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Policy Paper

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Enhancing Digital Public Infrastructure in West Africa

Foundational Infrastructures and Human-Centered Governance

DPI | HUMAN-CENTERED GOVERNANCE | DIGITAL INCLUSION

Summary

Digital identity, payment, and data exchange systems form the foundation of Digital Public Infrastructure (DPI), to which other designed forms can be added for application across various sectors. However, the possibilities and opportunities they offer to people in West Africa are narrow or unstable when legal identity and other foundational elements related to electricity, digital skills, devices, and internet access—essential for enhancing their implementation—are missing, weak, or unaffordable. Human-centered governance is crucial for holistic solutions to enable meaningful social welfare improvements. The approach involves ensuring readiness through harmonized cybersecurity and data protection measures, as well as fostering sustainable public-private partnerships (PPPs). Instead of viewing Digital Public Infrastructure solely as a common good or a public good, a balanced approach that integrates both perspectives will allow for solutions that align with the needs of the digital era comprehensively and effectively.

Legal and institutional divergences, in addition to weak investments and strong gaps in legal identity documentation, lead to fragmented solutions that restrict the exercise of human rights. Legal identity documents as proof of citizenship remain primordial alongside the establishment of digital identity.

Keywords: Digital Public Infrastructure (DPI), foundational infrastructures, human-centered governance, human rights

Recommendations

1. **Establish a unified legal identity framework**
   - Develop a collective understanding of the legal identity, recognizing digital identity as a transitional tool for both offline and online applications.

2. **Conduct a comprehensive census for legal identity to all citizens**
   - Identify citizens who lack birth and nationality certificates and implement a streamlined process to provide them with the required legal documents alongside their digital identity registration.
   - Integrate legal identity verification (birth certificates, nationality certificates, and national identity cards) into digital identity operations to ensure comprehensive coverage.

3. **Strengthen institutional collaboration**
   - Foster strong collaboration among key government bodies, including the Ministry of Justice, the Ministry of Security, the nationality service, and the Ministry of the Digital Economy, to ensure seamless digital and legal identity integration.

4. **Promote sustainable energy for digital infrastructure**
   - Enhance bilateral, multilateral, and regional cooperation to develop clean energy production, such as solar power, while minimizing land footprints and preventing deforestation.

5. **Improve digital access**
   - Ensure citizens have access to affordable high-speed internet, improved digital skills, and suitable devices to engage with digital infrastructure fully.

6. **Advance human-centered governance**
   - Foster public-private partnerships through joint knowledge-building, data sharing, and collaboration to co-design a fair and innovative DPI with access to sustainable funding.

7. **Strengthen cybersecurity and data protection**
   - Implement harmonized and consistent cybersecurity and data protection measures at the national and regional levels, ensuring enforcement across all stakeholders.

8. **Balance collaboration and competition for shared prosperity**
   - Adopt a fair approach that integrates collaboration, partnership, and competition, leveraging both public and common good frameworks to drive equitable and sustainable development.

Introduction

To facilitate citizens' access to services and the free movement of persons, West African countries are committed to establishing a unique proof of identity and strengthening foundational identification (FID) systems under Digital Public Infrastructure (DPI). This effort builds on their previous collective commitment in 2014[1] to develop biometric identity cards.

Given the interconnected challenges affecting DPI implementation, equal attention must be given to critical factors, such as affordable and accessible high-power energy systems, high-speed internet, digital skills, and suitable devices for all citizens. While legal identity remains a fundamental component of FID systems beyond digital identity,[2] some argue that linking DPI too closely with legal identity may risk excluding certain individuals from accessing public and private services.[3] Trust in legal identity is comparable to the trust required in cybersecurity and data protection—both essential for a secure data exchange system. However, challenges persist in enacting and consistently implementing national cybersecurity and data protection laws. Effective collaboration among stakeholders is necessary to align with the Supplementary Act on Personal Data Protection within the Economic Community of West African States (ECOWAS).[4] Moreover, trust and interoperability remain hindered by the fact that not all West African nations have ratified the African Union Convention on Cybersecurity and Personal Data Protection—only fourteen out of fifty-five African countries[5] have done so.

