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AUTORITÉ INTERGOUVERNEMENTALE POUR LE DÉVELOPPEMENT

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Migrant Money

Regional Harmonization of Remittance Policies in the Intergovernmental Authority on Development (IGAD)

SUDAN PAYMENT INFRASTRUCTURE ASSESSMENT REPORT

April 2023

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ABOUT THIS REPORT

The scope of this report draws from the policy diagnostic assessment in Sudan, which identifies key policy areas that require attention to enhance remittance flows to Sudan, including modernizing payment system infrastructures. In this context, the following four key areas have been assessed for the development of modern and efficient payment system infrastructures to enhance remittance flows using digital payment channels:

- Availability of access points for sending and receiving remittances, including automated teller machines (ATMs), merchant points of sale (POS), and cash-in/cash-out agents.
- Access to national payment system (NPS) infrastructures by non-bank remittance service providers (RSPs), including mobile network operators (MNOs), money transfer operators (MTOs), and fintechs.
- Interoperability for key retail payment systems and instruments, including POS, mobile money services and agents, although agent interoperability is currently unavailable.
- Connectivity with local, regional, and international hubs, gateways, and multilateral payment platforms.

This report assesses the progress made under each of the four priority areas identified as crucial for NPS infrastructures and provides guidance for future action for public and private stakeholders to improve the digital ecosystem for increased remittance flows through monitored and regulated digital channels.

ACRONYMS

ACH	automated clearing house
AED	United Arab Emirates dirham
AML/CFT	anti-money laundering/combating the financing of terrorism
API	application programming interface
ATM	automated teller machine
B2B	business to business
BLA	bilateral labour agreement
CBOS	Central Bank of Sudan
EAC	East African Community
CDD	customer due diligence
COMESA	Common Market for Eastern and Southern Africa
CSD	central securities depository
EBS	electronic banking service company
DFS	digital financial services
ECC	electronic cheque clearing
e-KYC	electronic know your customer
FATF/GAFI	Financial Action Task Force/Groupe d'action financière
FIMP	financial institution for mobile payment
GDP	gross domestic product
IGAD	Intergovernmental Authority on Development
IMF	International Monetary Fund
ISO	International Organization for Standardization
KYC	know your customer
MMO	mobile money operator
MNO	mobile network operator
MTO	money transfer operator
MFI	microfinance institution
MFU	microfinance institutions unit

NID	national identification
NPS	national payment system
PIN	personal identification number
POS	point of sale
PSP	payment system provider
P2P	person to person
QR code	quick response code
REC	regional economic community
REPPS	regional payment and settlement system
RSP	remittance service provider
RTGS	real-time gross settlement system
SAR	Saudi riyal
SDG	Sudanese pound
SIM	subscriber identity module
SMS	short message service
SSWA	Secretariat of Sudanese Working Abroad
SRAG	Sudanese Real-time Automated Gross Settlement System
STP	straight-through processing
SWIFT	Society for Worldwide Interbank Financial Telecommunication
UNCDF	United Nations Capital Development Fund
USD	United States dollar
USSD	unstructured supplementary service data

Remittance market overview

Sudan has an estimated population of 44.9 million people.[1] Sudan is an origin, destination, and, most important, a transit country for mixed migration flows from West and East Africa toward North Africa, Europe, and the Gulf Countries. Over one million Sudanese are estimated to work abroad, many of them skilled workers. The primary destination countries are Saudi Arabia, South Sudan, the United Arab Emirates, Chad, Qatar, Kuwait, Kenya, Ethiopia, the Republic of Yemen, and Uganda.[2] There are approximately 1.2 million migrants in Sudan.[3] In 2021, formal inbound remittances to Sudan totalled US$465 million, or 1.3 percent of the country's total gross domestic product (GDP).[4] Most remittances are from Saudi Arabia, South Sudan, and Chad. Large numbers of migrants reside in the neighbouring countries of South Sudan (28 percent) and Saudi Arabia (23 percent), some working as professional medical staff, engineers, and university lecturers.[5] Equally, inbound migrants from Bangladesh, China, the Philippines, Sri Lanka, and Turkey have sought economic opportunities in Sudan. It is estimated that 92.5 percent of remitting migrants send their money through informal channels for reasons including the parallel market premium and lower cost, greater ease of such transfers compared to those sent through the banking system,[6] and economic sanctions from the United States of America.

