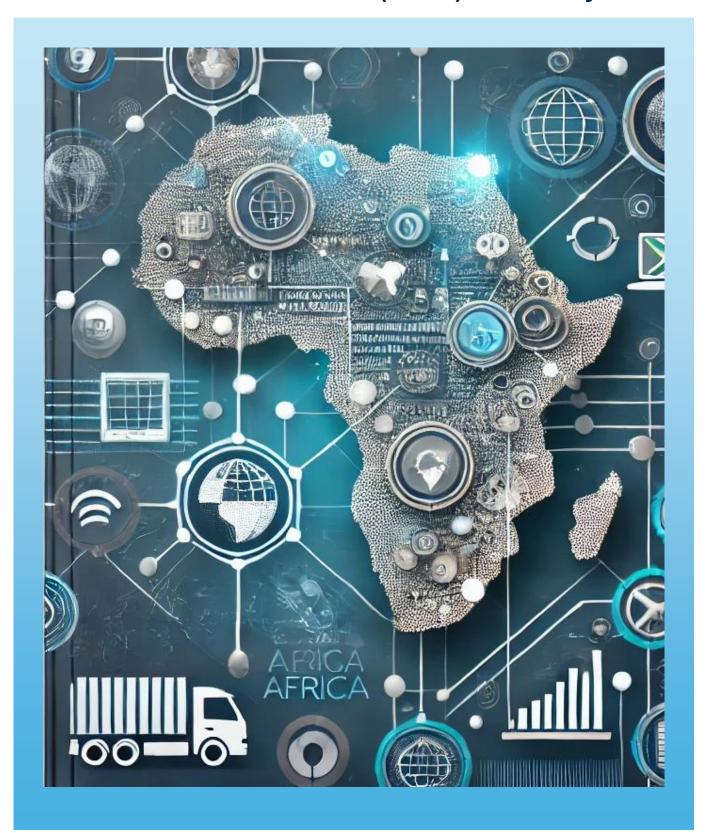
Assessing the Suitability of the African Union Data Policy Framework for Digital Trade in Africa:

A South African Customs Union (SACU) Case Study



Shamira Ahmed Policy Brief

Acknowledgements

The research was funded by the Collaboration on International ICT Policy for East and Southern Africa (CIPESA) as part of its multi-country research project, **Catalysing Good Data Governance Policy and Practice in Africa**, that seeks to advance progressive data governance policy and practice at continental and national level through research, stakeholder engagement and network building.

1. Introduction

The African Union (AU) Data Policy Framework (DPF), endorsed in February 2022, outlines a comprehensive set of principles and guidelines for data governance, data protection, data value creation, and data-driven innovation across the Continent (AU, 2022). The South African Customs Union (SACU), comprising South Africa, Botswana, Lesotho, Namibia, and Eswatini, is a well-established economic bloc with a long history of trade integration amongst its Member States (SACU, 2024). However, SACU's digital landscape is still evolving, with varying levels of endowments, capabilities, and enablers such as digital infrastructure, robust data governance policies, and regulatory frameworks amongst the SACU member states.

Given the importance of cross border data flows (CBDF) for digital trade and overall digital transformation, it is crucial to assess the suitability of the DPF for fostering digital trade within an established REC, such as SACU. SACU serves as a focal case study, given its significant role in regional trade, its well-established physical trade integration, its common negotiating mechanism, and the potential of its common tariff schedule (SACU, 2024; Abrahams et al., 2023).

This policy brief summarises the paper on "Assessing the Suitability of the African Union Data Policy Framework for Digital Trade in Africa: A South African Customs Union (SACU) Case Study" that evaluates the suitability of the DPF for facilitating the complex multidimensional aspects of digital trade amongst SACU member states. The aim of this paper is to provide a better understanding of the transnational changes shaping digital trade with a view to informing how these might be reflected in holistic policy design and implementation in the African context.

2. Background

2.1. Digital transformation, digital trade, and digital inequality

As with past technological revolutions, the benefits of leveraging frontier technologies to enhance trade can be immense, but they will not be realized without deliberate and strategic interventions (Ahmed, 2023a; UNCTAD, 2021b). There is a significant data divide between high income and low-income countries reflected by their ability to access, collect, integrate, store, analyse, and utilise data to create commercial and public value (UNCTAD, 2021a).

