THE STATE OF INCLUSIVE INSTANT PAYMENT SYSTEMS IN AFRICA

SIIPS 2023 • EXECUTIVE SUMMARY
The full report is available at www.africanenda.org/siips2023

About SIIPS 2023

The second annual State of Inclusive Instant Payment Systems 2023 (SIIPS 2023) by AfricaNenda reviews the landscape and state of instant payment systems (IPS) in Africa and how well they meet the standards of inclusivity, especially for low-income consumers. The research includes expert and stakeholder interviews, detailed case studies, and primary consumer research from five countries.

SIIPS 2023 was made possible through the partnership between AfricaNenda, the World Bank, and the United Nations Economic Commission for Africa (UNECA), with the generous support of the Bill & Melinda Gates Foundation and AfricaNenda’s fiscal sponsor, Rockefeller Philanthropy Advisors (RPA). Cenfri conducted the research.

This report defines as “live” those IPS that were processing transactions by June 2023.
Africa continues to make strides in the growth of digital financial services (DFS) as innovation and regulatory shifts shape the landscape. Digital payments are unleashing a technology revolution, supported by financial service stakeholders who are innovating and collaborating to unlock both domestic and cross-border socio-economic opportunities for Africans. In most of the markets, however, households and small businesses over-rely on cash, especially for daily low-value transactions.

There are other prevailing challenges in the financial services sector as well. Over 400 million African adults are financially excluded. This points to the need to support the growth of DFS on the continent with investments in infrastructure, technology, technical skills, policy, and regulatory reforms, aimed at ensuring responsible access and usage of financial products and services.

AfricaNenda supports these needs through its mandate of driving financial inclusion in Africa through the deployment of inclusive instant payment systems (IIPS). AfricaNenda embraces a collaborative approach to working with other stakeholders within the payment ecosystem. Indeed, the words of the ‘the Old Master’ and philosopher Lao Tzu ring true, ‘Do the difficult things while they are easy and do the great things while they are small. A journey of a thousand miles must begin with a single step’.

AfricaNenda is pleased to present the second edition of its flagship annual report, The State of Inclusive Instant Payment Systems (SIIPS) in Africa 2023. The SIIPS 2023 report aims to deepen insights and learnings around the development of inclusive instant digital retail payment systems in Africa. The first publication was well received by stakeholders in the payments industry and continues to be a critical resource for initiatives toward boosting payments infrastructure in the continent. It revealed priority areas in digital payments for Africa and promoted collaborative initiatives. The SIIPS 2022 map and data dashboard provided an easy way for IPS stakeholders to visualize instant payment system data from across the African continent, at regional and country levels. Insights from the SIIPS 2022 deliverables continue to inform decisions about enabling policies and regulations, and efficient IIPS implementation.
AfricaNenda developed the SIIPS 2022 inaugural edition in part to overcome the huge gap of data and information about the infrastructure that supports instant retail payments on the continent. The report also, for the first time, highlighted levers to inclusivity that can promote end-user access and usage of DFS. We encourage Africa’s digital payments industry stakeholders to contribute to narrowing the information gap on IPS in the continent by sharing data, embracing accurate reporting, and conducting continuous data analytics on instant retail payment transaction volumes and values. These initiatives will ensure that the broader market can accurately track progress in IPS access and usage, and that stakeholders—including policymakers and regulators—have evidence-based insights and learnings to help determine the most appropriate and cost-effective strategies for reaching low-income individuals.

The State of Inclusive Instant Payment Systems in Africa 2023 edition expands upon the inaugural insights into the state of the IPS landscape. In this edition, we highlight changes in the availability of IPS at country and regional levels, the different types of IPS that exist, and how central banks, and the private sector each play key roles. The report emphasizes the inclusivity positioning of each operational IPS, which is critical if they are to provide the payment layer of digital public infrastructure in Africa, a necessary enabler of an inclusive digital economy (along with consent networks, digital ID, and trusted exchange). The report also includes findings from consumer and MSME end-user surveys on digital payments usage, which validate the importance of functionality and the extent to which IPS support use cases and trust as key IPS design considerations that drive inclusivity.

Lastly, the 2023 report showcases critical considerations to unlock cross-border payments through policy and regulatory harmonization. A harmonization framework for the continent could reduce the complexity and facilitate greater competition, which ultimately could lead to cheaper, faster, and more accessible cross-border digital payment options for customers. The resulting increase in scale and accessibility of cross-border payments would support crucial continental agendas, such as digital trade under the African Continental Free Trade Area (AfCFTA) mandate, the African Union Digital Transformation Strategy, and the sustainable development goals.

Continental collaboration structures and agreements are essential to unlock cross-border payments through policy and regulatory harmonization. The African Union has a key role to play in elevating this agenda with heads of state to support the structures that would foster regional strategies, programs, and collaboration between the central banks, data protection authorities, regional economic communities (RECs), and monetary unions, among others.

AfricaNenda together with its partners The World Bank Group and the United Nations Economic Commission for Africa (UNECA) appreciate the overwhelming support we have received in developing and delivering the SIIPS 2023 report. Specifically, we appreciate all the stakeholders that shared data as part of our data availability, data transparency, and data impact campaign for the continent. They include the central banks and IPS operators of the Central African Economic and Monetary Community (CEMAC), Ghana, Madagascar, Malawi, Mozambique, Rwanda, South Africa, Zambia, and Zimbabwe. There remains a scarcity of available data and information, however. As a result, AfricaNenda had to rely on a mix of publicly available data and information instead of accessing these directly from institutions. We continue to advocate for the sharing of more data, more collaborations towards fulfilling Africa’s digital public infrastructure needs, and enhanced cross-border transactions, for the benefit of all Africans.