Without a synchronized legal framework, divergent approaches will certainly lead to fragmented solutions, weakening interoperability and restricting citizens' ability to exercise their rights. Hence, to address this, a shared understanding of best practices and objectives is essential. Strong investments based on human-centered governance, including public-private partnerships, will be key to ensuring a fair and effective DPI.

Finding alternative pathways—though potentially offering a lower level of assurance—is seen as a crucial opportunity for individuals in West Africa who lack official documentation. Without such alternatives, many risk exclusion from the formal economy in the digital age. This challenge is one of the primary motivations for developing and implementing DPI, which aims to provide citizens with a unique identification number to facilitate access to public and social services.

However, a unique identification number based solely on biometric data information is insufficient to set legal proof of their nationality unless it is a combined approach with all individual identity components.[6] A comprehensive approach that includes parental information and testimonies is necessary to verify an individual's entire identity. Simply assigning a unique identification number does not guarantee recognition of a person's real-life identity.[7]

Currently, an estimated 750,000[8] people in West Africa are stateless. Yet there is no accurate data on the number of young people and adults who meet all citizenship law requirements, and there is a lack of birth or nationality documents. However, it is estimated that 45 percent of children under five years old are unregistered. Across sub-Saharan Africa, 55 percent of people lack an official identification record, and of Africa's 1.2 billion people, approximately 500 million do not have legal identity documents (WB 2018d).

While it may seem obvious that adults should take the initiative to obtain their legal identity documents, many face significant barriers. People living in remote and rural areas often lack awareness of the benefits of birth certificates and other legal identity documents. Many are engaged in the informal sector, which represents 85 percent of the economy, and the struggle with the centralized process of obtaining nationality certificates, which is often only accessible in capital cities—the cost of travel and administrative fees further limits access.

Birth, nationality, and identity documents serve as formal recognition of citizenship, ensuring individuals can participate in their country's resources, wealth, and opportunities. The absence of these documents restricts people from fully exercising their human rights and benefiting from social welfare. Key reasons for the lack of legal identity documents include poverty, lack of interest or need, limited awareness of their importance, level of education, remote living conditions, and highly centralized registration processes.

To address the legal identity issues without directly linking them to digital identity—while still recognizing their importance in strengthening DPI—it is essential to conduct a nationwide census to identify individuals in need of legal identity documents. Additionally, to mitigate risks of identity fraud and corruption, governments must develop a clear strategy and well-designed policy aligned with national identity law.

1.

Purpose: Positioning Digital Public Infrastructure as an Enabler for Legal Identity in West Africa

Under Sustainable Development Goal (SDG) 16, which aims to promote just, peaceful, and inclusive societies, legal identities play a crucial role in enabling individuals to fully participate in society. It is fundamental for access to essential services, protection of rights, and opportunities for social and economic inclusion. One of SDG 16's key commitments is to ensure that by 2030, all individuals have a legal identity, including birth registration, which serves as the foundational step for official recognition and participation in societal structures.[9]

However, relying solely on legal identity to build Digital Public Infrastructure risks excluding many people from the formal economy, especially in West Africa, where large segments of the population lack official identification. Additionally, internet access remains weak, meaning that online economies will expand gradually as digital readiness improves.

To bridge this gap, it is essential to adopt a dual strategy—establishing both digital identity and legal identity for all citizens. DPI provides a strong framework for collaboration between national identity and security authorities to ensure that individuals who lack legal identification receive it while simultaneously developing functional identity systems.

Unlike low-income countries, developed nations already have legal identifications in place for nearly all their citizens and residents. As a result, they face fewer challenges related to foundational identification when designing and implementing DPI, aside from addressing issues concerning undocumented populations.

Digital Public Infrastructure functions like a road, but not everyone uses it in the same way or with the same capabilities. Some can use the road on foot, others ride bicycles, and some drive high-performance cars. In this analogy, individuals with a legal identity—such as a national identity card or passport—are like those with high-performance cars while those with only a digital identity are like motorcyclists on the same road.

To ensure fairness, DPI must be designed with the purpose of granting equal and fair rights to all citizens. While all residents can access certain opportunities through DPI, those with a legal identity will be entitled to greater access to human rights protections and benefits. It seems evident that when people's economic rights are fulfilled, other human rights will be effectively upheld.