The digital divide is particularly pronounced in the world's least developed countries (LDCs), landlocked developing countries (LLDCs), and small island developing states (SIDS) (Rattray,2024; UNDP,2024). As the continent with the highest number of LDCs and LLDCs, the digital divide across Africa remains an ongoing concern, most recent data from the International Telecommunication Union (ITU) for 2023 indicates that vulnerable countries, particularly LDCs, face significant challenges in Internet accessibility, usage, and penetration, on average, only 19 percent of the population using the Internet in LDCs, while LLDCs report an average Internet usage rate of approximately 27 percent average usage rates that are below the global average of 67 percent (ITU, 2023;UNCTAD,2021c).

Furthermore, the successful integration of digital trade within the African context relies on the effectiveness and harmonization of various prerequisites and enablers, such as cross-border data policy frameworks and essential network infrastructure, among others (Ahmed, 2023b).

2.2. The multilateral trade system and cross-border data flows

For decades, the multilateral trade system (MTS) has played a crucial role in facilitating cross-border data flows, which are essential for global economic integration and the data economy (Ciuriak & Ptaškina, 2018). The MTS, consisting of international trade agreements (ITAs) and frameworks that govern the exchange of digital goods, DDS, and data across borders, has been at the forefront of international data governance through the operationalisation of the first binding international rules related to digital trade (Burri et al., 2024). Despite their shortcomings (UNCTAD,2020), multilateral organisations such as the World Trade Organization (WTO) and the World Intellectual Property Organization (WIPO) have offered an established fora for improving data governance and for the protection of intellectual property rights (IPRs), which attempt to balance approaches to a wide range of issues such as access to data, fostering generation of data, and protecting legitimate interests in the trade context (Burri et al., 2024).

However, the wide range of stakeholders and states implicated by current rules and the various initiatives at play may make it challenging to achieve significant outcomes on a global level (Drake et al., 2016).

2.3. Why cross-border data flows matter for digital trade

Data is fundamentally different from traditional goods and services, data's non-scarcity, role in enabling digital services, facilitation of global value chains, and contribution to innovation underscore its importance in the modern global data-driven data economy (Aaronson, 2018). Digital trade and CBDF are closely intertwined, CBDF enables the transfer of data, information, and digital content across national borders, which is necessary for the functioning of digital trade platforms and services (OECD et al., 2019). Examples of CBDF include, but are not limited to:

- i. Transmitting customer data for online purchases
- ii. Sharing business information and data between subsidiaries
- iii. Storing and processing data in cloud computing services
- iv. Enabling digital services like online banking, streaming, and software as a service (SaaS)

As more data flows across borders, concerns about its use and misuse have emerged (Casalini & González, 2019), resulting in varying national regulations, which can create friction and inefficiencies.

2.4. Cross border data flows and Internet governance

Outside the auspices of trade policy discussions, governments, businesses, academia, and civil society have spent the past twenty years arguing over the jurisdiction that should apply when information travels across the globe, and what common rules should remain. Data governance, together with rules on access to information, are some of the key components of mitigating internet fragmentation (Drake et al., 2016). Net neutrality, digital market access, data localization, privacy, and competition are among the many regulatory issues emerging as digital transformation reshapes international trade (Ciuriak & Ptaškina, 2018). Coordinated and coherent international efforts to promote technical standards for data protection and cybersecurity are essential to ensure interoperability and the ongoing discussions about data and internet governance are crucial for shaping a global data economy that is fair, secure, and accessible to all (Casalini & González, 2019).

3. Critiquing the African Union Data Policy Framework: A digital trade perspective

Digital trade often encounters non-tariff barriers that can impede the movement of digital goods and services. These barriers can include customs procedures and approaches to data governance that are not adapted for digital transactions across borders, leading to delays and increased costs (Ciuriak & Ptaškina, 2018; Drake et al., 2016). Despite the commendable provisions of the DPF, unlike the Malabo Convention or African Continental Free Trade Agreement (AfCFTA), the DPF functions only as a guiding framework rather than a legally binding instrument subject to ratification.

