# Navigating Africa's Digital Partnerships in a Context of Global Rivalry

## Folashadé Soulé

## Key Points

→ Growing geopolitical rivalry between the world's biggest digital players has led African actors from the private and public sectors to adopt a mix of pragmatic approaches to negotiate digital partnerships to achieve their goals.

→ Africa's choice of China as its preferred partner for digital infrastructure has more to do with China offering a suitable mix of financial and technological value and the lack of viable Western alternatives, than geopolitics.

→ African governments must leverage collective bargaining and subregional economic blocs in their engagements with technology providers to maximize their negotiations for infrastructure and services.

→ Trust, transparency, clarity in regulations and collaboration between governments, private sector companies and civil society, are key to successful partnerships that promote economic growth and digital development.

## Introduction

Rising geopolitical tensions between the world's biggest digital powers, including China and the United States, have added a new layer of complexity to Africa's relations with external partners as the continent grapples with the urgent need for digital development. The Negotiating Africa's Digital Partnerships policy research project,[1] hosted at the Blavatnik School of Government, University of Oxford, and supported by the Centre for International Governance Innovation (CIGI), looks specifically at how African governmental actors negotiate and manage partnerships in the digital sector with new and rising partners (specifically around digital connectivity, infrastructure, digital governance positions in multilateral organizations, and establishing digital norms domestically and regionally) in a context of great power rivalries.

Through a series of interviews with African ministers, senior policy makers, private sector executives and civil society actors, the project gathered valuable insights into these digital partnerships from the vantage point of those in charge of building and maintaining these strategic partnerships in both francophone and anglophone Africa. Findings suggest that the geopolitical competition has not gone unnoticed by African actors, impacting how they navigate these global rivalries at the

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1 See www.geg.ox.ac.uk/negotiating-africas-digital-partnerships-interview-series.

## About the Author

Folashadé Soulé is a CIGI senior fellow and senior research associate in the Global Economic Governance Programme at the Blavatnik School of Government, University of Oxford. She is currently a visiting scholar at the University of Ghana. Her research areas focus on Africa-China relations, the study of agency in Africa's international relations and the politics of South-South cooperation. She is a principal investigator in Negotiating Africa's Digital Partnerships, a policy research project that examines Africa's relations with rising partners in the digital sector. As part of this project, she is leading a series of interviews with African senior policy makers, ministers, and private and civic actors that aims to shed light on how African actors build, negotiate and manage strategic partnerships in the digital sector in a context of geopolitical rivalry.

She was a post-doctoral fellow at the London School of Economics and a former Oxford-Princeton Global Leaders Fellow. Her research has been published in several peer-reviewed journals, including *African Affairs, International Affairs, Global Governance* and *Foro Internacional.*

local level. Yet several actors have found innovative ways to navigate these rivalries by setting up specific negotiation strategies, diversifying partnerships and establishing joint ventures. African governments are bent on finding ways to deliver on ambitious national digital transformation targets in the face of challenging local contexts and strained budgets. However, at the local level, actors from the private sector and national governments are adopting a mix of innovative approaches to engage and negotiate various digital partnerships to achieve their goals, despite global geopolitical tensions.

Based on these findings, this policy brief will highlight how African governments are choosing their digital partners. It will also shed light on the role and perceptions of African private and civic actors at the local level and the ongoing efforts for better multilateral coordination among African governments. It will end with a series of specific recommendations on how African governments could best negotiate digital partnerships in a context of global rivalry.

## Choosing Digital Partners Strategically and the Role of China

In their search to find partners to execute various digital projects, African governments make decisions based on national digital strategies enshrined in various policy documents. The choice of one partner over another is guided by the alignment of the potential partner's capacity to deliver with the priorities detailed in these policy documents. This suggests that a potential partner's understanding of these policy documents is critical for African governments. Partnerships are key. In the case of Mauritius, progress on building out the country's cybersecurity framework and digital economy, was mostly achieved via partnerships with international organizations, donor support from the European Union and collaborations with African regional organizations (Global Economic Governance Programme 2023a). Those international partnerships were also critical to help the team mature and grow.