Receiving wages and paying bills are mostly designed for digital market purposes instead of enabling people to exercise their human rights fully. It is much more a matter of policies, legal, and institutional facilitation to allow people to have legal proof of identity instead of being in an economic capacity to have them, which could lead to situations of corruption when processes are not simplified and harmonized.

The Economic Community of West African States (ECOWAS), a regional area for the free movement of goods and persons, offers a strong framework for member states to introduce a standardized biometric identity card.[10] This requirement would help DPI work effectively for the legal identity verification. Moreover, the West Africa Unique Identification for Regional Integration and Inclusion (WURI) Program offers an advanced framework for multi-stakeholder collaboration, ensuring dignified and fair solutions. For DPI to attract large investments and unlock broader opportunities, digital identity systems must build high levels of trust.

1.1 Improving Digital Identity Good Practices

Available good practices regarding the design and implementation of Digital Public Infrastructure provide valuable lessons for least-developed countries. However, the successful implementation with people without a legal identity should be considered as the first experience that needs to be improved. The focus should be on improving and adapting best practices instead of replicating established approaches elsewhere.

Regarding legal identity, Peru, as a national priority, has been able to ensure a universal identification of its population, with an overall coverage of 98.7 percent of its adult population and 94.5 percent of all minors.[11] Côte d'Ivoire and Guinea intend to build on the Peru identification experience in line with the implementation of the West Africa Regional Unique Identification for Regional Integration Inclusion (WURI) Program.[12] It is a human right for people to be provided a legal identity beyond digital identity, which offers them the flexibility to operate both offline and online or either offline or online. New forms of DPI are expected to be designed and implemented, and it becomes a strong reason to give more priority to legal identity as digital technology is evolving with much complexity that cannot currently be predicted. Therefore, it is better to consider developing foundational identification alongside digital identity. Digital identity should not serve as an alternative to legal identity—it must complement it.

2.

Impact of Identity Notion Fragmentation on Human Rights and Dignity

While “identity” can have multiple definitions and interpretations, achieving a common understanding is essential to ensuring that people can fully exercise their human rights—whether offline or online. A unified definition supports better identity interoperability, preventing possible conflicts between legal identity and digital identity while upholding human dignity.

As individuals with full dignity, human beings have more than economic rights to exercise or to be addressed. They deserve a legal identity in the digital age that grants access to both offline and online opportunities, ensuring broader choices and greater possibilities. This is why holding both the legal identity and the digital identity—or a merged form of both—is crucial rather than assigning only an identification number to those without legal identity. While it is essential to ensure inclusion in the formal economy, individuals must not feel like they are being considered serial elements for the sole purpose of a digital single market.

Furthermore, the establishment of identity documents such as biometric national identity cards and passports is highly and sufficiently secure without Iris data collection. Iris data collection—as part of Digital Public Infrastructure, although considered highly accurate in biometric identification systems—presents risks of violation of the right to privacy, human rights, and dignity. Even with the highly robust protection reasons, as well as other motives, human dignity remains affected by the Iris data collection that should be avoided or removed. The same resources used to issue free digital identity and biometric identification can be used to establish digital identity and biometric legal identity documents related to the birth certificates, nationality certificate, and national identity card, for all citizens.

It is well-established that the legal identity empowers people to operate in the formal economy and exercise their broader human rights. However, it is a fundamental right for each citizen—rooted in the simple fact of belonging to a society, a state, or a nation, much like the surname automatically assigned to each member of a family. The legal translation of the bond of blood and/or soil into the legal identity reinforces the feeling of citizenship and belonging for each citizen to their nation. It constitutes a fundamental basis for enabling the exercise of their recognized rights. In the digital age, merging both forms of identity will open more possibilities to their holders at the national, regional, and international levels.

3.

Beyond Inclusion for Openness, Social Justice, and Fair Rule of Law

The respect and exercise of human rights should be based on fair rule of law and governance rather than mere inclusion, which can imply that rights are conditional. Human rights can be compared to common goods, similar to public goods, with non-rivalrous and non-excludable characteristics. Within this kind of public and common goods, instead of cooperation, partnerships, collaboration, human rights exercise enabling, and social justice, inclusion could be compared to a form of power-centered methods. This hinders more effective solutions. Social justice, fair rule of law, and good governance are key drivers in creating better societal conditions, with DPI emerging as a crucial tool for enabling access to public and private services.