Governing CBDF is a complex challenge that requires careful consideration to ensure that data can move freely across border while protecting privacy, security, and socioeconomic interests. Analysis of existing literature reveals that the CBDF and digital trade should be guided by principles that prioritize trust, interoperability, proportionality, transparency, economic considerations, international cooperation, and inclusivity, to name a few (González, 2021). The critiques of the DPF from a digital trade perspective are grouped into three main categories: Approach, Implementation, and Scope are as follows:

i. Approach

- a. Data sovereignty and cross-border flows
- b. Advocacy for regulatory sandboxes
- c. Overemphasis on legal frameworks and principles

ii. Implementation

- a. Emphasis on national data protection authorities
- b. Limitations of the African Union Commission

iii. Scope

- a. Data interoperability and data governance
- b. Gender inequality and digital trade
- c. Data governance and environmental sustainability

4. Case Study Analysis: South African Customs Union (SACU)

4.1. Significance of the South African Customs Union (SACU)

SACU already has a mechanism for collecting and distributing physical trade tariff revenues among members, which can serve as a foundation for broader data governance frameworks and digital dividends (Zieliński, 2017). The establishment of a customs union often goes hand in hand with increased political cooperation and integration among member states, which creates an environment conducive to developing shared policies and regulations related to data governance, privacy, and digital trade (Abrahams et al., 2023).

4.2. Key findings from the SACU assessment for Digital Trade

The SACU assessment consists of secondary data analysis that are highly related to digital trade, cross border data flows (CBDF), and e-commerce and for which there is wide country coverage amongst SACU MS. In addition, the assessment includes a high-level summary of the SACU policy and regulatory environment for digital trade, CBDF, and e-commerce and data economy enablers of SACU MS.

Figure 5 highlights the uneven digital adoption amongst SACU MS, across all three dimensions of the economy: people, government, and business. Each sub-index comprises technologies necessary for the respective agent to promote development in the digital era: increasing productivity and accelerating

broad-based growth for business, expanding opportunities and improving welfare for people, and increasing the efficiency and accountability of service delivery for government.

0.69 0.64 0.5 0.5 ■ Botswana 0.48 0.47 0.46 Lesotho Scale of 0-1 ■ Namibia 0.38 0.34 South Africa 0.32 0.31 0.32 0.3 ■ Eswatini 0.28 0.25 0.2 DAI People Sub-index **DAI Government Sub-index Digital Adoption Index DAI Business Sub-index**

Figure 1: Digital Adoption between SACU Member States 1

Source: World Bank

South Africa has scores closer to 1 which reflects the extent to which digital technologies are available and adopted by all the key agents in the South African economy (people, businesses (firms), and governments) (World Bank, 2016). Figure 1 also reveals that in SACU countries, while business adoption is increasingly high, people gaining access to digital technologies remains surprisingly lower, particularly in Eswatini (Swaziland). The disparity between business adoption an adoption by the public calls for policymakers to explore barriers to uptake, which may extend beyond the information and communication technologies (ICTs) sector, such as high price of mobile devices, Internet access costs, or quality and availability of existing networks (World Bank, 2016).

Disparities in digital infrastructure and Internet access among SACU member states (MS)—South Africa, Botswana, Namibia, Eswatini, and Lesotho—can hinder digital trade, regional integration, cross-border data flows (CBDF), and e-commerce. SACU Countries with weaker digital maturity may struggle to participate in regional digital markets, creating imbalances in competition and limiting seamless data exchanges. These gaps also restrict e-commerce growth and prevent less-connected nations from fully integrating into a regional data economy, ultimately weakening overall economic cohesion and opportunities for inclusive development within SACU.

A proactive sociotechnical approach is essential to address the complex interplay within the data economy, particularly if digital technologies are used for the public good. A proactive stance allows for timely interventions that can mitigate risks and enhance the effectiveness of public policies. In general, along with supply side indicators, other demand-side indicators—such as workforce skills, business sector competition, and government accountability are crucial elements to identify the right mix of digital and "analog" policies needed to accelerate digital transformation within SACU MS. Overall, all SACU MS need a coherent collaborative approach to supply-side policies that support availability, accessibility, and affordability, while simultaneously fostering demand side policies that focus on making the internet

-

¹ Based on 2016 data

universal, affordable, open , and safe particularly with new waves of frontier technologies such as artificial intelligence (AI).

5. Recommendations

Developing a harmonized approach to data governance across Africa through the Digital Protocols of the Africa Continental Free Trade Area (AfCFTA) could be a more appropriate approach to facilitate CBDF and support the growth of digital trade on the continent as opposed to the DPF. Based on the key findings regarding the importance of CBDF for e-commerce and digital trade in Africa, the following recommendations are tailored for specific categories of stakeholders:

Governments/Public sector

Develop comprehensive public sector innovation policies that support robust data governance: To foster public sector innovation (PSI), it is essential to create an environment that encourages creativity and experimentation. Governments should prioritize the creation of robust data governance frameworks that align with international best practices while considering local contexts.