Even though sanctions are being lifted, transfers through the hawala system are still high. Sudanese migrants primarily send money back to their families using informal channels, mainly because of the cost of using formal channels, including complying with the AML/CFT policy and regulatory framework. Senders and recipients prefer informal channels as they have less stringent AML/CFT requirements, which prevents the uptake of digital products for remittances despite their growing availability. Due to limited interoperability, direct account-to-account transfers are either partially available or costly for remittances. Further policy and regulatory interventions may be needed to provide adequate tax and financial incentives, and enable interoperability in retail payment systems. Interventions may also have to be considered to address regulatory barriers for undocumented migrants in destination countries and to enhance migrants' digital literacy pre-departure, so they leave possessing the knowledge and skills they will need to send remittances through formal digital channels.

The Government of Sudan's efforts to improve remittance inflows

The Ministry of Finance is in the process of developing the country's financial inclusion strategy. The strategy emphasizes financial inclusion data infrastructure in its third implementation stage. One of the expected deliverables is the capacity to disaggregate and

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1 UNFPA, 2022. https://www.unfpa.org/data/world-population-dashboard (Accessed on 4 September 2022)
2 KNOMAD, Migration Data. https://www.knomad.org/data/migration/emigration?page=22 (Accessed on 4 September 2022)
3 ILO, NORMLEX country profile for Sudan: https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:11110:0::NO::P11110_COUNTRY_ID:103176
4 KNOMAD, Remittances Data. www.knomad.org/data/remittances (Accessed on 18 September 2022)
5 UNESCWA, *Remittances in Sudan*. https://archive.unescwa.org/sites/www.unescwa.org/files/page_attachments/remittances_in_sudan.pdf (Accessed on 18 September 2022)
6 UNDP, 2020. *The Potential of Sudanese Diaspora Remittances*. www.sd.undp.org/content/sudan/en/home/library/Research_Knowledge_resources/the-potential-of-sudanese-diaspora-remittances.html (Accessed on 18 September 2022)

report on the required data.[7] The Ministry of Finance also implemented an exchange rate reform in February 2021 to adopt a managed float regime, which unified official and parallel exchange rates. Sudan used a fixed exchange rate regime, with the official exchange rate set at SDG 55 to $1. South Sudan's secession and the loss of an estimated 75 percent share of oil revenues resulted in severe shortages of foreign reserves. As a result, the gap between the average official exchange rate and the free market widened over time, with the obvious negative consequences of discouraging remittances through the banking system.[8] It was estimated that 90 percent of transactions occurred at a parallel rate.[9] Incentives considered to encourage remittances among the diaspora include revising service charges for diaspora accounts.

On 31 December 2017, the government announced that special rates for foreign currency transfer to Sudan would be introduced to encourage the Sudanese diaspora to transfer foreign currency through the country's banking system. However, a lack of trust is a major obstacle preventing the Sudanese diaspora from using formal channels to remit.[10] According to the 2018 draft guidelines for a migration strategy in Sudan, Sudan has signed bilateral labour agreements (BLAs) with Ethiopia, Jordan, Kuwait, Libya, Oman, Qatar, the United Arab Emirates, Yemen, and Djibouti.[11] The Ministry of Labour and Administrative Reform is tasked with negotiating BLAs and has been developing BLAs with Egypt, Kuwait, and Qatar. According to the Ministry of Labour and Administrative Reform, the BLAs cover labour exchanges, annual leave, and social and health insurance, catering to different skill levels and sectors.[12]