The rapid advancement of digital technologies like artificial intelligence and artificial intelligence native will profoundly transform human labor and have an impact on people's income. Unlike developed countries, which have a better social security system, low-income countries—with limited industrial raw material transformation, where large imports of goods and services hinder the available internal production—will be facing more challenges regarding the progress of more advanced autonomous technologies. This is why implementing DPI is essential for accelerating progress toward the Sustainable Development Goals (SDGs) while also protecting people against such risks and finding better labor and income strategies. The Novissi program, designed and implemented by the Togolese government during the COVID-19 pandemic, is one example that enabled 819,972 beneficiaries to receive mobile money transfers to support their resilience.[13]

Several key areas must be addressed to advance social justice and strengthen the implementation of Digital Public Infrastructure: affordable internet access, electricity poverty, and digital skills combined with practical knowledge for innovation and development.

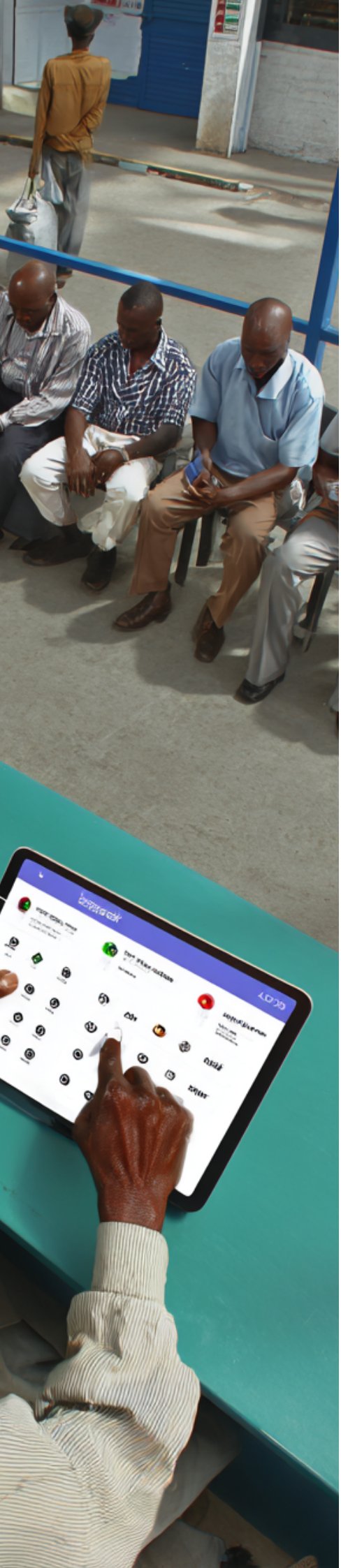
Regarding connectivity, the West Africa Cable System (WACS), which landed in 2012, has enabled member states to modernize their administration through e-government initiatives, improving public service operations based on the digital technologies under the GovTech. Moreover, Google's Equiano cable, based in Togo since 2022, is intended to significantly improve internet access in Togo and other West African countries.[14] However, while achieving high-speed internet is feasible, ensuring its affordability for widespread and regular access remains the major challenge.

In high-income countries, approximately 90 percent of the population usually spend 0.4 percent of their monthly income on internet connectivity, enjoying regular access. In contrast, in low-income countries, this rate drops to around 40 percent, with cost averaging 8.6 percent of their income and can reach up to 20 percent.[15] Essential for the payment and data exchange systems, the internet penetration rate in West Africa is about 43.2 percent, the lowest compared to the other six regions.[16]

There is an increasing potential for the payment system in West Africa as bank account owners and mobile phone users who have mobile money accounts continue to grow. Phone users are expected to reach 54 percent by 2025[17] for a population of 450,871,578,[18] and transactions through a mobile money account can be performed offline. However, online payment systems require a reliable internet connection and device, which represent additional expenses for users who can barely afford the internet price or appropriate devices.