In the case of Benin, partnerships are grouped into two categories: those that complement the

country's strategic objectives through partnerships to develop expertise, as with Estonia and Rwanda with which Benin is developing a long-term approach; and those that provide business-oriented partnerships and digital infrastructure set up through specific projects and the provision of funding and favourable debt repayment terms, such as those provided by China. Besides Benin, other countries such as Kenya and Senegal also consider China a privileged partner in this regard.

In Senegal, cooperation between it and China in the digital field has grown significantly in recent years. The two countries have signed several cooperation agreements to promote the development of information and communications technologies (ICTs) in Senegal, most recently strengthened further through the Dakar Action Plan 2022–2024[2] adopted at the 8th Ministerial Conference of the Forum on China-Africa Cooperation held in Dakar, Senegal, in 2021. These agreements include partnerships to execute projects planned under the country's Smart Senegal digital transformation program, such as the deployment of fibre optics, the Senegal Horn of Africa Regional Express submarine cable as well as a new data centre on the outskirts of Dakar. While China was a major partner during the planning and construction phase of the project, operations are fully run by Senegalese engineers.

Chinese tech firms are becoming ever more important actors through the Digital Silk Road (DSR), the digital component of the Belt and Road Initiative where China plays a significant role in the region's digital transformation strategy. For instance, North African governments see the DSR as an opportunity to help bridge the digital divide and bolster their own national efforts to build digital economies and create high-quality jobs for the millions of unemployed university graduates across the region (Global Economic Governance Programme 2023b). In recent years, the region has become home to notable DSR projects such as smart cities, satellite navigation centres, data centres and network infrastructure.

In interviews, African policy makers agreed that China has played an undeniable role in the development of the continent's digital economy and is one of its key strategic partners. Chinese tech firms offered African markets a more affordable alternative to their Western counterparts. Attractive financing arrangements offered by telecommunications equipment manufacturers such as Huawei, backed by Chinese grants and concessional loans, made it possible for large-scale deployment of critical backbone network infrastructure to enable high-speed mobile broadband across the continent. Mobile phone manufacturers such as Transsion Holdings (owner of the popular Tecno and Infinix brands) have enabled people in lower-income brackets to afford smartphones comparable to the best options from traditional competitors such as Apple and Samsung.[3] This advancement in accessibility contributed to the democratization of internet access and the accelerated growth of platform services such as mobile money and applications.

Experts interviewed for the research were not always unanimous on the role of China. In the case of Guinea, a major framework agreement between China and Guinea did not produce the expected results for this sector. With a minimum amount of US$20 billion focused on the construction of infrastructure in exchange for the extraction of natural resources, the framework agreement has had a considerable impact on the mining and energy sectors but less so on telecommunications infrastructure (Global Economic Governance Programme 2023c). In reality, many telecommunications-related projects have not yet been implemented.

Regardless, Chinese firms continue to be a frequent choice for African governments and companies as they are seen as more flexible partners for negotiations. China tends to be eager to do business and has gathered decades of experience in Africa by having well-established local subsidiaries on the continent, facilitating more direct engagements with African partners. Furthermore, Chinese firms such as Huawei have excelled at adapting to and operating in diverse cultural, political, economic and institutional settings in different regions around the world and across Africa. The choice of China may signal to the West, especially the United States, that African leaders still wield the agency to pursue their partnerships according to their interests. What remains important for African governments and leaders is maintaining a pragmatic stance that favours working with whichever partner has the best offer in terms of

2    See www.focac.org/eng/zywx_1/zywj/202201/t20220124_10632444.htm.

3    See https://gs.statcounter.com/vendor-market-share/mobile/africa.

technology and cost to achieve their goals, instead of choosing to align with one geopolitical rival over another. In this sense, the more determinant factor for the increasing cooperation between Africa and China in the digital sphere is the lack of viable alternatives from the West that respond to African needs as well as Chinese players do.

## The Repercussions of Geopolitical Rivalry at the Local Level

The geopolitical rivalry between China, Europe and the United States has several effects on the design and negotiation of contracts between development partners, the private sector and government agencies. Political and economic rivalries at the global level have concrete repercussions at the local level. In Guinea, an internet provider was informed by a Western donor that it would not accept the provider's service if it uses any equipment from Chinese companies (ibid.). At the institutional level, the major investors from Australia, the United Kingdom and the United States have, for some years, preferred to avoid using Chinese equipment for their projects.