AfricaNenda will continue to work with governments, central banks, Regional Economic Communities, development agencies, the private sector, and all DFS stakeholders to reduce the barriers to financial inclusion. We welcome collaborators to support the development of inclusive instant payment systems. We will continue our efforts to provide critical pre-project planning and program management support to expand IPS projects, advocate for critical policy reforms, and enhance the capacity of African institutions and payments industry experts. We believe in our vision of universal financial inclusion in Africa by 2030, and we acknowledge the critical role that partnerships play in achieving it.
The State of Inclusive Instant Payment Systems (SIIPS) in Africa report is the most detailed and insightful report on instant payment systems available today, and we at The Bill & Melinda Gates Foundation are proud to support this report and AfricaNenda.

The pace of progress in instant payment systems (IPS) is astounding and nowhere more so than across Africa. As of 2022, thirty-two IPS have been deployed across the continent, and 17 countries are in early development stages. But not all IPS are inclusive, as this report points out. To truly advance financial inclusion, these systems must be designed and deployed in a way that includes everyone, protects consumers, and bolsters competition and innovation. This report includes a framework to assess and guide the inclusivity of IPS, and highlights exemplar country and regional deployments that other countries can look to for inspiration and insight. It also highlights the critical opportunity for development and philanthropic organizations to support countries in these efforts through financial and technical assistance.

Much of the world is starting to focus on the incredible power of IPS as a foundational part of a digital public infrastructure (DPI). This is evidenced by the focus on DPI from the G20 this year, under India’s leadership, as well as in other international fora, including the United Nations General Assembly and the World Bank Annual Meetings. We are also seeing more collaboration between countries who are on their DPI journeys, such as with the new 50-in-5 global campaign, which aims for 50 countries to design, launch, and scale at least one DPI component in a safe and inclusive manner within five years. One of the most important and clearest ways to help achieve this goal is through IPS implementation in countries across Africa.

What would have seemed like only a dream a few years ago—interconnected inclusive instant payment systems across every country in Africa—is now within reach. The impacts of this development on financial inclusion, remittances, trade, and overall inclusive economic growth are starting to be realized, yet there is so much more to be imagined. We must all rise to the occasion to keep up this incredible momentum and the SIIPS 2023 report provides a clear roadmap of how we can make this happen.
This State of Inclusive Instant Payment Systems (SIIPS) in Africa 2023 report is published by AfricaNenda and its partners, the World Bank and the United Nations Economic Commission for Africa (UNECA). It is the second annual report to assess the landscape and inclusivity of open-loop, instant payment systems (IPS) in Africa. It combines a cataloguing of IPS in Africa with consumer research in five countries (Cameroon, Malawi, Morocco, Rwanda and Senegal), insights from expert interviews across the continent, and detailed case studies from Malawi, Rwanda, Zambia, and the Economic and Monetary Community of Central Africa (CEMAC) region, to provide an overview of key trends, barriers, and opportunities for IPS in Africa.

Why is it important to study instant payment systems in Africa? Because IPS can form the foundation for the Digital Public Infrastructure (DPI), which is necessary for ensuring inclusivity in the digital economy.

SIIPS 2023 finds that the number of IPS systems and overall transaction volume has grown. There are now 32 active regional and domestic IPS, including three new regional IPS that have launched in the last three years. Still, 27 countries lack domestic instant payment functionality in Africa as of 2023. This means roughly half of the African population lacks access to a domestic IPS, though regional and private sector players fill the gap for some residents in these areas.

Findings in this year’s study reinforce the fact that, to achieve inclusivity, the payments landscape must enable a wide range of channels, payment instruments, and use cases. Today, e-money instruments are the most dominant, person-to-person (P2P) payments are the primary use case, and USSD is the most-used channel. As was the case last year, no IPS yet qualify as mature, and most meet only basic-level inclusivity criteria, though the five IPS that meet the criteria for being “progressed” are on their way toward full maturity. While a number of barriers to widespread payments acceptance remain across access, early adoption, and habitual usage, policy and regulatory harmonization can help to overcome some of them to enhance seamless cross-border payments.

What is an instant payment system and when does it become inclusive?

**Instant payment systems (IPS)** are retail payment systems that are multilateral—and open loop—and that enable digital push payments in near real time for use 24 hours a day, 365 days a year, or as close to that as possible.

**Inclusive instant payment systems (IIPS)** process retail transactions digitally in near-real time and are available for use 24 hours a day, 365 days a year, or as close to that as possible. They enable low-value, low-cost push transactions that are irrevocable and based on open-loop and multilateral interoperability arrangements. Licensed payment providers have fair access to the system, and participants have equal input opportunities into the system. The central bank has a role in system governance. End-users have access to a full range of use cases and channels, as well as transparent and fit-for-purpose recourse mechanisms.

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3 GIMACPAY in the Economic and Monetary Community of Central Africa (CEMAC) region, Natswitch in Malawi, eKash in Rwanda, and National Financial Switch (NFS) in Zambia.