This could include establishing clear regulations on data protection, privacy, building human capital, and ownership to facilitate secure cross-border data flows.

PSI can be achieved through leveraging existing expertise or building capacity of public servants by leveraging local expertise to support the establishment of dedicated innovation hubs within government agencies that focus on developing new ideas and solutions tailored to address specific public needs. Training programs should focus on equipping public servants with the skills necessary to embrace innovative practices, including design thinking, data analytics, and collaborative problem-solving. These hubs can serve as platforms for collaboration among various stakeholders, including civil society, academia, and the private sector, fostering a culture of co-creation.

Build public sector capacity for anticipatory governance and decolonial sociotechnical foresight: Capacity building is crucial for fostering a culture of innovation within the public sector. Training programs should focus on equipping public servants with the skills necessary to embrace innovative practices, including design thinking, data analytics, and collaborative problem-solving. By implementing these strategies, public sector innovation can thrive, enabling governments to respond effectively to current challenges while anticipating future needs. This holistic approach will not only enhance service delivery but also strengthen democratic governance by actively engaging citizens in shaping the policies that affect their lives. Anticipatory governance and decolonial sociotechnical foresight can play a critical role in this context by equipping public institutions with the tools and frameworks necessary to learn from historical systematic institutions of inequality and foresee potential challenges and opportunities. By employing data-driven approaches and scenario planning, governments can better understand emerging trends and their implications for service delivery.

Foster multistakeholder partnerships: Encourage collaboration among diverse stakeholders, including government entities, private tech companies, civil society organizations, international development assistance (IDA) organisations, and academia, to adopt a sociotechnical participatory approach in developing innovative solutions for data management and protection. By engaging multiple perspectives and expertise, these partnerships can enhance the collective capacity to handle data securely while promoting economic growth, through collaborative frameworks that will ensure that data governance strategies are inclusive, addressing the needs and concerns of all stakeholders involved, and ultimately fostering a more resilient and equitable digital ecosystem. The public sector should create platforms for dialogue among stakeholders, including the tech

community, and civil society, to discuss challenges and opportunities related to data governance and digital trade.

Invest in digital public infrastructure (DPI): Allocate resources towards enhancing digital infrastructure, ensuring accessible, affordable, and high-quality connectivity, foundational elements for digital transformation, access to digital public goods (DPGs), and facilitation of efficient intra-regional digital trade. Additionally, investing in digital infrastructure is essential for making open data widely accessible to researchers, entrepreneurs, and the public, within and between countries.

Internet access is the key to delivering public services to people. If the service is not affordable to most people, goals of leveraging digital transformation for development will not be met. Over the past decade new financing and technology, along with privatization and market liberalization, have spurred dramatic growth in information and communication technologies (ICTs) in many countries, which are increasingly recognized as essential tools of development, contributing to global integration and enhancing public sector effectiveness, efficiency, and transparency.

Regional Bodies (SACU, AU)

Harmonize regulatory frameworks: Regional bodies should work towards harmonizing legal frameworks across member states to reduce policy fragmentation, by establishing common standards for data protection and privacy that facilitate seamless CBDF, that also align with global standards. Regional bodies can leverage the AfCFTA Digital Protocol to create a unified digital market that supports cross-border data flows and enhances regional integration. To enhance digital trade within SACU:

- Member states should prioritize harmonizing their data governance policies and ecommerce strategies.
- Collaborative initiatives should be established to share best practices and resources.
- Continuous engagement with continental bodies like the AU will be essential for aligning national policies with continental goals.

Promote capacity building initiatives: Organize training and capacity-building programs for member states to enhance their understanding of data governance and digital trade, that encompass trade and non-trade related aspects of CBDF to enhance public sector innovation and equip stakeholders with the necessary skills to implement effective policies.

Furthermore, capacity building of data curators in the public sector is needed to create effective national statistics systems (NSS) that collect and disseminate comparable statistics on access, use, quality, and affordability of ICT are needed to formulate growth-enabling policies for the sector and to monitor and evaluate the sector's impact on development.

Private sector

Co-create ethical solutions for data-based systems (DS): Beyond market incentives, tech companies and other early data economy incumbents in the private sector should prioritize the development of DS that adhere to ethical standards, respect human rights, and support sustainable digital transformation. This includes transparency in data usage and accountability for data innovations that support the public good.