Sensitive projects that have a security dimension (for example, middleboxes [firewalls, network address translators] or artificial intelligence (AI)-assisted video surveillance projects) are especially under media scrutiny due to rivalries at the international level. This raises the increasingly important question of Africa's digital sovereignty, which can constitute significant points of contention around the choice of equipment used, the conditions of financing, and how and where personal data is processed and stored.

Still, these rivalries could have a positive benefit for African nations as actors from various countries try to outcompete each other to propose favourable offers to governments and operators seeking partners to execute large-scale digital projects. An example of this can be observed from the recent initial deployments of fifth-generation radio access network technologies in Africa, which have been a tussle between the major technological players in China, such as Huawei or ZTE, and in Europe, such as Ericsson or Nokia (Rühlig, Seaman and

Voelsen 2019). African governments and mobile network operators reportedly[4] prefer the former[5] for a better cost-benefit ratio even as the geopolitical rivalry has intensified protectionist thinking about players on all sides and diplomatic pressure from Western countries. Moreover, Chinese players have overtaken European and American counterparts (Munga and Denwood 2022) when it comes to market share in telecommunications infrastructure and mobile phone manufacturing.

For policy makers from Kenya and Senegal, for whom digital partnership diversification is key, geopolitical rivalries in the digital sector could foster positive competition for Africa but should be managed peacefully. The business attitude observed in smaller countries such as Benin is more pragmatic and was summarized by an interviewee as "the enemy of my friend is not necessarily my enemy, at least in the context of concluding contracts" (Global Economic Governance Programme 2023d).

## Data Sovereignty: An Elusive Goal?

China has been a vocal proponent of data localization and data sovereignty. Many nations have introduced data governance frameworks that resemble China's. Notably, to achieve greater data sovereignty, Senegal was the first African country to replicate the Chinese data governance model that requires all servers to be located within a country's borders. The West African state moved all government data and digital platforms from foreign servers to a Huawei-built data centre in Senegal. The data centre was financed through a €70 million Chinese loan. According to the director of Senegal Numérique, the data centre allows Senegal to better control its destiny and to definitively resolve the issue of its digital sovereignty (Global Economic Governance Programme 2023e).

But this arrangement creates several issues, according to Tin Hinane El Kadi (Global Economic Governance Programme 2023b) from the London School of Economics. The danger of relying on

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4    See Ehl (2022).

5    See Nyabiage (2022).

Chinese surveillance technologies for African countries' own cyber sovereignty has been somewhat concealed by China's advocacy for data sovereignty in various global digital technology standard-setting bodies. Investigations have shown that confidential data from the Chinese-built African Union headquarters was diverted every night from Addis Ababa to Shanghai. China is by no means the only power involved in using the internet for spying, as US intelligence services have accessed the data of millions of citizens across the world with the help of US tech giants.

African governments recognize the importance of digital sovereignty and are adopting strategies to increase their control over the flow, processing and storage of citizens' data locally (so-called data onshoring). These initiatives include major investments to establish new national data centres (Tier-3 data centres in Benin and Togo, the Diamniadio data centre in Senegal and so forth) and internet exchange points, often in cooperation with international finance institutions such as the World Bank or through Chinese loans. While these pieces of infrastructure can improve the quality of service delivery to end users, it remains to be seen if they contribute enough to digital sovereignty when many digital services, including those run by governments, continue to be hosted on servers outside the continent. A Nigerian media outlet reported in 2021 that 70 percent of Nigerian government agencies hosted their data on cloud-based servers abroad.[6] As long as there is a lack of endogenous technological capabilities, data sovereignty will remain an elusive goal (Global Economic Governance Programme 2023b).

# Joint Ventures as a Way to "De-risk," Deliver Quality and Attract Top Talent

Many African countries face a lack of top talent in various critical areas of the digital sector, including cybersecurity, data protection and

software engineering. An effective way to bring in operational expertise in digital fields where local expertise is lacking is through joint ventures. One such field is cybersecurity, where skills are in short supply worldwide and top talent is in high demand. In Togo, the government leveraged public-private partnerships in the form of joint ventures as part of its strategy to de-risk large-scale digital projects and maximize the quality of service delivery (Global Economic Governance Programme 2023f). This approach creates the flexibility the country needs to be able to attract top-quality human resources to carry out specialized tasks within the structures established. Integrating the private partner also makes it possible to offer the more attractive remuneration packages necessary to attract top talent and build local capacity.