4 The definitions used in this report are, in principle, aligned with the definition of the Committee on Payments and Market Infrastructures (CPMI) but seek to emphasize a few specific aspects that are relevant from a financial inclusion context in several low-income countries—notably, mobile money accounts and push payments. Given this, even solutions that enable users of different mobile money providers to make and receive transfers in real-time are considered under this definition, though the limitations of such arrangements are recognized in the different categorizations of IIPS.
IPS are foundational to digital public infrastructure for Africa

The concept of digital public infrastructure (DPI) has gained significant attention globally, as a mechanism for ensuring inclusivity in the digital economy. DPI refers to the digital ‘stack’ of payments, data exchange, digital identification, and consent networks that power common digital interactions. DPI comprises front-end and back-end systems, provided by the government or in partnership with the private sector, which together serve as ‘rails’ that enable digital transactions and connections for people, businesses, and governments throughout the economy (World Bank 2022g; DIAL 2023; see Figure 0.1). If inclusive, IPS can reinforce the payment layer of DPI in Africa.

**FIGURE 0.1 | Digital public infrastructure**

Source: Adapted from World Bank 2022g and Digital Impact Alliance (DIAL) 2023
A growing footprint with increasing volume

IPS are crucial to deepen financial and digital inclusion. Africa's uptake of IPS is increasing:

- In 2022, 32 IPS systems in Africa processed nearly 32 billion transactions worth close to $1.2 trillion.6
- The number of transactions processed has increased rapidly over the past five years, with an average annual growth rate of 47% in transaction volume and 39% in total transaction value.
- IPS increasingly process a significant dollar amount as a percentage of gross national income (GNI; Figure 0.2). Nine countries processed IPS value at 10% of GNI or above; three of these processed IPS value in excess of 100% of GNI in 2022: Ghana, Nigeria, Uganda. Nine countries had IPS values below 10% of GNI.

**FIGURE 0.2 | 2022 domestic IPS transaction values relative to GNI (n=21)**

<table>
<thead>
<tr>
<th>LAUNCH YEAR</th>
<th>2022 TRANSACTION VALUES RELATIVE TO GNI</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>RTC (South Africa)</td>
</tr>
<tr>
<td>2011</td>
<td>ZIPIT (Zimbabwe)</td>
</tr>
<tr>
<td>2011-2021</td>
<td>NIP (Nigeria), Nigeria mobile money, eNaira</td>
</tr>
<tr>
<td>2012</td>
<td>SIMO (Mozambique)</td>
</tr>
<tr>
<td>2015</td>
<td>NatSwitch (Malawi) (off-us) and NatSwitch (on-us)*</td>
</tr>
<tr>
<td>2015-2016</td>
<td>GIP, Ghana MMI (off-us), Ghana MMI (on-us)*</td>
</tr>
<tr>
<td>2016</td>
<td>Madagascar mobile money</td>
</tr>
<tr>
<td>2016</td>
<td>Uganda mobile money</td>
</tr>
<tr>
<td>2016</td>
<td>Taifa Moja (Tanzania)</td>
</tr>
<tr>
<td>2017-2018</td>
<td>Kenya mobile money and PesaLink</td>
</tr>
<tr>
<td>2018</td>
<td>NFS (Zambia)</td>
</tr>
<tr>
<td>2019</td>
<td>MauCAS (Mauritius)</td>
</tr>
<tr>
<td>2021</td>
<td>NamPay (Namibia)</td>
</tr>
<tr>
<td>2021</td>
<td>Somalia Instant Payment System</td>
</tr>
<tr>
<td>2022</td>
<td>InstaPay (Egypt)</td>
</tr>
<tr>
<td>2022</td>
<td>eKash (Rwanda)</td>
</tr>
<tr>
<td>2022</td>
<td>EthSwitch (Ethiopia)</td>
</tr>
</tbody>
</table>

*NatSwitch (Malawi) and Ghana MMI are the only IPS where information on on-us transaction data is available.

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5 Note that measurement inconsistencies between countries affect comparability and aggregation accuracy of reported data. Some countries include on-us transactions (internal transactions between account holders of one provider), which increases values and volumes compared to other countries, and some only include mobile money cash-in and cash-out transactions, which understate values and volumes.
What is needed for IPS in Africa to become digital public infrastructure?

In order for IPS in Africa to increase access for all citizens and form an effective payment layer in digital public infrastructure, systems will need to improve in sustainability, customer value proposition, provider value proposition, and policy.

**Sustainability**
- Increased transparency and open access of scheme rules, as well as the involvement of all licensed PSPs in scheme rule design.
- Reporting based on common measurement standards of volumes and value of transactions.
- Design for scale and to address market needs while limiting end-user costs compared with cash.

**Customer centricity**
- Pricing models that can compete with cash and existing closed-loop solutions to incentivize uptake.
- Inclusive services for end-users, including effective agent channels and recourse mechanisms.

**A compelling provider value proposition**
- Continued roll-out of a portfolio of scale- and value-driving use cases to increase network touchpoints and keep digital value in circulation.
- An emphasis on value-added services including proxy IDs, centralized fraud and cybersecurity facilities, as well as centralized electronic know your customer (eKYC) and customer due diligence (CDD) facilities.
- Development of open APIs to promote open banking and foster a competitive landscape.

**A conducive policy environment**
- Continued improvement of the supporting ecosystem: risk-based and harmonized licensing of PSPs; network upgrades; sustained roll-out of agent networks; increased penetration of smartphones, broadened coverage areas for mobile data, and more affordable data access.
- Building out a principles-based regulatory framework for consumer protection and data privacy, and moving towards risk-based supervision.
- Emphasis on regional harmonization of policy and regulation for cross-border payments and transfers to enable IPS to catalyze digital trade and remittances.
Three systems, Meeza Digital (Egypt), MauCAS (Mauritius), and eKash (Rwanda), have been reclassified as cross-domain IPS. Meeza Digital and eKash had been classified previously as mobile money IPS and MauCAS was a bank IPS in SIIPS 2022.

