maximum transaction time of 20 seconds, though most transactions are processed in under a second. The system offers real-time payment confirmation messages (notifications) and transaction validation (payee confirmations).



Technical standards

NIP utilizes a hub-switch model with the Nigerian Central Switch connecting directly to commercial banks, microfinance institutions, and MMOs, and supporting various functionalities through APIs. Additionally, the NQR platform, which facilitates real-time, account-based QR payments within the NIP system, was designed to be Europay/Mastercard/Visa (EMV) compliant.

The NIP system is based on messaging standards developed in-house for domestic transactions. However, NIBSS is upgrading to the ISO 20022 messaging standard, with the initial transactional phases targeted for completion in 2025. This transition aims to create a more flexible and adaptable infrastructure capable of handling various financial and non-financial messages customized for local needs. ISO 20022 has already

been implemented for cross-border payment requests via PAPSS.

When it was initially conceived, NIP only supported P2P payments and P2B push EFTs; the NIP system now supports a wider range of use cases, including P2P, P2B, B2B, and B2P transactions. It also facilitates government collections (P2G) and government-to-person (G2P) payments. Additionally, NIP enables various cross-border payment scenarios (P2P, P2B, B2B) through its integration with PAPSS.



Business model

NIP's development was funded and created in-house by NIBSS. The initial build was intentionally limited to manage upfront investment, with plans for later improvements and upgrades. The phased approach to technical development, starting with basic EFT credit transfers and gradually adding functionality, allowed for controlled and internally funded expansion.

NIP operates on a not-for-loss business model, which aims to achieve the organization's mission while maintaining overall financial sustainability. In this model, any surplus is reinvested to further the organization's mission. NIBSS itself operates on a cost-recovery model where pricing is set to match the cost of offering the service alone without profit. As mentioned, participants on NIP pay a flat fee of \$0.0024 per transaction to NIBSS, lower than \$0.03 in 2021. This reduction has enabled strategies like "free transfers" offered by emerging fintechs, such as Opay, and leading banks, such as Sterling Bank.

Distinct from participant fees are consumer/end-user fees, which the CBN limits. Currently, the CBN-approved charges are \$0.05 per transaction for values above \$54, \$0.03 per transaction for values between \$5 and \$54, and \$0.01 per transaction for values less than \$5 (CBN, 2019). These limits were introduced in response to customer complaints of price gouging. They aim to increase consumer confidence, ensure fairness, and drive use.



Scheme rules

The NIP is governed by detailed national financial regulations published by the CBN, known as the Regulation on Instant (Inter-Bank) Electronic Funds Transfer Services in Nigeria, and last amended in 2019 as the Regulation on Electronic Payments and Collections for Public and Private Sectors in Nigeria. This regulation includes guidelines for all NIP participants (direct and indirect). These rules are available to all participants and to the public on the [CBN website](#). This public availability ensures transparency, allowing all stakeholders to understand the operational framework of the system, which includes payment processing, risk management, and participant responsibilities within the NIP ecosystem.

NIP scheme rules regarding management and enforcement involve several key mechanisms. NIBSS has a dispute resolution system (DRS) specifically for NIP that outlines consumer recourse requirements. DRS requires banks to resolve transaction disputes within 72 hours, with automatic triggers for systemic defaults if the participant does not meet this timeline. Furthermore, the scheme rules provide an escalation path for consumer complaints to the CBN consumer protection department. Since its founding in 2012, the CBN consumer protection department has managed dispute resolution, arbitration, and sanctions for non-compliance. This multi-layered approach, involving both NIBSS's internal mechanisms and CBN oversight, ensures adherence to the scheme rules and protects the interests of participants and end-users.