The transfer of skills through staff training and involvement of locally trained managers is an important aspect of negotiations of national projects, as demonstrated by the Togolese government's joint venture approach. In deploying its biometric identification contract, for example, the Togolese government insisted on a road map for knowledge transfer and operational training as part of its agreement with the strategic partner. The government demanded that local staff be trained by the partner to the highest international standards, consolidating local ownership of the project. Building local capacity in this way is fundamental to safeguarding digital sovereignty.

In addition, credibility is highlighted as a critical part of establishing joint ventures to deliver services in sensitive sectors such as cybersecurity. The Togolese government has successfully delivered major digital infrastructure such as a security operations centre and computer emergency response team through a joint venture with Polish software firm Asseco. The joint venture approach has also enabled the small country to reach significant achievements, such as the establishment of the Woezon joint venture with wholesale connectivity provider CSquared (2022) to build and operate a Togolese landing station for Google's Equiano submarine fibre optic cable, which is expected to add US$351 million to the country's economic output by 2025 (Africa Practice and Genesis Analytics 2022).

However, to foster successful private sector partnerships with governments in digital development, a number of challenges need to be addressed. According to African private sector

6    See Adepetun (2021).

actors who were interviewed, African governments are often naturally protective of national assets and skeptical of the intentions of certain private sector players, fearing that they may exploit the country for monetary gain and disproportionately expatriate profits. Private sector companies must endeavour to allay the fears of governments and know exactly what the latter wants to achieve through a partnership (Global Economic Governance Programme 2023g). Governments, in turn, must create an enabling environment for profitable private business, which includes improving transparency in their selection of private sector partners and establishing clear rules of engagement regarding licensing, intellectual property (IP), interoperability and regulatory processes. Fiscal discipline, respect for the rule of law and protection from arbitrary nationalization of private entities are also key to private sector interest in joint ventures with the government. While private sector companies encourage governments to seek guidance from them on technical matters in which they have expertise, governments ultimately wield the power to protect their interests regarding dealings with private sector partners and shaping the outcomes of these engagements (ibid.).

# The Geopolitics of Standards: When International Standards Clash with Local Innovation

African private sector players working with partners in both Asia and the West face unique challenges caused by the dominance of Western-centric institutional practices and international standards that clash with local innovation. These challenges become particularly complex when African companies are wedged between partners on both sides: Europe and the United States on the one hand, and China and India on the other.

While Asian partners adhere to globally recognized standards such as those set by the International Organization for Standardization (ISO) or Global Standards 1 (GS1), they have also developed

internal standards adapted to their unique contexts. Moreover, the interpretation of ISO standards demonstrated variability depending on the specific implementation environment. Consequently, African private companies have to take on the challenge of arbitraging between companies in the West (Europe, the United States) and manufacturers in the East (China, India) to reconcile conformance expectations between them (Global Economic Governance Programme 2023h).

Yet significant advancements have been made in certain fields of digital technology. An example is in traceability since 2010, which the president of mPedigree, a patent-holding enterprise technology inventor, cited as evident in the systems of local companies that facilitate the tracking of pharmaceutical products from factories to patients in Nigeria. Some of these achievements surpass the current capabilities of the United Kingdom or the United States, owing to a more efficient coordination process and a propensity for experimentation and learning (ibid.). Nonetheless, the expanding influence of Western-centric standards such as GS1 presents challenges as locally developed systems, operating independently, struggle to align with these models. This dilemma is particularly apparent in Ethiopia, Ghana, Kenya and Nigeria, where the imposition of GS1-based systems clashes with existing local capacities. This situation sheds light on the hegemonic tendencies with Western leanings often observed in globally acknowledged standards such as ISO or GS1, underscoring the need for periodic updates to maintain relevance. The geopolitics of standards significantly influence these dynamics, despite the progress made in African and Indian contexts.

## Associating Civil Society Actors

Civil society organization (CSO) interviewees on the continent focused on how they can play a positive role as they enable governments to access expert networks to carry out studies and come up with findings that ultimately improve the quality of deals struck with international counterparts and with the private sector. CSOs can also enrich the democratic structures of African governments by playing a role as the voice of the people and holding authorities accountable for constitutional and legal rights (Global Economic Governance Programme 2023i). One such CSO is the Africa Digital Rights Hub, which addresses the lack of government offices equipped to handle digital rights challenges.