According to GSMA, West Africa leads globally in mobile money adoption, making it the continent's digital finance epicenter.[19] As mobile money does not depend on internet access, which remains costly for many, and given the challenges in electricity poverty, it serves as an alternative, especially since classical phones and smartphones require relatively little power to function. Consistent and reliable electricity is essential across various sectors of human activity to power households, cities, institutions, and organizational infrastructures. The faster growth of mobile money transactions, now surpassing traditional bank account transactions in West Africa,[20] highlights a strong need for innovative and interoperable payment mechanisms that expand opportunities for mobile money users beyond the currently available services. A convergent and unique identity for each citizen, thanks to the collaboration of the different state authorities dealing with identity establishment, either legal identity or digital identity, will enhance trust and interoperability among mobile money operators, telecom providers, and banks. This will create greater financial inclusion, leading to more opportunities for users beyond basic transactions.

The data exchange system is essential for evidence-based decision-making, innovation, and endless possibilities. Its regular and effective operation, which relies on digital identity, payment systems, and other designed digital infrastructure, depends on high-performance computing, large-scale data storage, reliable energy, and a stable high-speed internet connection.



In West Africa, the energy produced rate stands at 42 percent overall and only 8 percent in rural areas,[21] despite significant energy potential:

2,000 gigawatts
solar energy

106 gigawatts
wind energy

162 gigawatts
hydropower

Yet 220 million of its population are living without access to power.[22] The renewables-based installed capacity is close to 7 GW, which is about 31 percent hydropower and less than 2 percent wind and solar power.[23]

Better strategies must be employed in the design, development, and installation of solar and wind energy plants to prevent deforestation and minimize unnecessary land use. Electricity shortages usually lead to cuts in the energy supply, disrupting ongoing activities, whether in households, public services, institutions, organizations, or businesses. As an alternative, many rely on fossil-fuel-powered generators, which negatively impact data storage infrastructure, data communication, and sharing.

Limited access to electricity—particularly in rural or remote areas and even in some areas in the cities—is partly due to the lack of grid connectivity[24] and low purchasing power, preventing people from connecting even when the grid is nearby. Additionally, West Africa has the highest electricity costs in sub-Saharan Africa.[25] Without improvements in energy and internet supply and cost harmonization, DPI will remain inaccessible to large segments of the population, limiting its full potential.

4.

Harmonized and Consistent Data Regulation in West Africa: A Cornerstone for Digital Trust

Digital technologies are evolving constantly and rapidly, creating a large gap between those who master digital tools and those with limited or no digital skills. Information and communication technologies (ICT) professionals, suppliers, and customers must always update their knowledge and skills to both protect themselves and maximize the benefits of digital technologies.

Cyberspace is a complex environment where humans interact through digital tools, making cybersecurity measures essential to protect personal data during communication and usage. Within the regional area of the Economic Community of West African States (ECOWAS), addressing cybersecurity, cybercrime, and data protection relies heavily on technical and economic capacities, as well as the harmonized development of national laws, policies, and procedures across member states.

West African countries have adopted the Supplementary Act on Personal Data Protection and the Directive on Fighting Cyber Crime. However, many member states have yet to ratify the African Union Convention on Cyber Security and Personal Data Protection, which weakens privacy protection and the effective use of data. This partial ratification of the convention[26] poses a significant challenge to trust and security, particularly in the development and implementation of Digital Public Infrastructure. Components related to the data exchange system, generated from digital identity and the payment system, as well as other digital infrastructure, require member states to establish shared policies and regulations that facilitate compliance and interoperability. Even when ratification and integration into domestic law are achieved—with aligned policies, procedures, and processes—the most crucial step remains effective implementation, not only by the state but also by companies and organizations collaborating to solve common problems. Common needs, interests, and priorities may vary from one member country to another, leading to divergent interpretations of digital sovereignty and differing speeds in implementing common regulations and policies for data protection within DPI. Negotiation is key to encouraging member states to ratify the African Union Convention on Cyber Security and Personal Data Protection with consistent internal laws and policies enacting and moving in the same direction for better cybersecurity and data protection in West Africa.

5.