7 Alliance for Financial Inclusion, Financial Inclusion Strategy (FIS) Peer Learning Group, 2020. *Policy Model for National Financial Inclusion Strategy*. https://www.afi-global.org/sites/default/files/publications/2020-09/AFI_NFIS_PM_AW2_digital.pdf (Accessed on 5 August 2022)
8 UNESCWA, *Remittances in Sudan*. https://archive.unescwa.org/sites/www.unescwa.org/files/page_attachments/remittances_in_sudan.pdf (Accessed on 12 June 2022)
9 IGC, 2021. *Exchange rate reform in Sudan*. https://www.theigc.org/wp-content/uploads/2021/10/SDN-20260_Exchange-rate-reform-in-Sudan.pdf (Accessed on 8 February 2022)
10 ILO, 2020. *An Assessment of Labour Migration and Mobility Governance in the IGAD Region: Country report for Sudan*. www.ilo.org/wcmsp5/groups/public/---africa/---ro-abidjan/---sro-addis_ababa/documents/publication/wcms_743322.pdf (Accessed on 18 September 2022)
11 UNESCWA and NPC, 2018. *2018 Draft Guidelines for a Migration Strategy in Sudan*, p. 14.
12 ILO, 2020. *An Assessment of Labour Migration and Mobility Governance in the IGAD Region: Country report for Sudan*. www.ilo.org/wcmsp5/groups/public/---africa/---ro-abidjan/---sro-addis_ababa/documents/publication/wcms_743322.pdf (Accessed on 18 September 2022)

The Central Bank of Sudan

The Central Bank of Sudan (CBOS) was established in 1959[13] and is responsible for overseeing the banking system and its development, promotion, issuance, and management of the national currency, among others. The banking supervision department at the CBOS has two directorates, namely prudential and inspection. The department conducts onsite and offsite supervision, including commercial and specialized banks, and remittance and exchange bureaux, whereas the payments department supervises fintechs, e-money issuers, and other payment solution providers. Microfinance institutions (MFIs) are supervised by the Microfinance Institutions Unit (MFU).

Banks

Sudan has 38 banks,[14] of which five are specialized and 33 are commercial banks.[15] All 38 banks participate directly in the national payment systems, which include the Sudanese Real-time Automated Gross Settlement System (SRAG), the electronic cheque clearing (ECC) system, and the national switch, the Electronic Banking Service Company (EBS).

Non-bank remittance service providers

Non-banks do not participate directly in large-value payment systems or real-time gross settlement (RTGS). However, they can participate directly in the retail payment switch, the EBS. Non-bank service providers (NSPs) include microfinance institutions and remittance service providers (RSPs) such as money transfer operators (MTOs) and mobile network operators (MNOs) that want to set up an international remittance business in Sudan. There are three types of licenses, namely exchange bureau, MTO (only money transfer with no currency exchange), and Internal MTO.

Mobile money operators

The Central Bank of Sudan licences mobile money operators (MMOs) to provide mobile payment services and manage customers' mobile wallets. MMOs are integrated into the national switch and the payment system, while MNOs only provide telecommunications services such as airtime and cannot provide mobile money or payment services. Not all MNOs are MMOs, and MNOs have their own standalone point-of-sale networks located at their agents' premises used exclusively for telecom services. The CBOS established a centralized mobile payment infrastructure. However, this was not well-received by users, as its business case needed to be revised and streamlined with a unique offering. The central mobile platform was also monopolized in the mobile money space. However, the product did not take off as expected. Since then, the CBOS has opened the retail space and enabled MMOs to participate as financial institutions for mobile payments (FIMPs). MTN was awarded a fintech license and rolled out the MTN mobile money product. The same applies to Zain, that applied for a fintech license like MTN. Each MMO and MNO has a POS-type device for cash-in and cash-out utility payments and airtime sales. However, the POS, owned by MMOs and MNOs, is standalone and not interoperable with card systems.

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13 CBOS website. https://cbos.gov.sd/en/about-cbos/about-central-bank-sudan (Accessed on 5 September 2022)

14 Interviews with CBOS representatives, IGAD Entebbe Workshop, 5-7 March 2022.

15 Central Bank of Sudan, 2018. *58th Annual Report*. https://cbos.gov.sd/sites/default/files/CBOS%20-%2058th%20Annual%20Report%202018.pdf (Accessed in February 2022)

Microfinance institutions

The CBOS' Microfinance Unit is responsible for supervising MFIs. There are 17 licensed MFIs in Sudan, all of which do not have direct access to the large-value payment system and the Sudanese Real-time Automated Gross Settlement System but have direct access to the retail payment systems of the EBS. The law also enables microfinance institutions to engage in micro-international remittances, but it must be comprehensive enough to cover how MFIs can partner with MTOs.