Seven countries have multiple IPS; only in Ghana are these systems interoperable with one another.6

There are 29 live domestic systems across 21 countries and three live regional systems. This diverse landscape has relatively few new IPS, though that is to be expected since IPS take multiple years to implement and often require extensive industry and/or regulator consultation and technical expertise. Over the last year, the IPS landscape in Africa has evolved in the following ways (see Map 0.1):

- Three new systems, EthSwitch (Ethiopia), Virement Instantané (Morocco) and PayShap (South Africa) went live.

Landscape snapshot

6 Egypt, Ghana, Kenya, Morocco, Nigeria, South Africa, Tanzania.
MAP 0.1 | There are 32 active domestic and regional IPS in Africa as of June 2023

**DOMESTIC-LEVEL IPS**

- **29** since SIIPS 2022
- **17** more under development

**COUNTRIES WITH MULTIPLE IPS**

- **7** since SIIPS 2022

**TUNISIA**
- Tunisian mobile money

**MOROCCO**
- MarocPay
- Virement Instantané

**GAMBIA**
- Gomswitch (Gambia)

**NIGERIA**
- NIBSS Instant Payment (NIP)
- eNaira
- Nigeria mobile money

**GHANA**
- Ghana mobile money interoperability (Ghana MMI)
- GHIPSS Instant Pay (GIP)

**ZAMBIA**
- National Financial Switch (NFS)

**NAMIBIA**
- NamPay

**SOUTH AFRICA**
- Real-Time Clearing (RTC)
- PayShop

**ZIMBABWE**
- ZimSwitch Instant Payment Interchange Technology (ZIPIT)

**EGYPT**
- InstaPay
- Meesa Digital

**ETHIOPIA**
- EthSwitch

**DJIBOUTI**
- Système de Règlement Automatisé de Djibouti (SYRAD)

**SOMALIA**
- National Payment System

**UGANDA**
- Uganda mobile money

**KENYA**
- Pesalink
- Kenya mobile money

**TANZANIA**
- Taifa Moja
- Tanzania Instant Payment System (TIPS)

**MALAWI**
- NatSwitch

**MAURITIUS**
- Mauritius Central Automated Switch (MauCAS)

**MADAGASCAR**
- Madagascar mobile money

**MOZAMBIQUE**
- Sociedade Interbancaria de Moçambique (SIMO)

**Sovereign currency IPS**

**EGYPT**
- InstaPay
- Meesa Digital

**NIGERIA**
- NIP
- eNaira

**KENYA**
- PesaLink
- Kenya mobile money

**TANZANIA**
- Taifa Moja
- Tanzania Instant Payment System (TIPS)

**MALAWI**
- NatSwitch

**MAURITIUS**
- Mauritius Central Automated Switch (MauCAS)

**MADAGASCAR**
- Madagascar mobile money

**MOZAMBIQUE**
- Sociedade Interbancaria de Moçambique (SIMO)

**DOMESTIC-LEVEL IPS**

- **17** more under development

**REGIONAL-LEVEL IPS**

- **3** since SIIPS 2022
- **3** more under development

**PAN-AFRICAN PAYMENT AND SETTLEMENT SYSTEM (PAPSS) PILOT**

- IN WEST AFRICAN MONETARY ZONE (WAMZ)
  - The Gambia, Ghana, Guinea, Liberia, Nigeria, Sierra Leone.

**GIMACPAY IN CENTRAL AFRICA MONETARY AND ECONOMIC COMMUNITY (CEMAC)**

- Cameroon, Central African Republic, Chad, Republic of Congo, Equatorial Guinea, Gabon.

**TRANSACTIONS CLEARED ON AN IMMEDIATE BASIS (TCIB)**

- IN SOUTHERN AFRICAN DEVELOPMENT COMMUNITY (SADC)

IPS: Instant payment system
Four types of domestic and cross-border IPS prevail on the continent, based on the payment instruments and interoperability arrangements adopted: cross-domain, bank, mobile money, and sovereign currency. Cross-domain IPS are the most prevalent, followed by bank IPS and then by mobile money IPS (Figure 0.3).

- 14 IPS are cross-domain in that they provide for account-to-account interoperability across banks and non-banks, and support transactions on both bank and mobile money accounts.
- There are 10 bank IPS, which only support bank access and bank-account-associated instruments.
- There are seven mobile money IPS, which only operate on mobile money accounts provided by mobile money providers.
- The eNaira in Nigeria remains the only sovereign currency IPS in Africa.

Mobile money IPS, used for small, frequent payments, dominate transaction volume. Small value, frequent payments via mobile money IPS account for 82% of IPS transaction volumes in Africa, despite representing only 29% of total IPS values. As indicated in Table 0.1, bank IPS have the highest—though sharply-decreasing—average transaction values. The average bank IPS ticket size decreased from $313 in 2021 to $267 in 2022. Compared to $17 and $142 in mobile money and cross-domain systems, respectively, the average transaction value in bank systems is considerably higher, yet their rapid decline suggests that end-users are embracing lower-value use cases. Mobile money and cross-domain average values have remained relatively stable over the years.
Regional IPS are broadening the availability of payments across the continent. Three regional IPS were launched in the past three years: GIMACPAY, which mostly focuses on providing domestic and regional IPS capabilities to close the gap for the CEMAC countries in Central Africa; the Pan-African Payment and Settlement System (PAPSS), which is in pilot in the West African Monetary Zone countries; and the Southern Africa Development Community’s Transactions Cleared on an Instant Basis (TCIB).