Foster local DS innovation ecosystems: Foster local innovation ecosystems that are increasingly dependent on foundational DS by collaborating with other stakeholders in data ecosystems to create technologies that address their unique challenges. This can empower local stakeholders and

enhance digital inclusion and create homegrown contextually relevant solutions. Furthermore, engaging communities in the open data process is also key to empowering them to participate in data initiatives that address their specific challenges. By incorporating local perspectives and needs, open data initiatives can stimulate social innovation and economic development while upholding individual rights and privacy will support open data practices that will enhance information flow and cultivate a culture of collaboration and innovation that benefits all stakeholders in the data-driven data economy.

Media and civil society

Raise public awareness: Media outlets and civil society should implement initiatives that focus on educating the public about data protection rights and the importance of secure data flows to build a culture of awareness and demand for robust data governance. This can include developing articles, videos, and infographics that simplify the complexities of data rights, promote digital literacy, and emphasize the benefits of strong data governance.

Investigate and report on digital issues: Investigative journalism should focus on the implications of data policies and practices, holding governments and corporations accountable for data misuse and breaches. Examples can include analysing government regulations and corporate policies to assess their alignment with data protection principles and identify loopholes, uncovering cases of data misuse, breaches, and exploitation through on-the-ground reporting and whistleblower accounts, interviewing diverse stakeholders including policymakers, industry leaders, civil society advocates, and affected communities, to name a few. Media outlets should provide ample space for these investigations and ensure they are widely disseminated to maximize impact.

By shining a light on complex issues surrounding data governance, media and civil society can hold powerful actors accountable and push for reforms that support just data value creation.

Academia and Think Tanks

Conduct research on inclusive data governance: Academic institutions and other orgnisations in the policy-knowledge ecosystem such as think tanks should prioritize comprehensive research initiatives to analyse the effectiveness of existing data governance frameworks. Initiatives can range from establishing dedicated research centres focused on data governance that bring together multistakeholder transdisciplinary teams of experts in law, technology, sociology, and public policy. These centres can conduct in-depth studies to assess the current state of data governance across various sectors and recommend evidence-based improvements. The proposed centres can also employ comparative analyses of data governance frameworks from different countries and regions to identify best practices and lessons learned. This can help inform local adaptations that consider cultural and contextual differences.

Research initiatives should involve a diverse range of stakeholders, including government agencies, private sector representatives, and civil society organizations, in the research process. A collaborative approach will ensure that the research addresses real-world challenges, and incorporates multiple perspectives, to provide insights and recommendations based on public interest, evidence-based findings, ensuring that academic perspectives inform the development of data governance policies.

Lastly, academia and think tanks should disseminate research findings through academic journals, policy briefs, and public forums to raise awareness and inform ongoing debates about data

governance, including through engaging the media and other stakeholders in these discussions to amplify the impact of public interest research.

Collaborate on policy development: Academic institutions and think tanks should actively engage with policymakers to ensure that research findings inform the development of data governance policies. initiatives can range from establishing policy advisory committees that include academic experts who can provide insights and recommendations on data governance issues to bridge the research-policy gap between academia and government, and facilitate the exchange of knowledge and expertise amongst stakeholders, participating in public consultations on issues related to data governance, and collaborating with policymakers to conduct impact assessments of proposed data governance policies, evaluating their potential effects on various stakeholders and the broader data economy. Fostering networks among academic institutions, think tanks, policymakers, and industry stakeholders to promote ongoing dialogue and collaboration on data governance issues can facilitate knowledge sharing and the development of cohesive policy frameworks.

Official Development Assistance (ODA) and International Development Assistance (IDA)

Prioritize support for local data governance initiatives: ODA and IDA should focus on funding programs that enhance data governance frameworks across African nations, ensuring they are inclusive, equitable, and sustainable. This support should prioritize initiatives that foster regional collaboration, harmonize regulatory frameworks, and build local capacities (technical and policy) for data management and protection for thriving local data ecosystems

Prevent tied aid and encourage sustainable local innovation ecosystems: To avoid creating dependency on foreign aid, and foreign consultants, and experts, development assistance should be structured to prevent tied aid, which often restricts funding to the purchase of goods and services from donor countries. Instead, ODA and IDA should prioritize supporting the establishment of robust local innovation ecosystems, which involves investing in capacity-building programs that empower various local stakeholders to develop contextually relevant solutions and prevent "Aid oligopolies". By fostering collaboration among local businesses, academic institutions, and civil society organizations, these efforts can enhance the development of homegrown technologies and an enabling policy environment that effectively address local challenges.