Human-Centered Governance for Prosperity Sharing and Planet Protection

Digital Public Infrastructure has immense potential to enhance public participation across various sectors at both national and regional levels in West Africa. To become much more effective, DPI requires a coherent policy and legal framework on identity alongside other foundational infrastructures. Governance should prioritize human well-being as the main goal of DPI design and implementation besides digital trade concerns. When guided by convergent and harmonized policies, laws, and regulations, interactions between actors should be driven by practical, evidence-based solutions. Whether in the public or private sector, the shared objective is to address human needs and solve problems, either by creating better conditions that enable people to exercise their rights or by providing essential goods and services. However, methods, manners, processes or procedures, and means can sometimes hinder the achievement of these goals. Better solutions to common problems depend on the collaboration of different actors to jointly identify the most elaborate, relevant, and convincing solution on an objective, scientific, and fair basis. Learning from best practices allows us to draw conclusions and design improved solutions through innovation and creativity based on previous experience while pushing beyond existing limitations.

A notable example is Aadhaar, India's biometric-enabled digital identity. Launched in 2009, Aadhaar has become nearly universal, enrolling 1.3 billion people within a decade, demonstrating the potential of well-implemented digital identity systems to enhance access and inclusion.[27]

6.

Involved Actors and Public-Private Partnerships for Sustainable Solutions

Due to their prerogative of public authority, states are the primary drivers of large-scale change within a well-structured governance framework. While often associated with government and administration, the state alone cannot possess all the necessary expertise, resources, and financial capacity to make a notable change. This challenge also applies to non-state actors when they operate in silos. Establishing common ground becomes vital for bringing together different actors from the public and private sectors to work toward common goals, objectives, and missions to achieve the Sustainable Development Goals. Although the framework for collaboration may originate from non-state actor's proposals, its effectiveness ultimately relies foremost on the member states' strong commitment and willingness of member states to facilitate cooperation among all parties involved.

Harmonizing the interests of for-profit and non-profit actors is crucial to ensuring that capital serves humanity through DPI rather than people merely serving economic interests. Public-private partnerships provide a structured framework for defining shared solutions, requiring substantial technical and financial commitments. As a governance mechanism, these partnerships are a formalized framework where innovative ideas and designs can arise based on a clear principle subject to constant improvement and updating. Alongside state actors, non-state actors consist of businesses, civil society organizations, non-governmental organizations, international organizations, citizens, and customers. These can be further categorized into industrial, financial, institutional, community, and academic actors.

Public-private partnerships play a vital role in enhancing sectors, such as legal identity systems, electricity, and internet infrastructure, all of which are essential for strengthening Digital Public Infrastructure. For example, large-scale investments in electricity infrastructure are primarily led by states through initiatives such as the West Africa Energy Program (WAEP) and the West African Power Pool (WAPP), with support from both states and non-state actors.[28] The private actors are particularly active in renewable energy, supported by the ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE). The development of unified grids to expand electricity access in West Africa[29] underscores the need for strengthened public-private partnerships to ensure reliable electricity for all citizens.

The same collaborative approach is necessary for improving internet access and data exchange systems. While public-private partnerships already exist across these sectors, the focus is primarily on investments and the development of technical and digital expertise. It is essential to refine existing partnership frameworks to ensure a balanced playing field, enabling fair and equitable participation for small, medium, or large enterprises alike.

Within the payment system, the main public actors are the Economic Community of West African States (ECOWAS), the Central Bank of West African States (BCEAO), the West African Development Bank (WADB), and the African Development Bank Group. As of the end of 2022, BCEAO had approved forty-two mobile money initiatives,[30] supporting 155 credit institutions, including 132 banks operating within the West African Economic and Monetary Union (WAEMU).[31] Public-private partnerships in legal identity systems can bring more value and expand the interoperable instant payment system recently launched in its pilot phase by BCEAO.[32] This system connects eight hundred financial institutions across eight WAEMU countries, serving a target market of 120 million people.[33] Strengthening trust in the data generated by payment systems, legal identity frameworks, and other digital infrastructure requires collaboration between public and private entities. PPPs can help facilitate compliance, ensure seamless information exchange, and enhance data security.