For example, the CSO provided support to the Ghana Data Protection Commission by focusing on creating an enabling legal environment within the country, which involved passing several laws. After the laws were passed, resources were allocated to support the implementation of the legal framework.

## Working Collectively at the Multilateral Level Despite the Challenges

For African countries to have a significant impact on norm formation at the multilateral level, they need to double down on finding a unified stance and leveraging critical mass.

Through the African Union and multilateral organizations at the regional level, African countries are increasingly working collectively on digital sector issues. Multilateralism has played a key role in Africa's digital development, especially in cross-border infrastructure projects and supranational agreements to harmonize regulations in certain sectors of the digital economy, such as cybersecurity and data protection, but also payments and trade across the continent. The adoption of the African Union Convention on Cyber Security and Personal Data Protection (Malabo Convention)[7] in 2014 is one such example that has guided some African countries to establish critical cybersecurity infrastructure and regulatory bodies for personal data protection. The African Union Digital Transformation Strategy for Africa (2020–2030),[8] which builds on many existing frameworks, has been widely adopted by member states. The document highlights the need for common regulatory frameworks, developing multi-stakeholder African alliances and the promotion of public-private partnerships. Aside from this, there are also subregional alliances, such as the Mano River Union (consisting of Côte d'Ivoire, Guinea, Liberia and Sierra Leone), which aim to achieve greater unity and solidarity. In 2019, the union, in partnership with the African Development Bank, launched a cross-border project, Digitalisation of Government Payments, that will enhance public resource management transparency, security and optimization.

Yet despite the ongoing efforts of the African Union, there is still a lack of a common voice on digital transformation issues at the international level. Larger nations tend to go it alone when they negotiate with major digital partners on issues that have an impact beyond their borders, such as regulations to mitigate the impact of big tech (Global Economic Governance Programme 2023f). African countries are in fervent competition to attract foreign direct investment, including from big tech. This may explain why larger countries mainly focus on issues affecting them rather than taking a more representative stance that includes the inputs of smaller countries.

The Smart Africa alliance[9] is of note as a nexus of African multilateral action on digital issues. Smart Africa brings together 36 African member state governments and a myriad of private sector players, academia, civil society and international development organizations. It coordinates continental efforts to make the digital economy a significant contributor to socio-economic development. Smart Africa works closely with the African Union even though the former appears to be relatively more reactive. It provides technical support, feedback and pilot project expertise and helps African countries pool resources. In recent times, Smart Africa has developed several blueprints with different member states covering smart cities, smart broadband, the digital economy, e-payments, AI, digital ID and so forth, to provide countries with a template on how to develop similar policies and strategies in their own context.

For example, Sierra Leone's National Digital Development Policy, created in 2021, was inspired by Kenya's Digital Economy Blueprint developed by Smart Africa and the Kenyan government. Major private sector companies contribute to the financing of Smart Africa at various levels. The highest contributors consist of the most important technological firms, including Google (the United States), Huawei (China), Orange (France) and Econet (Zimbabwe). Smart Africa, in turn, offers its members privileged access to policy makers and heads of state during regular ministerial and board meetings, thereby creating an avenue for one-to-one negotiations between them.

There are also a handful of multilateral projects to build key digital infrastructure at the regional level.

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7    See African Union Convention on Cyber Security and Personal Data Protection, 27 June 2014 (entered into force 8 June 2023), online: *African Union* <https://au.int/en/treaties/african-union-convention-cyber-security-and-personal-data-protection>.

8    See https://au.int/en/documents/20200518/digital-transformation-strategy-africa-2020-2030.

9    See https://smartafrica.org/fr/page-daccueil/.

One such example is the Economic Community of West African States (ECOWAS)-led Amilcar Cabral project[10] to build a submarine fibre optic cable that will increase international broadband capacity and guarantee network redundancy of member states Cabo Verde, The Gambia, Guinea, Guinea-Bissau, Liberia and Sierra Leone. As part of the memorandum of understanding signed by member countries, they affirmed their commitment to sharing policies and strategies in efforts to coordinate the implementation of the project. This regional project is part of the ECOWAS ICT strategy, which is targeted at garnering political will and building appropriate frameworks to improve access to infrastructure and lower the cost of broadband in the bloc.