Additionally, investing in digital public infrastructure is crucial to facilitate efficient CBDF and promote digital trade. Such investments can enhance access to essential digital services and tools, especially in Least Developed Countries (LDCs), Landlocked Developing Countries (LLDCs), and Small Island Developing States (SIDS). By aligning ODA and IDA strategies with the specific needs of local contexts, these funds can play a transformative role in strengtheninhmed

g data sovereignty, enhancing economic development, and ensuring that digital transformation benefits all stakeholders in the region.

6. References

Aaronson SA (2018). Data is different: Why the world needs a new approach to governing cross-border data flows. CIGI papers no. 197. Centre for International Governance Innovation, Waterloo, ON

Abrahams, L., Burke, M., & Hartzenberg, T. (2023). *Digital customs transformation for effective trade facilitation and revenue collection* (SARChI Industrial Development Working Paper Series WP 2023-02). https://www.uj.ac.za/wp-content/uploads/2021/10/sarchi-wp-2023-02-abrahams-l--burke-m--hartzenberg-t-february-2023.pdf

African Union (AU). (2022). Data Policy Framework (DPF). https://au.int/en/documents/20220728/audata-policy-framework

Ahmed, S. (2023a). *Data justice for an inclusive African Digital Single Market*. Medium. Retrieved from https://shamiraahmed.medium.com/data-justice-for-an-inclusive-pan-african-digital-single-market-e59f012c3d2

Ahmed, S. (2023b). *Facilitating an African Digital Single Market*. Data Economy Policy Hub. Retrieved from https://www.dataeconomypolicyhub.org/post/facilitating-a-pan-african-digital-single-market

Burri, M., Callo-Müller, M. V., & Kugler, K. (2024). The Evolution of Digital Trade Law: Insights from TAPED. *World Trade Review, 23*(2), 190–207. https://doi.org/10.1017/S1474745623000472

Casalini, F., & González, J. L. (2019). Trade and Cross-Border Data Flows. OECD. https://doi.org/10.1787/b2023a47-en

Ciuriak, D., & Ptaškina, M. (2018). The Digital Transformation and the Transformation of International Trade. *RTA Exchange*. International Centre for Trade and Sustainable Development (ICTSD) and the Inter-American Development Bank (IDB). https://ssrn.com/abstract=3107811

Drake, W. J., Vinton, C. G., & Kleinwächter, W. (2016, January). Internet Fragmentation: An Overview. *World Economic Forum*.

González, J. L. (2021). Trade and Cross-Border Data Flows. Organisation for Economic Co-operation and Development (OECD). https://doi.org/10.1787/7bc12916-en

International Telecommunication Union (ITU). Measuring digital development: Facts and Figures 2023. https://www.itu.int/en/ITU-D/Statistics/pages/facts/default.aspx

Organisation for Economic Co-operation and Development (OECD), World Trade Organization (WTO), & International Monetary Fund (IMF). (2019). *Handbook on Measuring Digital Trade* (Version 1). Paris, Geneva, and Washington, D.C.: OECD, WTO, and IMF. https://www.oecd.org/sdd/its/Handbook-on-Measuring-Digital-Trade.html

Rattray, C. (2024). ITU's global event on emerging technology for connectivity: Accelerating digital transformation in LDCs, LLDCs, and SIDS. https://www.un.org/ohrlls/news/itu%E2%80%99s-global-event-emerging-technology-connectivity-accelerating-digital-transformation-ldcs

Southern African Customs Union (SACU). (2024). https://www.sacu.int/

United Nations Development Programme (UNDP). (2024). Small Island Digital States: How digital can catalyse SIDS development (New York: UNDP Global SIDS Team, 2024)

UNCTAD. (2021a). Technology and Innovation Report, Catching technological waves: Innovation with equity. https://unctad.org/system/files/official-document/tir2020_en.pdf

UNCTAD. (2021b). Digital Economy Report 2021, Cross-border data flows and development: For whom the data flow https://unctad.org/system/files/official-document/der2021_en.pdf

UNCTAD. (2021c). The Least Developed Countries Report 2021. https://unctad.org/publication/least-developed-countries-report-2021

World Bank (2016). World Development Report 2016: Digital Dividends. Washington, DC. https://www.worldbank.org/en/publication/wdr2016/background-papers

Zieliński, M. F. (2017). Regional integration and customs: Enhancing the role of customs (WCO Research Paper No. 41). World Customs Organization (WCO). https://www.wcoomd.org/-/media/wco/public/global/pdf/topics/research/research-paper-series/41-miroslaw-zielinski.pdf