Agents

As of 31 March 2022, no agent regulations were in place, although there are plans to develop a legal framework for agency banking. Currently, agents are not exclusive as they are the same for all digital financial service providers that use the same platform.

NATIONAL PAYMENT SYSTEMS INFRASTRUCTURES

The payment system participants in Sudan include the CBOS, the national government, commercial banks, and non-banks, depending on the category of the payment system. National payment systems in Sudan are classified into two categories, namely large-value (wholesale) and low-value (retail) payment systems, based on the throughput in terms of values and volumes processed.

Large-value payments systems

The CBOS owns and operates the SRAG and has full responsibility and control of the day-to-day business operations of settlement accounts and operations. The SRAG was launched in 2008 and made mandatory for all commercial banks. The scheduled operational times are between 8 a.m. and 3 p.m. local time. Sudan also has an electronic cheque clearing (ECC) system, which settles in five currencies, i.e., the domestic SDG pound, the United States dollar (US$), the euro, the Saudi riyal (SAR), and the United Arab Emirates dirham (AED). The ECC was launched in 2006 and is integrated with the RTGS.

Retail/low-value payment systems

The domestic national switch of Sudan is the Electronic Banking Service Company (EBS), with all 38 banks integrated as direct participants. The EBS is interoperable with payment systems belonging to mobile money operators. The EBS is the technology partner of the CBOS and was instrumental in developing payment systems when the country was under sanctions. This also served as a workaround to provide an alternative product to the SWIFT network. The EBS implemented the cheque clearing house and the switch, whereas the RTGS (SRAG) is implemented and managed by the CBOS.

Private-owned retail payment systems

Five commercial banks each have proprietary switches connecting ATMs to their branded cards. The five are Omdurman, Khartoum, Faisal, Al Baraka, and Al Salam, but all banks are part of the EBS's national switch system, which the EBS runs. Regarding cross-border interoperability, the EBS, SRAG, and ECC do not have any connectivity outside Sudan's borders.

Personal identification cards

Sudan has a national ID (NID) issued by the Department of Passports, Immigration, and Nationality of the Ministry of Interior Affairs. Currently, all applications for the NID cards must be made in person. The NID card is mandatory and contains the cardholder's name, date of birth, address, fingerprint, signature, and blood group. The primary identity documents in Sudan include the NID card, citizenship identity documents, driving licenses, birth certificates, and passports. Payment systems are partially integrated with national identity systems. The know-your-customer information used in Sudan to access a financial service is the national ID number included in the passport and the personal ID (the national ID card). However, there is no analogous identifying process for a migrant in Sudan who must provide their passport and regular registration documents from the immigration authorities. Additionally, no risk-based strategy for KYC procedures based on shared information is employed. The police manage the national ID platform, accessible to MNOs for KYC purposes and used by the credit bureau during the credit-scoring process.

Automatic teller machines and point of sale terminals

There are approximately 1,600 ATMs and 60,000 POS devices with an active rate of 80 percent. All ATMs are interoperable with the EBS. However, major players in the banking industry have proprietary ATM and POS networks. Over 200,000 points of sale are used by MNO agents for airtime sales. The POS networks owned by MNOs are standalone and do not provide services for branded cards.[16]

16 Interviews with CBOS representatives, IGAD Entebbe Workshop, 5-7 March 2022.

REMITTANCE-LINKED PRODUCTS AND SERVICES

After almost two decades of international sanctions, financial institutions in Sudan face challenges when initiating cross-border bilateral partners for correspondence banking. Even though sanctions have been lifted over the past five years, Sudan's financial sector is considered high-risk, limiting the number of correspondence banks willing to do business with Sudanese banks and negatively impacting remittances.[17] Consequently, de-risking has become a major priority in Sudan, affecting all countries in the Horn of Africa. Due to these challenges, Sudanese migrants in the IGAD Member States resort to using informal means to send money to their families as the formal ones established in Sudan, such as Western Union and MoneyGram, are very expensive.