While alliances and regional organizations such as Smart Africa, the African Continental Free Trade Area (AfCFTA), ECOWAS and the West African Economic and Monetary Union have called for deeper digital integration and the creation of a single digital market in Africa, the inconsistency of policies and laws in African countries remains a major barrier to achieving this goal. This situation is exacerbated by the varying levels of digital development across the continent. African governments will have to leverage multilateral instruments such as the AfCFTA to further harmonize laws and pursue digital projects with a common interest in interoperability.

A senior policy analyst for an international financial institution observed that in some African countries, various ministerial departments and agencies tend to engage with international development partners and the private sector individually, with sector-specific objectives rather than under a common national agenda. This tendency to be diffuse and operate in silos is echoed at the continental level by the lack of a unified African stance on a range of topics.

# Negotiating Africa's Digital Partnerships: Recommendations

In order for African governments to better navigate these digital partnerships amid geopolitical rivalries, the following recommendations can be put forward while negotiating these partnerships:

→ At the country level, African governments need to develop strong institutional frameworks and coordination mechanisms to ensure their ministries and agencies engage development partners and the private sector with one voice and a common national agenda; otherwise, they lose the opportunity to negotiate for lower prices or volume discounts for services. For example, governments could consider appointing a specific ministry or department that coordinates the alignment of initiatives and the choice of partners with pre-existing engagements and national objectives.

→ Collective bargaining would help maximize gains from negotiations with partners for digital development and technology. African governments should leverage their collective markets and various regional economic blocs to demand more transparency individually and collectively from Chinese partners as a requirement for doing business with them to increase local accountability and thus enhance agency from the African side of partnership negotiations.

→ Technology transfer involves a deliberate act of operational training and capacity building. Policy makers must consider insisting on defining road maps for knowledge transfer with strategic partners. These initiatives should include hiring local experts to fill roles up to the managerial level of projects and to establish internationally recognized training/certification programs for local talent to enable them to eventually take over core roles within projects.

→ Lobbying for locally established standards to be recognized internationally and establishing technical interoperability with competing standards (for example, GS1 or ISO) is essential. The AfCFTA could be an opportunity to explore

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10   See https://pp2.au-pida.org/approved-project/entry/o2vo6/.

ways to create new norms based on African experiences and standards that have been created locally and that could be rolled out at the continental level. These norms could then be extended to being used with partners. Identifying the kinds of norms, solutions and technologies that are effective within the African value chain will involve comprehensive collaboration with local private sector actors with significant business between partners from both sides of the geopolitical divide.

→ Civil societies on the continent can be a crucial source of knowledge and expertise for governments in their decision making on various subjects, for example, on the integration of clauses in contracts to emphasize the protection of digital rights, defining needs, project feasibility research and the assessment of risks that could emerge from collaborating with international partners on major projects. These measures will allow governments to take advantage of civil society expertise on the subject and strengthen the democratic quality of partnerships on large-scale digital projects negotiated by governments.

→ Private sector players value transparency with governments, especially those private ventures that are backed by large-scale funders such as the World Bank. Trust, transparency, clarity in regulations, and a collaborative approach between governments and private sector companies are key to successful partnerships that promote economic growth and digital development.

→ However, government negotiators should be careful to avoid overdependency on foreign design thinking and proprietary solution norms. Governments must strategically navigate issues surrounding IP and interoperability regarding solutions provided by the private sector, especially when it relates to critical civil infrastructure, to ensure they can maintain their agency over the long term.

→ African success stories need to be shared more generally to show development partners what practices, strategies and norms in the digital sector do not work on the continent and emphasize African innovations to address them.

## Author's Note

# Acronyms and Abbreviations

| | |
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| AfCFTA | African Continental Free Trade Area |
| AI | artificial intelligence |
| CIGI | Centre for International Governance Innovation |
| CSO | civil society organization |
| DSR | Digital Silk Road |
| ECOWAS | Economic Community of West African States |
| GS1 | Global Standards 1 |
| ICTs | information and communications technologies |
| IP | intellectual property |
| ISO | International Organization for Standardization |

# Works Cited

Adepetun, Adeyemi. 2021. "70% of govt agencies host data abroad despite $220m local infrastructure." *The Guardian* (Nigeria), June 4. https://guardian.ng/technology/70-of-govt-agencies-host-data-abroad-despite-220m-local-infrastructure/.