Several new domestic systems are on the horizon. Map 0.2 shows the 17 domestic systems under development across the continent:

<table>
<thead>
<tr>
<th>Average value per transaction per IPS type (US$; n=21)</th>
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<tbody>
<tr>
<td></td>
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<td></td>
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<tr>
<td>-------------------------------------------------------</td>
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<tr>
<td>Sovereign currency IPS</td>
</tr>
<tr>
<td>-</td>
</tr>
<tr>
<td>Mobile money IPS</td>
</tr>
<tr>
<td>27</td>
</tr>
<tr>
<td>22</td>
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<tr>
<td>14</td>
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<tr>
<td>17</td>
</tr>
<tr>
<td>17</td>
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<tr>
<td>Cross-domain IPS</td>
</tr>
<tr>
<td>136</td>
</tr>
<tr>
<td>110</td>
</tr>
<tr>
<td>142</td>
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<tr>
<td>147</td>
</tr>
<tr>
<td>142</td>
</tr>
<tr>
<td>Bank IPS</td>
</tr>
<tr>
<td>653</td>
</tr>
<tr>
<td>445</td>
</tr>
<tr>
<td>386</td>
</tr>
<tr>
<td>313</td>
</tr>
<tr>
<td>267</td>
</tr>
</tbody>
</table>
**MAP 0.2 | Domestic IPS in development (n=17)**

- TUNISIA
- ALGERIA
- MAURITANIA
- GUINEA
- SIERRA LEONE
- LIBERIA
- BENIN
- SÃO TOMÉ AND PRÍNCIPE
- ANGOLA
- ESWATINI

**MAP 0.3 | Planned regional IPS (n=3)**

**COMESA**

**EAC**
Burundi, DRC, Kenya, Rwanda, South Sudan, Tanzania, Uganda.

**WAEMU**
Benin, Burkina Faso, Côte d’Ivoire, Guinea-Bissau, Mali, Niger, Senegal, Togo.

*Tanzania is not a COMESA member state but will integrate with the COMESA regional IPS.
Seven countries remain without existing or planned domestic functionality. Botswana, Cabo Verde, Democratic Republic of the Congo (DRC), Eritrea, Libya, the Seychelles, and South Sudan do not yet have—or have not yet publicly announced plans to develop—any domestic instant payment system functionalities as of June 2023, deadline of the data collection for the report. This provides a potential opportunity to share infrastructure.

As in 2022, three new regional IPS are in development (Map 0.3). Once these are fully operational, regional systems will cover more than half the continent’s adult population.

Overlaps in the planned regional instant payment systems could undermine regional IPS’ ability to achieve scale: Burundi, Kenya, Rwanda, Tanzania, and Uganda are included in both the EAC and COMESA. Algeria, Cabo Verde, Mauritania, Morocco, and São Tomé and Príncipe are not served by any of the Africa-based regional IPS, although Algeria, Mauritania and Morocco can access Buna, a cross-border payment system supported by the Arab central banks, and spanning the Middle East, South Asia, and North Africa.
Functionality continues to be centered on e-money instruments, person-to-person (P2P) use cases, and unstructured supplementary service data (USSD)

The SIIPS 2022 established that offering a range of channels, instruments, and use cases to meet the payment needs of end-users is core to achieving inclusivity. The picture in 2023 shows the same trajectory as in SIIPS 2022; namely, a landscape in which:

- **E-money instruments prevail.** All mobile money and cross-domain IPS support e-money instruments. Cross-domain systems also support a range of commercial money instruments, such as credit and debit electronic funds transfer (EFT). Bank IPS focus mainly on supporting credit EFT with debit EFT as a secondary instrument.

- **P2P use cases dominate, followed by person-to-business (P2B).** All IPS offer fast and convenient P2P payments. P2B use cases are also on the rise, and three-quarters of domestic systems support both. In contrast, only 31% of IPS support business-to-business (B2B) payments. Critical use cases, such as government-to-person (G2P), person-to-government (P2B) or other government-linked services remain unavailable in most African countries. Only six IPS (GIP and MMI in Ghana, Madagascar mobile money, MarocPay in Morocco, NIP in Nigeria, and Uganda mobile money) support G2P payments, and NIP and the Ghanaian systems are the only IPS that enable the broadest range of use cases.

- **USSD remains the most prevalent channel, closely followed by apps.** Seventy-five percent of IPS in Africa support USSD; most of these IPS are mobile money or cross-domain systems. App channels are the second most prevalent at 72%, but require smartphone functionality and internet connectivity, which continue to be a barrier for the majority of African citizens. Other channels, such as quick response (QR) codes, are on the rise.

The channels an IPS provides is often based on the type of participants in the system: bank IPS and cross-domain IPS support the largest variety of channels, while mobile money schemes are typically limited to mobile money operators (MMO) as participants. This explains the dominance of agent and USSD channels for these systems. Several systems have adopted a “channel agnostic” approach. This means that the system does not provide for a specific set of channels, but rather permits PSP participants to determine what channels they provide.
Central banks continue to be key payment system and infrastructure actors alongside private sector players and industry associations

Participants have overlapping roles in IPS governance and ownership. Apart from fulfilling a core governance function, central banks also often operate as owner, overseer, settlement agent, or, in some cases, operator. In addition, external private companies have stepped in to act as system operators. Fifteen system operators are privately-owned, and private companies also play a key role as owner and in system governance. In some cases, the various roles (apart from settlement agent) are fulfilled by industry associations. Finally, for some schemes, roles are fulfilled by bilateral arrangements. The particular governance arrangement is often determined by the ownership structure.