17 Ibid.

ASSESSMENT OF THE PAYMENT SYSTEMS INFRASTRUCTURE FOR DIGITAL REMITTANCES

This section assesses progress made by the CBOS and market stakeholders in the four key areas identified in the scope of the study to address the NPS infrastructure gaps and remaining challenges.

Retail payments access points for sending and receiving remittances

Context

The usefulness of transaction accounts for payments or remittance services is enhanced by a broad network of access points with wide geographical coverage and by offering a variety of interoperable access channels.[18] The existence of a national-level retail payment infrastructure, including ACH, payment cards and mobile money switches, could effectively increase the network of access points (e.g., ATMs, points of sale, branches, or agent networks) for individual customers. Such centralized payment infrastructures act as hubs for processing interbank transactions, improving interoperability and exhibiting positive network externalities for all system participants. Any branch of a bank or other PSP participating in the ACH or switch can be used to initiate a funds transfer to a customer of another ACH or switch participant. This supports countrywide reachability, even if a particular bank does not have access points deployed in specific regions. The success of digital remittance services that use retail payment systems depends on customer service and access points' availability, quality, and reliability.

Situation in Sudan

In Sudan, bank branches, ATMs, and agent-based POS terminals are important access points for disbursing remittances. Sudan has a comprehensive ATM network with six retail payment switches, including the national switch. The national switch serves the 33 banks, while the other five are private networks incorporated into the national switch and serve their own ATM networks. Cash-out points using ATMs are extensive because of this.

Recommendations

The following recommendations could be considered to improve access points for remittances.

1. **The CBOS could consider enhancing the mobile platform to create shared infrastructure.** Currently, only one mobile payment platform connects two MNOs (MTN and Sudatel) and eight banks. MTN, Sudatel, and eight banks had been connected on that platform. However, product offerings have little diversity because all players offer similar services. One of the main challenges with this model, which was developed by the CBOS's technical partner, the EBS (50 percent owned by the CBOS, 20 percent by the MNO, and 30 percent by the commercial bank), is the deployment of agents and liquidity management for cash-in or cash-out services. The model did not have a business case for participants, so it was decentralized, and each player could apply for a fintech license. MTN has since taken up this opportunity and was the first to be licensed by the CBOS. There is an opportunity to turn the mobile platform owned by the CBOS into a shared infrastructure since it is already interoperable with MNOs and banks. Innovators could leverage shared infrastructure to

18 World Bank, 2017. Payment Aspects of Financial Inclusion (PAFI). https://www.worldbank.org/en/topic/financialinclusion/brief/pafi-task-force-and-report

reduce capital and operational costs when establishing digital financial services to increase remittance service uptake.

2. **The CBOS could issue laws and regulations that support remittances, including guidelines on how players could adopt shared infrastructure.** Laws and regulations governing licensing, authorization, and RSP regulations should specify how RSPs could collaborate with MTOs, and how agent regulations would enable banks and MFIs to establish agent networks. The regulations could guide RSPs and banking agents on using shared infrastructure such as interoperable POS devices for banking and mobile money agents. RSPs could also adopt shared infrastructure when partnering with MTOs. A new RSP operator would not need to install standalone cash-in/cash-out devices as they could be made interoperable.

Access to national payment infrastructures by non-bank remittance service providers

Context

According to the Financial Stability Board (FSB) Stage Two report,[19] "there are clear advantages to promoting direct access to the national payment infrastructures by non-bank RSPs as this reduces the costs for remittance transfers and time it takes to settle these transactions. Lowering barriers to access improves the possibility for PSPs and payment infrastructures to become direct members of multiple payment systems across different jurisdictions. Similar access requirements in different payment systems can encourage PSPs to become global payment players, serving many jurisdictions. Lower costs and higher speed in cross-border payments with lower credit and liquidity risks would be the targeted outcome."

