



# Project Information Document (PID)

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Concept Stage | Date Prepared/Updated: 28-Sep-2021 | Report No: PIDC32333



**BASIC INFORMATION**

**A. Basic Project Data**

Country Western Africa	Project ID P176932	Parent Project ID (if any)	Project Name Western Africa Regional Digital Integration Program (P176932)
Region AFRICA WEST	Estimated Appraisal Date Apr 04, 2022	Estimated Board Date Jul 22, 2022	Practice Area (Lead) Digital Development
Financing Instrument Investment Project Financing	Borrower(s) Economic Community of Western Africa States	Implementing Agency MINISTÈRE DES POSTES, TÉLÉCOMMUNICATIONS ET DE L'ECONOMIE NUMÉRIQUE, Ministère de la Transformation numérique de l'Innovation et de la Modernisation de l'Administration, Ministry of Information & Communication Infrastructure - MOICI	

**Proposed Development Objective(s)**

The Program Development Objective (PDO) is to increase access to broadband and digital services through the development and integration of digital markets in the Western Africa region.

**PROJECT FINANCING DATA (US\$, Millions)**

**SUMMARY**

<b>Total Project Cost</b>	143.00
<b>Total Financing</b>	143.00
<b>of which IBRD/IDA</b>	143.00
<b>Financing Gap</b>	0.00

**DETAILS**

**World Bank Group Financing**



International Development Association (IDA)	143.00
IDA Credit	90.00
IDA Grant	53.00

Environmental and Social Risk Classification  
Substantial

Concept Review Decision  
Track II-The review did authorize the preparation to continue

## B. Introduction and Context

### Country Context

The Western Africa region is home to about 420 million people, with a combined Gross Domestic Product (GDP) of US\$700 billion and a wide range of countries in terms of levels of socio-economic development.<sup>1</sup> The population is mostly concentrated in the coastal areas, while landlocked countries generally experience lower density. The region has experienced accelerated urbanization, with cities hosting 48 percent of the population. With respectively 3.7 million and 3.1 million inhabitants, Abidjan and Dakar are the largest francophone cities in the world after Kinshasa and Paris, and Lagos is among the largest English-speaking agglomerations in the World. This rapid urbanization is expected to continue in the coming years.

While economic growth across Western Africa is slightly above the continental average, this region has a high incidence of poverty, compounded by fragility and many of the serious challenges it faces have been exacerbated by the COVID-19 pandemic. Average annual economic growth across the Economic Community of West African States (ECOWAS) member states stood at 3.4 percent between 1980 and 2019 and combined GDP amounted to US\$694 billion in 2019,<sup>2</sup> less than one percent of the world’s GDP (42 percent of Sub-Saharan Africa’s (SSA) GDP). Economic activity in SSA is estimated to have contracted by two percent in 2020, reflecting a slower-than-expected spread of the virus and lower COVID-19-related mortality in the region, strong agricultural growth, and a faster-than-expected recovery in commodity prices. Nevertheless, COVID-19 has plunged the SSA region into its first recession in over 25 years, with activity contracting by nearly 5 percent on a per capita basis.<sup>3</sup> The eventual slump arising from the global economic slowdown from COVID-19 or its domestic disruptions will have additional adverse economic effects on the Western Africa ‘regional fragility’ trap: although country variations exist, two-thirds of the countries have national poverty levels above 50 percent. In the

<sup>1</sup> For the purpose of the proposed regional project, Western Africa consists of the ECOWAS Countries (Benin, Burkina Faso, Chad, Cape Verde, Cote d’Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, and Togo) and Mauritania. Mauritania signed an association agreement with ECOWAS in August 2017.

The Telecommunications / Information and Communication Technologies National Regulatory Authorities of these 16 countries are also member of the West Africa Telecommunications Regulators Assembly (WATRA) which was established to promote an efficient, adequate, and cost-effective ICT infrastructure and services in the West African region, while fostering rapid telecommunications development across member states. This proposed regional project is designed to follow up and build upon the achievements of the West Africa Regional Communications Infrastructure Program (WARCIP), which was open to the same group of countries.

<sup>2</sup> Constant 2010 US\$.

<sup>3</sup> <https://www.worldbank.org/en/region/afr/overview>



Western Africa region, 15 countries are considered low-income by the World Bank (WB).<sup>4</sup> Political instability and the threat of civil conflict continue to be impediments to stronger regional economic growth, good governance, and improved living standards— currently five countries are classified as fragile or conflict-affected (FCS).<sup>5</sup>

**There has been meaningful progress on gender equality; however, challenges persist.** In roughly the last decade, primary and secondary completion rates for girls increased at a higher rate in West Africa compared to the wider SSA region. However, there are opportunities for improvement in the quality of education as well as enrollment at higher levels of education, which are both important for economic participation at later stages of life. Women in West Africa face the challenge of low participation in formal employment. Despite progressively transitioning out of agriculture, women are more likely to shift into informal employment—formal wage employment remains male-dominated. Another challenge is high birth rates. When combined with household responsibilities and unpaid care, high levels of birth rates restrict the time, mobility and economic opportunities of women and girls.<sup>6</sup> Similar trends are evident at the country level. In The Gambia, although there is gender equality in education at all levels, gaps are still evident in the labor market with fewer women participating in the formal labor force (51 percent for women versus 68 percent for men).<sup>7</sup> Occupational sex segregation is especially acute in industry, where women participate at a rate of 4 percent versus 23 percent for men.<sup>8</sup> In Guinea, girls attain less education than boys at the primary and secondary levels, translating into gaps in human capital in adulthood. Women have fewer access to economic opportunities than men. And, when they do work, they are more likely to work in the informal sector or part-time, leading to substantial differences in earnings and productivity.<sup>9</sup> Although data are lacking, available information shows a similar pattern in Mauritania where women participate at a much lower rate in the labor market (28 percent for women versus 63 percent for men).<sup>10</sup> Legal barriers also constrain women’s economic opportunity in several ways, including laws that prohibit women’s access to jobs in the same way as men.<sup>11</sup>