Banks and MMOs, for their part, serve as key IPS participants. Commercial banks are the primary players in cross-domain systems, followed by bank participants and then MMOs (in contrast, MMOs dominate in mobile money IPS). Standard Bank Group and Ecobank participate in the most systems. The four MMOs with the largest IPS footprint are Airtel, MTN, Orange Mobile, and Vodacom (whose footprint includes Safaricom in Kenya). Fintechs play a vital role along the IPS value chain by providing innovative technologies to end-users, IPS operators, and payment system providers. They typically partner with direct participants to provide front- or back-end services, but as technical service providers they are facilitators rather than system actors.

Some progress toward inclusivity, but no systems yet qualify as “mature”

No IPS has reached the mature level of inclusivity yet as shown in the IPS Inclusivity Spectrum in Figure 0.4. Most systems either are unranked or meet only basic-level inclusivity criteria.

The five progressed IPS are all on their way to the mature level. These include four domestic systems covering three countries (Ghana, Malawi, and Zambia) and one regional system serving six (Cameroon, Central African Republic, Chad, Republic of Congo, Equatorial Guinea, Gabon). As a result, nine countries have access to progressed IIPS functionality as of 2023. The two systems in Ghana, however, have plans to roll out an expanded set of use cases, which will bring them closer to maturity. Transparent consumer recourse mechanisms remain the most complex element to implement.
This year’s inclusivity spread is similar to that reported in SIIPS 2022, where thirteen IPS were not ranked, eleven were at the basic level and five qualified as progressed. Two IPS moved to not ranked in 2023: Kenya mobile money and Rwanda’s eKash. Six IPS moved from not ranked to basic level: InstaPay and Meeza Digital (Egypt), Madagascar mobile money, NamPay (Namibia), and TIPS and Taifa Moja (Tanzania). The countries with progressed systems have remained unchanged year-over-year.

**FIGURE 0.4 | IPS inclusivity spectrum in 2023**

- **NOT RANKED**
  - 12 IPS
- **BASIC LEVEL**
  - 15 IPS
- **PROGRESSED LEVEL**
  - 5 IPS
- **MATURE LEVEL**
  - 0 IPS

- Not ranked if the IPS does not fulfill basic inclusivity criteria where it does not enable P2B and P2P transactions or does not offer channels that are most used.
- If the IPS does not provide enough information/data on the public domain or via direct consultation that enables inclusivity assessment.

- Minimum channel functionality: most-used channel is supported
- Minimum use case functionality: P2P and P2B transactions are supported

In addition to basic-level criteria:
- Participation by all PSPs cross domain IPS enabling all-to-interoperability
- Pro-poor governance inputs possible by all PSPs or there is an explicit inclusivity mandate
- Central bank involvement in governance

In addition to basic- and progressed-level criteria:
- Expanded use cases supported
- Standards and monitoring of provision of consumer resource mechanisms
- Low-cost for end-users within a not-for-loss business model

- SYRAD (Djibouti)
- EthSwitch (Ethiopia)
- Kenya mobile money
- PesaLink (Kenya)
- Virement Instantané (Morocco)
- Nigeria mobile money
- eKash (Rwanda)
- Somalia National Payment System
- PayShap (South Africa)
- Tunisia mobile money
- PAPSS (Africa)
- TCB (SADC)

- InstaPay (Egypt)
- Meeza Digital (Egypt)
- Gamswitch (Gambia)
- Madagascar mobile money
- MacCAS (Mauritius)
- MarocPay (Morocco)
- SIMO (Mozambique)
- NamPay (Namibia)
- eNaira (Nigeria)
- NIP (Nigeria)
- RTC (South Africa)
- Taifa Moja (Tanzania)
- TIPS (Tanzania)
- Uganda mobile money
- ZIPIT (Zimbabwe)

- GIP (Ghana)
- Ghana MMI
- Natswitch (Malawi)
- NFS (Zambia)
- GIMACPAY (CEMAC)*

No IPS has reached the mature level although there are ongoing efforts to reach this state.

Assessment based on available data and information collected till June 2023. * GIMACPAY (CEMAC) enables domestic IPS functionality in six countries: Cameroon, Central African Republic, Chad, Republic of Congo, Equatorial Guinea, and Gabon.
End user insights confirm the importance of functionality and trust for driving digital payments adoption

The 2023 sample countries feature fewer users overall, but more super-users. Among the adults who use digital payments in Cameroon, Malawi, Morocco, Rwanda, and Senegal—the five countries where consumer surveys were conducted for this report—more than half of adults receive or make a payment at least once a week. Specifically, nearly 70% of surveyed digital payment users, on average, make a digital transaction at least once a week, meaning they are “super-users.” (Figure 0.5).

Different user groups show distinct usage patterns. When looking at weekly transaction volumes, a clear gender gap exists for MSMEs: male business owners report more than 30 transactions per week, on average, whereas female business owners report only 24.

Age influences digital payment usage as well, but the extent of its influence varies by country. A larger share of younger users, aged 30 and below, has embraced digital payments than their older counterparts due to their aspiration for innovation and desire to engage in mobile and e-commerce opportunities. However, older people have more opportunities to use digital payments, given greater income and expense obligations, and thus use them more frequently.

FIGURE 0.5 | Cross-country analysis: frequency of digital transaction use
What do IPS need to do to meet end-user needs and realities? Consumers highlight several barriers to and drivers of use, including access challenges, usage constraints, and limits to habitual use. Addressing these will help to create the network effects needed to achieve scale:

**Access:** The main constraints highlighted by the consumer research are phone ownership and internet access. These are outside the control of IPS. Yet it is entirely within the control of participant PSPs to establish agent networks to enable access for those without devices and/or digital literacy. Agent networks and their interoperability can be encouraged and promoted by IPS.