Situation in Sudan

In Sudan, non-banks do not participate directly in large-value payments, i.e., the SRAG. However, they can participate directly in the retail payments switch, the EBS. Non-bank service providers include MFIs, RSPs such as MTOs, and MNOs. Non-banks such as MFIs are also restricted from partnering with RSPs and MTOs due to a lack of supporting regulations.

Digital ID and e-KYC platforms are yet to be developed in Sudan. In compliance with Financial Action Task Force (FATF) standards, both remittance senders and recipients should be identified by RSPs, and remittance flows must be traceable. Supporting this process using digital ID, e-KYC, and credit-scoring platforms could help foster financial access, reduce costs for RSPs, and address issues related to de-risking. Incorporating digital ID, e-KYC, and credit-scoring platforms by banks and non-bank RSPs could help facilitate account opening and authentication, and develop and issue alternative digital products and channels, which are much needed in the Sudan payments ecosystem to promote digital remittances.

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19 Building Block 10 details the importance of direct access. Committee on Payments and Market Infrastructures, 2020. *Enhancing Cross-Border Payments: Building blocks of a global roadmap.* https://www.bis.org/cpmi/publ/d193.pdf

Recommendations

The following recommendations could be considered to improve the quality of access to NPS infrastructures.

1. **Enabling non-bank RSPs to access the SRAG payment systems directly** may be one step ahead. Non-bank RSPs could improve the efficiency of retail payment systems by increasing competition. Increased competition could lower fees and broaden the alternatives open to end-users. Unbanked individuals may be able to use non-bank services as an alternative to payment instruments offered by banks. In other situations, non-banks could provide the expertise the incumbents lack and cooperate with banks to provide innovative services such as mobile payments. Some mobile phone operators, for example, have extended basic financial services to sectors of the population that no financial institution previously served.

2. **The CBOS could encourage banks and non-banks to adopt shared infrastructure** to reduce the cost of implementing access points in rural areas, e.g., using interoperable cash-in and cash-out POS devices.

3. **Implement digital ID, e-KYC, and credit-scoring infrastructures for banks and non-banks to speed up the digitalization of remittance services.** Sudan has a digital ID system accessible to financial institutions, including MNOs. There is also a credit bureau that has its standalone systems. The CBOS could enhance interoperability between the separate systems to support e-KYC. This can be made available to both banks and non-banks. Banks are currently provided direct access to national payment systems, while non-banks are yet to be provided direct access. The same scenario may play out when the national digital ID project has progressed to the point of integration with payment systems in the future.

4. **Build resilience in critical retail NPS infrastructures.** The impact of operational incidents could be mitigated, in principle, by building resilience that withstands service disruptions and supports effective business continuity plans. NPS system operators could be required to do the following: (i) adopt rigorous risk management procedures in line with global best practices to identify and mitigate operational risks, including cybersecurity; (ii) incorporate appropriate redundancy and business continuity arrangements to ensure the timely recovery of services in the event of a major disruption; and (iii) establish procedures for timely communication to stakeholders of operational incidents. Furthermore, the CBOS could consider conducting periodic, regular disaster recovery drills (both announced and unscheduled) to ensure systems are effective and resilient. The CBOS may consider capacity-building initiatives to empower internal capacity with the above and have a programme for participating in the NPS and the wider domestic payments ecosystem. Capacity-building could be based on guidance developed by the Committee on Payments and Market Infrastructures (CPMI) on cybersecurity[20] and other global best practices.

5. **The CBOS may need to enhance its supervisory capacity for private retail payment systems through peer learning.** Sudan has five private switches, namely Omdurman, Khartoum, Faisal, Al Baraka, and Al Salam, with established payment service platforms (e.g., real-time clearing and settlement, etc.), which need enhanced and greater monitoring.