Among the many actors in the data sphere in West Africa are the Africa Data Centres (ADC), the African Data Centres Association, and others. Through PPPs, these organizations—similar to the Africa Fintech Network (AFN)[34]—could enhance the availability of accurate and transparent data while upholding safety, privacy protection, and respect for human rights. As key enablers of economic growth and for its digital sovereignty, Africa currently has 119 data centers,[35] with only 4 in West Africa.[36] However, an estimated 700 additional data centers are needed,[37] alongside 618 active tech hubs in Africa.[38]

Depending on the kind of digital public infrastructure and foundational infrastructure, the public-private partnership scope will vary according to the competence and specificities of each actor by identifying common frameworks for collaboration. While the design and development of legal entities remain under the exclusive jurisdiction of the state—albeit with potential technical and financial support from non-state actors—other sectors such as payment, data exchange systems, and electricity and internet infrastructure offer more possibilities for public-private partnerships. In the development of the legal identity framework, actors' collaboration should focus on interoperability, harmonized policies, security, privacy, human rights, and public trust. For public-private partnerships to succeed, they need to be grounded in accountability, transparency, fairness, sustainability, and responsibility principles.

7.

Mixed Approach of Digital Public Infrastructure for More Innovative Possibilities

A shared-to-many-ends digital technology approach offers the most scalable model among the various Digital Public Infrastructure frameworks.[39] Rather than prioritizing either the public good or the common good as the primary governance model for DPI, a blended approach—merging both concepts—is essential.[40] While self-interest within a competitive market is often viewed as the primary driver of efficiency and economic growth, the core promise of the SDGs is to leave no one behind. Achieving this requires innovative ways that can bring people to the best of themselves through collaboration and knowledge sharing. Although competition and rivalry are strong drivers of progress and development, they remain passive ways and less dynamic than a strong will to collaborate and achieve better outcomes for shared prosperity. In the digital era, the traditional notion of "rivalrous"—where one person's gain reduces another's share—is being redefined. Despite the finite nature of certain resources, the abundance of digital capabilities creates opportunities to make goods and services as universally available as air.

In this possible augmented possibilities and abundant era, identifying better capacities building and grading scales will enable us to assess and evaluate people's capacities and capabilities in accessing different opportunities while also considering the unconditional benefit. Comparing DPI to roads is more consistent with public good although it involves the notion of common good. By embracing both perspectives, DPI can effectively bring together public institutions, businesses, and civil society organizations to regulate, co-design, co-invest, and implement strategies. This joint approach also helps address governance challenges, such as the tragedy of the commons, ensuring that digital infrastructure remains inclusive, sustainable, and beneficial to all.

8.

Policy Implications

Legal identity is a well-established right recognized by all United Nations member states, including those in West Africa. Beyond their various constitutions and identity-related legislation on nationality and citizenship, the SDGs—particularly Target 16.9—reinforce the urgency of providing legal identity to all, including birth registration, by 2030. This is vital for ensuring broader access to opportunities.

Despite the simplified procedures for birth registration, a significant number of children and adults still lack birth certificates. However, the greater challenge often lies in obtaining a nationality certificate due to the complex and highly centralized process. Recognizing this barrier, Togo introduced a digital application system on December 12, 2024, allowing citizens to apply for a nationality certificate using their phones, tablets, or computers. This reform eliminates the need for long journeys and streamlines the process by issuing certificates in electric form.[41]

However, both electronic and physical versions of the nationality certificate remain important. While the electronic version enhances accessibility, the physical version serves as a backup, supporting offline and online use. A practical solution would be to distribute physical copies through local documentation services.

To further strengthen security and efficiency, transitioning to biometric birth certificates will be essential. Newborns registered with traditional birth certificates will have the option to upgrade biometric versions once their biometric data can be captured. This transition will help secure personal identification and align with broader digital identity efforts.

Various initiatives—such as the foundational identification program, the Civil Registration and Vital Statistics (CRVS) systems, the Economic Community of West African States (ECOWAS) Biometric Identity Cards, and the digital identity programs—must be developed and implemented based on convergent and consistent policies at both national and regional levels. Additionally, national citizenship laws should be updated to align with the digital era and achieve a unified legal identity together for either online or offline purposes.