**Usage:** Lack of trust and capacity to use the services are the main usage barriers. Marketing campaigns and agent outreach can drive digital adoption, including for women. Micro business owners and infrequent income earners were most likely to say digital payments hold limited value. Unreliable mobile networks, lack of widespread acceptance of digital payments by merchants, transaction costs, and complex user interfaces affect users’ ongoing engagement with digital payments. Agents play a key role in educating and assisting users with specific transactions, managing issues that arise, and supporting consumer recourse.

Women continue to face more barriers than men, although the significance of the barriers depends on the context.

MOST WOMEN DID NOT GO TO SCHOOL; THEREFORE, THEY CANNOT EASILY MAKE A TRANSACTION USING DIGITAL PLATFORMS.”
From barriers to opportunities

The IPS landscape in Africa is not yet optimized to inclusively meet end-user needs or create sustainable low-cost business models. As Table 0.2 shows, barriers and opportunities at five levels shape the agenda for scaling inclusive IPS adoption and use in Africa.

### Table 0.2 | Barriers and opportunities for IPS at a glance

<table>
<thead>
<tr>
<th>Barriers</th>
<th>Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IPS business models</strong>&lt;br&gt;• Competition with proprietary systems and closed-loop systems, and overlap between regional systems, fragments the market and inhibits scale.</td>
<td>• Establish network effects by attracting additional participants.</td>
</tr>
<tr>
<td>• The proliferation of on-us transactions impacts the scalability of IPS operated through a third-party interoperability arrangement.</td>
<td>• Build scale through additional use cases.</td>
</tr>
<tr>
<td>• Sub-optimal interoperability arrangements.</td>
<td>• Achieve sustainable business models that lower costs, drive uptake, and achieve scale.</td>
</tr>
<tr>
<td><strong>IPS value proposition for PSPs</strong>&lt;br&gt;• Dominant PSPs and those that have invested heavily in their own infrastructure do not buy in to the value of interoperability with less-dominant PSPs.</td>
<td>• Share infrastructure for efficiency.</td>
</tr>
<tr>
<td>• Lack of transparency of scheme rules, performance data (volumes, and values).</td>
<td>• Disaggregate IPS on-us transaction data to bring more insights.</td>
</tr>
<tr>
<td>• Failure to address key regulatory barriers for PSPs, domestically and cross-border: compliance burden, foreign exchange limitations, operational challenges.</td>
<td>• Develop IPS designs through a participant-led consultative process.</td>
</tr>
<tr>
<td><strong>Digital payment inclusion for women</strong>&lt;br&gt;• A persistent gender gap in digital payment usage, plus gaps in phone, internet, and legal identity documentation access.</td>
<td>• Make scheme rules and data visible to improve PSP trust and buy-in, and to assist with compliance.</td>
</tr>
<tr>
<td>• Failure to tailor product design to women’s needs.</td>
<td>• Endorse payment digitalization and implementation of regulatory change.</td>
</tr>
<tr>
<td></td>
<td>• Allow new entrants to live-test products in a risk-controlled environment.</td>
</tr>
<tr>
<td></td>
<td>• Establish effective recourse mechanisms to counter fraud and increase trust. Conduct financial education campaigns for women on their rights and responsibilities.</td>
</tr>
<tr>
<td></td>
<td>• Analyze gender-disaggregated data to drive product and service design.</td>
</tr>
<tr>
<td></td>
<td>• Leverage agent networks, including female agents, to onboard, build trust, and familiarize women with digital payments.</td>
</tr>
<tr>
<td></td>
<td>• Integrate the G2P use cases.</td>
</tr>
<tr>
<td></td>
<td>• Adopt electronic know your customer systems to lower access barriers.</td>
</tr>
</tbody>
</table>
### Barriers

#### Merchant and government payment use cases
- Limited digital value circulation impacts IPS’ ability to scale and reduce costs.
- Lagging user adoption of merchant payments and persistent merchant informality.
- G2P contracts selectively awarded or not digitalized/still reliant on cash distribution.

#### Technology standards
- International Organization for Standardization (ISO) 8385 is outdated but ISO 20022 remains expensive.
- A lack of standardized QR codes.
- Data sharing restrictions limit innovation.

### Opportunities

#### Encourage cheaper and reliable P2B payments for merchants and end-users through scheme rules on pricing and transparency; incorporate value chain B2B payments with end-user incentives.

#### Digitalize G2P distribution and open distribution to various players.

#### Adopt application programming interface (API) integration layers to enable integration with ISO 20022.

#### Adopt standardized QR codes to increase convenience.

#### Inform country strategies on Open Banking and Open Finance to propel technology standards forward.
Unlocking cross-border payments through policy and regulatory harmonization

Inclusive cross-border retail payment systems play an important role in supporting the implementation of digital trade as part of the African Continental Free Trade Area (AfCFTA) mandate.

Harmonization of policy and regulatory frameworks is required to address barriers related to cross-border remittances (P2P transfers); micro, small, and medium enterprise (MSME) trade payments (B2B); and cross-border merchant payments (P2B).

Today, retail end-users and providers face significant barriers to cross-border payments. Many incumbent providers find the compliance burden for serving MSMEs and migrants with cross-border payments too high. High cost, complex documentation, and reporting requirements drive end-users to use informal channels for both remittances and trade payments. Overall, cross-border retail payments on the continent are expensive and inaccessible, and hence still largely informal.

Why harmonize?