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20 Bank for International Settlements and International Organization of Securities Commissions, 2016. *Guidance on Cyber Resilience for Financial Market Infrastructures*. https://www.bis.org/cpmi/publ/d146.pdf

Interoperability and interconnectivity of domestic and regional payment infrastructures

Context

Interoperability is one of the most desirable characteristics of payment and financial market infrastructures to ensure infrastructure sharing and the widespread availability of digital financial service access points. Whereas the widespread availability of digital solutions for remittances, payments, savings, and credit provides people with access to financial services, payment interoperability enables these targeted people to transfer their money to any other individual without a requirement for multiple transaction accounts, thereby increasing the importance of transaction accounts and their usability.

ISO 20022 has become the key global standard for developing modernized financial market infrastructures. Currently, most payment systems follow the ISO 20022 standards, resulting in improved efficiency, lower costs, and the avoidance of errors. ISO 20022 is a global standard for financial messaging that provides a standard model across business domains such as payments, securities, trade services, card services, and foreign exchange. The standard defines messages with clarity of purpose, conveys information between parties within a payment chain, and defines message specifications for each message type. The benefits of ISO 20022 include the following: (i) **The ability to share rich information**, i.e., ISO 20022 can carry large data sets and messages and users of the standard can choose the quantity of data to share for necessary insights; (ii) **Integration between both domestic and cross-border payments**, i.e., ISO 20022 can integrate and standardize domestic and cross-border payments in market practices by rolling out standard guidelines; (iii) **Interoperability and harmonization**, i.e., ISO 20022 harmonizes previously known interoperable formats and simplifies data consumption and transmission. The underlying syntax of XML and the structured platform makes this standard more feasible for payments; and (iv) **Efficiency gain and cost-savings**, i.e., ISO 20022 makes financial messaging more efficient by standardizing and harmonizing payment message formats, increasing STP rates and simplifying cost-intensive processes such as payment processing, investigations, data analytics, and reporting.

Situation in Sudan

Interoperability has been established between the large-value payment system, the SRAG, and all 38 banks. In addition, there is interoperability between the national retail payments switch and all 38 banks, as well as 17 MFIs. The MNO platform also has interoperability with MTN, Sudatel, and other banks with mobile wallets. However, cross-border interoperability between large-value retail payments and mobile money has not yet been established. There are efforts to establish bilateral agreements for commercial banks via relationships with the central banks of countries such as Ethiopia, Kenya, and Uganda.

At the regional level, limited regional payment systems interoperability and lack of uniformity in codes for cross-border remittances contribute to the high cost of conducting low-value, high-volume payments, and delays in payment processing times. However, integration between these systems is underway. Sudan is a Member State of the Common Market for Eastern and Southern Africa (COMESA) regions. Yet, the CBOS does not participate in the regional RTGS integration project, the Regional Payment Settlement System (REPSS).

Recommendations

The following recommendations could be considered to improve the interoperability environment.

1. **The CBOS could consider taking up its membership in the REPSS.** The REPPS provides clearing and settlement for Member States of the Common Market for Eastern and Southern Africa (COMESA) region. Settlement is in US$, euro and GBP currencies, and the system is operational in Mauritius, the DRC, Malawi, Swaziland, Uganda, Zambia, Rwanda, and Kenya. Uganda and Kenya are both Member States of the IGAD and EAC regional economic communities.

2. **The CBOS could develop guidelines for the market players on a harmonized and coordinated cyber-reporting framework as the first step towards coordinating efforts and sharing of experiences required to put adequate protections in place.** A standard security framework (ISO/IEC 27001) could be adopted. Cybersecurity issues around payments could be properly addressed, specifically indicating the following: (i) who should monitor unstructured supplementary service data (USSD) channels; (ii) who should be notified of USSD breaches and how to respond; (iii) who is ultimately responsible for any loss of customer funds because of such breaches; and (iv) who should handle any customer complaints where USSD-based breaches result in loss of funds. Infrastructure security should be properly addressed, particularly the roles and responsibilities of those who transmit and hold data.