To advance the digital transformation of their administration and services, the various West African states—as at the continental level—have each established ministries dedicated to the digital economy. While specialization enables targeted problem-solving, it should not result in siloed approaches or fragmented solutions. Addressing complex problems requires collaboration across different actors, including public-private partnerships. As an impact, this will strengthen interoperability between member states and help remove physical borders for the free movement of persons and goods. Legal identity has more potential to build trust and safety than digital identity alone to avoid silos compliance. Digital identity could be a certain solution for those who do not have a legal identity, but they will be facing challenges linked to trust for broader opportunities.

Ensuring fair and equal access to Digital Public Infrastructure requires significant investment in digital skills training, enabling citizens to use digital tools and participate in the digital economy effectively. Convergent and consistent policies and laws are also necessary to harmonize the sufficient and abundant availability of quality and affordable electricity for citizens. The same goes for the internet, which is essential with electricity for better access and use of DPI. This approach will avoid repeated interruptions in access and availability of data, as well as delays in the execution of economic activities. The maintenance of infrastructure in good condition will be ensured when there are no sudden interruptions in the electricity supply, which also affects data processing and communications.

Conclusion

West African member states are committed to developing, implementing, and using the latest advancements in digital technologies to increase citizens' access to public and private services. However, the successful development and implementation of advanced digital technologies—such as Digital Public Infrastructures—require a comprehensive and collective understanding of strategies, notions, definitions, and policies. Establishing a robust framework for trust, security, interoperability, and public-private partnerships will help ensure stakeholder compliance with the agreed-upon solutions.

One of the most critical components of DPI that demands a convergent and coherent approach is identity. Identity should not be reduced to a purely functional digital solution that allows citizens without legal identity to have access to public and private services. Linking the legal identity to access opportunities provided by DPI could violate the rights of individuals without legal documentation. On the other hand, defining identity solely in digital terms for those without legal identity could undermine the trust and security of the identification system. This approach could also create inconsistencies, as the same entity may use a different identity for the same services, leading to compliance challenges.
Some emerging countries, like India, have successfully implemented DPI using a similar approach. However, as digital technologies evolve, the risks associated with cybersecurity and data protection continue to grow. It is, therefore, imperative to design and implement holistic solutions that go beyond technical and functional aspects to uphold human dignity and citizenship belonging rights. While some analyses support digital identity as an alternative for those lacking legal identification, other perspectives present digital identity as a transition toward a better standardized and consistent legal identity system.

A human-centered governance approach can enable the development of DPI that prioritizes human dignity and rights over purely technical and functional solutions or the economic needs of markets. Citizens should be recognized as members of a nation, entitled to legal proof of citizenship as evidence of their belonging.

Beyond identity, other key components of DPI—such as access to affordable, high-power electricity and high-speed internet—are essential for ensuring full and consistent participation of all citizens in social and economic life in the digital era. However, governance should not focus solely on rigid decisions and regulations, which are often hindered by conflicts of interest, inertia, and delays. Instead, governance should be more about finding better strategies in designing innovative solutions based on collaboration and partnership for joint knowledge that help bring quick solutions to populations facing energy poverty, costly internet, and lack of digital skills and devices.

While setting conventions and agreements and integrating them into national laws has been relatively straightforward, effective implementation that requires technical expertise, collaboration, and cohesion remains a challenge due to fragmentation and poor mission-driven actor interactions. Overcoming these barriers requires a mixed approach to Digital Public Infrastructure—one that blends the principles of public and common goods. This integrated strategy will pave the way for innovative governance in the digital era.

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Ferdinand Mayéda Digemnt'n Bassona is a dynamic leader whose expansive experience in research, analysis, advocacy, policy, planning, program and project management, and implementation equips him to effectively address complex legal, social, economic, ecological, and environmental sustainability challenges. As the founder of GovRise, a nonprofit based in Togo devoted to strengthening governance and advancing the SDGs, he brings both strategic vision and hands-on execution to his work.

Grounded in expertise in law and governance, Ferdinand leads with a collaborative, motivational style that inspires teams toward common goals. He champions innovative and creative approaches, leveraging deep knowledge to deliver objective, impactful, and successful outcomes across diverse initiatives.

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About

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