Africa Practice and Genesis Analytics. 2022. *Equiano Economic Impact Assessment.* March. https://africapractice.com/insights/equiano-togo-eia/.

CSquared. 2022. "Togo Welcomes Google's Historic 'Equiano' Subsea Cable in a Partnership with CSquared That Will Transform the Country's Broadband Landscape." Press release, March 18. www.csquared.com/index.php/togo-welcomes-googles-historic-equiano-subsea-cable-in-a-partnership-with-csquared-that-will-transform-the-countrys-broadband-landscape/.

Ehl, David. 2022. "Africa embraces Huawei tech despite security concerns." Deutsche Welle, February 8. www.dw.com/en/africa-embraces-huawei-technology-despite-security-concerns/a-60665700.

Global Economic Governance Programme. 2023a. "Joanne Esmyot: 'Digital decolonisation in Africa is a two-way street.'" www.geg.ox.ac.uk/content/joanne-esmyot-digital-decolonisation-africa-two-way-street.

———. 2023b. "Tin Hinane El Kadi: 'Collective bargaining would help maximise gains from negotiations with leading tech firms.'" www.geg.ox.ac.uk/content/tin-hinane-el-kadi-collective-bargaining-would-help-maximise-gains-negotiations-leading.

———. 2023c. "Lionel Chobli: 'Geopolitical rivalries in the digital sector have repercussions at the local level in Guinea.'" www.geg.ox.ac.uk/content/lionel-chobli-geopolitical-rivalries-digital-sector-have-repercussions-local-level-guinea.

———. 2023d. "Marc-André Loko: 'Benin's digital strategy involves a diversified portfolio of best-in-class partners.'" www.geg.ox.ac.uk/content/marc-andre-loko-benins-digital-strategy-involves-diversified-portfolio-best-class-partners.

———. 2023e. "Cheikh Bakhoum, Sénégal Numérique: 'Geopolitical rivalries in the digital sector could foster positive competition for Africa.'" www.geg.ox.ac.uk/content/cheikh-bakhoum-senegal-numerique-geopolitical-rivalries-digital-sector-could-foster.

———. 2023f. "Cina Lawson: 'Executing a deal well in the digital sector requires thorough collaboration among many actors.'" www.geg.ox.ac.uk/content/cina-lawson-executing-deal-well-digital-sector-requires-thorough-collaboration-among-many.

———. 2023g. "Lanre Kolade, CSquared: The private sector needs to understand exactly what the government requires to find common ground during negotiations." www.geg.ox.ac.uk/content/lanre-kolade-csquared-private-sector-needs-understand-exactly-what-government-requires-find.

———. 2023h. "Bright Simons, mPedigree: 'The geopolitics of standards play a significant role in how innovation-focused organisations can have agency.'" www.geg.ox.ac.uk/content/bright-simons-mpedigree-geopolitics-standards-play-significant-role-how-innovation.

———. 2023i. "Teki Akuetteh, Africa Digital Rights Hub: 'Civil society organisations have the power to hold governments accountable on digital rights enforcement.'" www.geg.ox.ac.uk/content/teki-akuetteh-africa-digital-rights-hub-civil-society-organisations-have-power-hold.

Munga, Jane and Kyla Denwood. 2022. "How Will U.S.-China Tech Decoupling Affect Africa's Mobile Phone Market?" Carnegie Endowment for International Peace, October 3. https://carnegieendowment.org/2022/10/03/how-will-u.s.-china-tech-decoupling-affect-africa-s-mobile-phone-market-pub-88034.

Nyabiage, Jevans. 2022. "China's Huawei seeks to lead 5G boom in Africa, as US, Europe shut doors." *South China Morning Post,* November 7. www.scmp.com/news/china/diplomacy/article/3198622/chinas-huawei-seeks-lead-5g-boom-africa-us-europe-shut-doors?module=perpetual_scroll_0&pgtype=article&campaign=3198622.

Rühlig, Tim, John Seaman and Daniel Voelsen. 2019. "5G and the US-China Tech Rivalry — a Test for Europe's Future in the Digital Age." SWP Comment No. 29. June. Berlin, Germany: Stiftung Wissenschaft und Politik. https://doi.org/10.18449/2019C29.

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