Providers cited the lack of risk-proportionate payments licensing framework, a high regulatory burden with significant penalties for non-compliance, inconsistencies between know your customer (KYC) and customer due diligence (CDD) requirements across countries, data localization requirements and complexities in tax and balance of payment reporting across jurisdictions, as the top regulatory barriers to cross-border digital payments implementation. These barriers increase risk and cost to providers, and challenge market entry by innovators who want to focus on inclusive cross-border payments. Harmonization of regulation across jurisdictions will reduce complexity and facilitate greater competition, which could lead to cheaper, faster, and more accessible cross-border payment options for end-users.
What is needed to harmonize?

Achieving harmonization calls for a pragmatic approach that honors the authority of regulators within each jurisdiction while providing overarching guiding principles set through mutual recognition at the regional level.

How to harmonize?

The road to harmonization is long, with differences in domestic legal structures posing challenges. This requires proactive regional strategies, programs, and, where appropriate, model regulatory frameworks. Lessons from around the globe can assist African RECs and central banks in prioritizing harmonization actions. These lessons suggest that the sequencing of regulatory changes and regional initiatives needs to be carefully considered. There are three building blocks for effective cross-border retail payment harmonization that can be developed concurrently and iteratively:

1. **Policy formulation at the regional and domestic levels.** The first building block is for regional and domestic policymakers to establish a common goal—shared principles—and to equip regulators with mandates for cooperation.

2. **Alignment of regulatory frameworks.** The second building block is domestic alignment of regulation, guidance, rules, practices and implementation according to regional principles, with approaches that are reasonably compatible within countries’ respective technical and risk tolerances. Development organizations can contribute with technical support and capacity building.

3. **Formal agreements.** The final building block is for payment service directives and trade agreements to be entered into as formal tools for the realization of longer-term harmonization outcomes.

Who can harmonize?

Central banks are the key actors in driving harmonization. To enable them to do so, cooperation structures and agreements are needed, particularly related to financial integrity and data harmonization.

In addition to central banks, data protection authorities can play a vital role in facilitating cross-border trade by ensuring protection of data during international data transfers. Tax and monetary policy authorities play critical roles in addressing exchange control barriers, while regional economic communities (RECs), monetary unions, monetary zones, and their associated executive bodies have a mandate to foster cooperation and collaboration among members, including in cross-border payments.

Finally, the African Union will play an important role in elevating the urgency of policy and regulatory harmonization agenda with heads of state.

There are several areas of regulation to harmonize:

- **PSP licensing requirements and supervision regimes.**
- **The KYC and CDD framework, including eKYC, and the interpretation of Financial Action Task Force guidance for the associated anti-money-laundering, terrorism-financing, and proliferation-financing framework.**
- **Financial consumer protection provisions on complaint and dispute resolution processes, as well as disclosure and transparency.**
- **Foreign exchange access and reporting regimes.**
- **Data privacy, cross-border data sharing, and data protection principles, including compatibility of payment data standards and formats.**
Future perspectives

Africa's digital payments market has entered a new era. Although the IPS landscape has remained relatively stable over the past year, competitive dynamics and payments functionality will continue to evolve, new IPS will go live, and with new entrants, IPS in some countries will see overlap with regional systems. At the same time, there are significant opportunities to accelerate digital payments and all-to-all interoperability.

Several market, system, and consumer trends will shape the evolution of the IPS landscape and its ability to scale in all countries and regions, as Table 0.3 shows:

**TABLE 0.3 | Market, system, and consumer trends at a glance**

<table>
<thead>
<tr>
<th>Market trends</th>
<th>System trends</th>
<th>End-user trends</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Agents will cement their position at multiple points along the digital payments value chain.</td>
<td>• Banks remain crucial participants of IPS.</td>
<td>• End-users are increasingly susceptible to and aware of fraud and cybercrime.</td>
</tr>
<tr>
<td>• Fintechs will continue to launch innovative products and increase their networks/market share in the mobile payments market.</td>
<td>• Fintechs continue to provide front- and back-end services in partnership with established PSPs rather than becoming direct IPS participants.</td>
<td>• End-users are persistently price sensitive.</td>
</tr>
<tr>
<td>• Regulators are revising payments and e-money laws to foster innovation.</td>
<td>• Open Finance is emerging.</td>
<td>• End-users are increasing their smartphone adoption, but growth in data access has been slow.</td>
</tr>
<tr>
<td>• Digital ID rollouts will increasingly allow for additional proxy ID options.</td>
<td>• CBDCs are emerging as decentralized instant settlement and interoperability mechanisms but technical assistance support is oversubscribed.</td>
<td></td>
</tr>
<tr>
<td>• Virtual assets for cross-border retail payments can divert scale from IPS.</td>
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</tbody>
</table>
Where to next?

The State of Inclusive Instant Payment Systems in Africa 2023 report showcases the continent’s progress on increasing digital instant transaction volumes and values. However, it also shows that more needs to be done to ensure that IPS are truly inclusive, so that they can successfully contribute to the growth of digital public infrastructure in Africa. As we look to the future, policymakers must create incentives for the design and scale-up of inclusive instant payment systems within existing financial market infrastructure. In this, access to credible and comparable information is key. For IPS, the imperative is to ensure that their design and governance structures support inclusive outcomes, and that consumer and market participant requirements are met to achieve sustainable inclusion. Regulators, in turn, need to consider how to regulate and supervise to enable inclusive national and regional ecosystems through measures to support innovation, more proactive coordination between domestic regulators, and regional harmonization of regulation for cross-border payments.

AfricaNenda, the World Bank, and UNECA will continue to advocate for making instant payment systems accessible and useful for all, and to help regulators and market players navigate the choices that they face in the pursuit of inclusive instant payment systems as digital public infrastructure in Africa.