Interconnectivity with local, regional, and international hubs, gateways and multilateral payment platforms

Context

Cross-border payments through the correspondent banking model often involve long transaction chains that lead to fragmented and truncated data standards, high capital costs, and weak competition, negatively affecting payment speed, cost, and transparency. Interlinking retail payment systems (including fast payment systems) and wholesale payment systems (such as RTGS) enable PSPs to interact directly through the linked infrastructures, reducing their reliance on traditional correspondent banking. Interlinking arrangements can range from simple agreements on cross-participation to fully integrated technical systems.[21]

Situation in Sudan

Sudan has shown interest lately in joining the Buna payment platform. Buna is the cross-border payment system owned by the Arab Monetary Fund. It aims to enable financial institutions and central banks in the Arab region and beyond to send and receive payments in local and key international currencies.

Recommendations

The following recommendations could be considered to bolster interconnectivity with local and regional multilateral platforms.

1. **The CBOS could foster connectivity between the NPS and regional and international hubs and payment gateways.** Establishing connectivity with international hubs and gateways will support greater access to digital payment channels. Such service aggregation platforms and remittance hubs enable RSPs to scale quickly and not incur disproportional operational and regulatory costs. These platforms and remittance hubs also have the potential to reduce the distance to access points and the cost of transactions by supporting a high number of low-value/low-fee transactions through many access points (or accessed remotely via the Internet or mobile networks).

2. **The CBOS could consider implementing a fintech regulatory sandbox approach to foster long-term inclusive innovation in digital payments, financial and banking services.** While the regulatory environment for digital payments is still evolving in Sudan, and as part of the implementation of the financial inclusion strategy, the CBOS could consider implementing a fintech regulatory sandbox so that banks and emerging fintech players can experiment with innovative financial products or services in a live environment but within a well-defined space and duration. The sandbox should include appropriate safeguards to contain the consequences of failure and maintain the overall safety and soundness of the financial system. Upon successful experimentation and exiting the sandbox, the sandbox entity must fully comply with the relevant legal and regulatory requirements. The sandbox may address the onboarding friction, the time it would take to integrate it with other apps, and the period for the learning curve.

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21 Building Block 13 details the importance of interlinking different payment systems. Committee on Payments and Market Infrastructures, 2020. *Enhancing Cross-Border Payments: Building blocks of a global roadmap*. https://www.bis.org/cpmi/publ/d193.pdf

Impact Capital for Development

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ABOUT IGAD

The Intergovernmental Authority on Development (IGAD) is one of the eight regional economic communities (RECs) and building blocks for the African Union. IGAD was established in 1996 to supersede the Intergovernmental Authority on Drought and Development (IGADD) which was founded in 1986. The new and revitalized IGAD was launched during the 5th Summit of IGAD Assembly of Heads of State and Government—Djibouti, Eritrea, Ethiopia, Kenya, Somalia, South Sudan, Sudan, and Uganda—held on 25-26 November 1996 in Djibouti. The Summit endorsed the decision to enhance regional cooperation in three priority areas of food security and environmental protection, economic cooperation, regional integration and social development peace and security. The founding leaders of IGAD were motivated by a vision where the people of the region would develop a regional identity, live in peace, and enjoy a safe environment alleviating poverty through appropriate and effective sustainable development programmes.

ABOUT UNCDF

The United Nations Capital Development Fund (UNCDF) is the United Nations' flagship catalytic financing entity for the world's 46 Least Developed Countries (LDCs). With its unique capital mandate and focus on the LDCs, UNCDF works to invest and catalyse capital to support these countries in achieving the sustainable growth and inclusiveness envisioned by the 2030 Agenda for Sustainable Development and the Doha Programme of Action for the least developed countries, 2022–2031.

UNCDF builds partnerships with other UN organizations, as well as private and public sector actors, to achieve greater impact in development; specifically, by unlocking additional resources and strengthening financing mechanisms and systems contributing to transformation pathways, focusing on such development themes as green economy, digitalization, urbanization, inclusive economies, gender equality and women's economic empowerment.

A hybrid development finance institution and development agency, UNCDF uses a combination of capital instruments (deployment, financial & business advisory and catalysation) and development instruments (technical assistance, capacity development, policy advice, advocacy, thought leadership, and market analysis and scoping) which are applied across five priority areas (inclusive digital economies, local transformative finance, women's economic empowerment, climate, energy & biodiversity finance, and sustainable food systems finance).

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