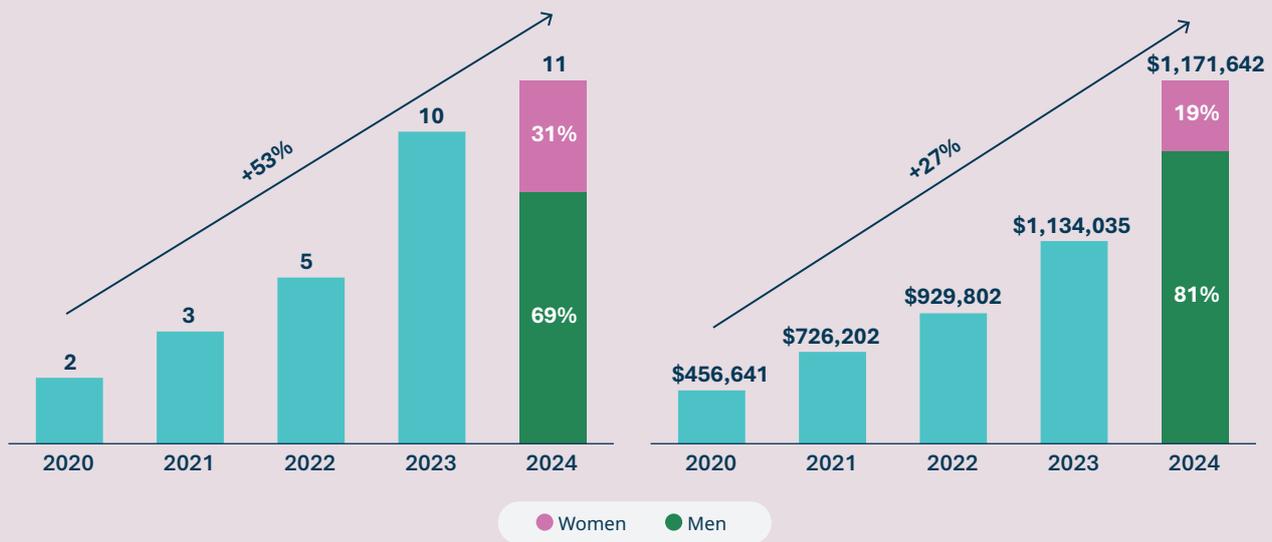
Volumes and values processed by the payment system

The NIP system has 57.7 million unique users, 52% of the adult population. NIP data for 2020 to 2024 shows an increase in transaction volumes from 2 billion in 2020 to 11 billion in 2024, representing a compound annual growth rate (CAGR) of 53%

over five years. Transaction values grew from \$457 billion to \$1.1 trillion, a CAGR of 27%. The gender distribution has remained heavily skewed toward males, who accounted for 69% of transaction

volumes and 81% of transaction values in 2024, suggesting a significant gender gap in economic and financial inclusion.

NIBSS transaction volumes (billions) and values (millions)



The growth in NIP transaction volumes and values is attributable to several factors. First, the CBN cashless policy has been a key driver for increasing reliance on digital transactions. The COVID-19 pandemic further advanced the use of digital payment channels for both individuals and organizations, and transaction volumes remained high even after the pandemic subsided. Furthermore, the phased development of NIP, beginning in 2011, started with limited functionality consistent with the low level of digital inclusion at the time, and gradually added more use cases. The CBN's regulation of consumer fees helped to encourage adoption, especially among lower-income populations. More recently, the emergence of fintechs offering free transactions to gain traction in the market has driven additional momentum and forced established banks to follow suit. Lastly, the increasing preference for account-to-account transfers over card payments, based on faster dispute resolution, avoidance of card restrictions, quicker merchant settlement, and cost considerations, has contributed to NIP's growth.



Regulatory framework

The CBN has issued guidelines and regulations that shape NIP's operation, covering areas such as instant electronic funds transfer services, risk management, consumer recourse mechanisms, and PSP licensing. Key regulatory instruments include the [Guidelines on Instant \(Inter-Bank\) Electronic Funds Transfer Services \(2015\)](#), amended as the [Regulation on Electronic Payments and Collections for Public and Private Sectors in Nigeria \(2019\)](#), the [Nigerian Payments System Risk and Information Security Management Framework \(2019\)](#), and the [Guide to Charges by Banks, Other Financial and Non-Bank Financial Institutions](#). Participants in the NIP system must obtain a license and comply with all relevant regulatory requirements.



Inclusivity learnings

NIP has made remarkable progress in its inclusivity journey, advancing from a basic level on the AfricaNenda inclusivity framework in the SIIPS 2022 report to the progressed level in the SIIPS 2024 report and finally to the mature status in 2025. NIP is Africa's first IPS to reach mature inclusivity status. The system now supports most use cases, meeting basic requirements like minimum channel, use case, and instrument functionality, as well as progressed requirements including cross-domain participation for all licensed PSPs, pro-poor governance mechanisms, and central bank governance involvement. The system has also implemented additional recourse mechanisms and not-for-loss provisions, ensuring consumer protection, fair pricing, and trust. This evolution reflects Nigeria's commitment to financial inclusion through a digital payments infrastructure that serves diverse stakeholder needs.

NIP has embraced the following drivers of inclusion:

- A phased-development approach to building a fit-for-purpose system.** NIBSS developed NIP in-house and launched it with limited functionality and only two participating banks. This approach helped to limit the upfront investment, especially given the nascent state of the digital payments sector at that time. As the value proposition of instant payments became apparent, more participants joined; as of the publication of this case study, NIP has 699 direct and indirect participants. NIBSS has continuously enhanced the system and mandated upgrades for participants to ensure it remains adaptable and responsive to market needs. In-house development fostered the necessary skills and knowledge for these continuous improvements.

- NIP promotes smooth system performance, crucial for building trust and ensuring sustainability.** Initially, NIP aimed for a transaction clearing time of 50 seconds. Not all providers could meet this standard, which negatively affected the customer experience and threatened the reputations of all connected banks. To address this, NIBSS improved its technical capacity and transaction processing system so as to shorten the total processing time. The result is a shortened clearing time of 20 seconds. Furthermore, NIBSS sends each participant bank CEO an Independent Weekly Efficiency Rating report that ranks its average transaction processing time and other variables against the industry average. This aims to incentivize banks to improve service quality and meet higher standards, fostering healthy competition and driving better uptime and performance.
- Digital identity infrastructure, particularly the Bank Verification Number (BVN) system.** The biometrically enabled BVN underpins various authentication methods. It allows customers to verify their identity and conduct transactions through channels like ATMs using their fingerprint and BVN number. This enhances convenience and security. Furthermore, NIBSS developed and launched the Financial Authentication Service (FAS) to validate and verify national identity numbers (NIN) and BVN numbers, with potential for future integration into the NIP payment flow to strengthen identity verification and broaden access points for individuals across different demographics.
- Enabling many use cases and supporting all payment channels except NFC.** Initially supporting only P2P and P2B push EFTs, NIP has expanded to accommodate most use cases, including B2P, B2B, G2P, P2G, and cross-border transactions. It also supports channels such as USSD, mobile apps, browsers, POS, ATMs, QR codes, agents, and branch.
- Fee transparency and fairness.** Initially, banks set the fees for instant EFT services with limited price transparency, leading to customer complaints about price gouging. The CBN intervened by issuing regulations that capped customer fees between NGN 10 and NGN 50, according to transaction size. This regulatory action increased consumer confidence and reduced the price variation charged by different providers. The relatively low cost also encourages use among lower-income populations sensitive to fees, making the system more inclusive.
- A tiered participation model.** While most direct participants are commercial banks, CBN-licensed non-banking financial institutions can participate indirectly through sponsorship and client settlement arrangements with direct participants. Indirect participants include MFIs, MMOs, and PSPs. This model enables a broader range of financial service providers to offer instant payment services to their customer base, extending the reach of NIP to underserved segments of the population who may not directly interact with traditional commercial banks.
- The introduction of an NIN as the basic requirement for account opening.** CBN has allowed the use of the NIN to open tier-one bank accounts. This initiative lowers the barriers to access to formal financial services. While tier-one accounts may have certain transaction limits, account holders have access and the possibility of upgrading to accounts with more features after providing further identification, such as the BVN.

AfricaNenda Foundation

C1-402, 4th Floor, Block C, Grand Baie La Croisette, Grand Baie, Mauritius

website www.africanenda.org | email info@africanenda.org



November 2025

© 2025 - All Rights Reserved
AfricaNenda Foundation