**Building on a long history of regional trade, the region is committed to deepening regional cooperation and integration, including through the development of Information and Communication Technologies (ICT) and digital economy.** The ECOWAS hosts the largest Regional Economic Community (REC) in Africa with a mandate to promote regional cooperation, integration, and economic growth.<sup>12</sup> The ECOWAS Vision 2020 emphasized in its overarching mission that regional cooperation and integration will promote economic development in the region and envisioned a single integrated market with free movement of people across the region by 2020.<sup>13</sup> The ECOWAS shall in particular ensure “the harmonization and coordination of national policies and the promotion of integration programmes” in areas including communications, trade,

<sup>4</sup> For the current 2022 fiscal year, the following countries are low-income economies: Burkina Faso, The Gambia, Guinea, Guinea-Bissau, Liberia, Mali, Niger, Sierra Leone, and Togo are low-income. (<https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups>)

<sup>5</sup> The World Bank’s FY22 List of Fragile and Conflict-affected Situations includes Burkina Faso, Guinea-Bissau, Mali, Niger, and Nigeria. (<https://thedocs.worldbank.org/en/doc/bb52765f38156924d682486726f422d4-0090082021/original/FCSLIST-FY22.pdf>).

<sup>6</sup> Buvinic et al. 2020. Women’s Economic Empowerment in West Africa: Towards a Practical Research Agenda. <https://www.cgdev.org/publication/womens-economic-empowerment-west-africa-towards-practical-research-agenda>

<sup>7</sup> World Bank Gender Data Portal. 2019 figures (latest available). <https://www.worldbank.org/en/data/datatopics/gender>

<sup>8</sup> The industry sector consists of mining and quarrying, manufacturing, construction, and public utilities (electricity, gas, and water), in accordance with divisions 2-5 (ISIC 2) or categories C-F (ISIC 3) or categories B-F (ISIC 4). World Bank Gender Data Portal. 2019 figures (latest available). <https://www.worldbank.org/en/data/datatopics/gender>.

<sup>9</sup> World Bank. 2019. *Guinea : The Economic Benefits of a Gender Inclusive Society*. World Bank, Washington, DC. © World Bank. <https://openknowledge.worldbank.org/handle/10986/32507> License: CC BY 3.0 IG

<sup>10</sup> Labor force participation rate (% of female population ages 15+) (modeled ILO estimate), 2019 figures (latest available). World Bank Gender Data Portal.

<sup>11</sup> Loi Portant Code du Statut Personnel, Art. 57. *Women, Business and the Law* 2021. <https://wbl.worldbank.org/en/data/exploreeconomies/mauritania/2021>

<sup>12</sup> The ECOWAS region includes two other sub-regional entities. The West African Economic and Monetary Union (WAEMU) consists of eight states with a customs and currency union, and the West African Monetary Zone (WAMZ) comprises of six states which are working towards a currency union. The mandates of these entities overlap to a certain extent and their broader underlying objectives are similar. ECOWAS maintains close contact with these entities and other regional economic communities (REC) on areas of common interest.

<sup>13</sup> <http://dummy.ecowas.int/wp-content/uploads/2015/01/ECOWAS-VISION-2020.pdf>



information, science, technology and services. Building upon its previous ICT initiatives, ECOWAS is now encouraging engagement and cooperation in Western Africa towards the development of a digital economy.<sup>14</sup>

**Rapid digital transformation is reshaping the global economy, permeating virtually every sector and aspect of daily life, and changing the way we learn, work, trade, socialize, and access public and private services as well as information.**

The e-Economy Africa 2020 Report by the International Finance Cooperation (IFC) and Google found that Africa's digital economy -- which encompasses a wide range of new applications of information technology in public services digitization and business models and products (including agriculture, education, financial services, healthcare, supply chains, etc.) -- has the potential to reach US\$180 billion by 2025, accounting for 5.2 percent of the continent's gross domestic product (GDP).<sup>15</sup> Connecting individuals, firms, and governments to broadband internet offers leapfrogging opportunities to increase productivity. It also offers new solutions to long-standing problems, including low levels of financial inclusion, poor access to market information, low access to health and education services, and exclusion of women. Moreover, digital solutions in Africa have a positive impact on employment creation by firms since they create good jobs rather than displace labor. In addition, access to a digital transaction account is a step toward broader financial inclusion and a gateway to other financial services. Digital technologies can also help leapfrog on learning (e.g., scripted lessons) and promote transparent teacher recruitment, deployment, and training.<sup>16</sup> The COVID-19 pandemic has further amplified the role of digital services for education and business continuity as well as in the fight against the pandemic (e.g., digital tools for case management, contact tracing, and vaccine logistics, among other solutions).<sup>17</sup>

Sectoral and Institutional Context

**Affordable and good quality broadband connectivity**

**Western Africa is at risk of capturing only a fraction of the growth fueled by global digital transformation due to still insufficiently developed broadband connectivity.**

In the past decade, the region has seen significant advancements in the provision of broadband connectivity, key foundation for the emergence of a vibrant, safe and inclusive digital economy.<sup>18</sup> The arrival of new international bandwidth capacity through submarine cable systems to the Western Africa coast has enabled better access to the world wide web. Reduced reliance on costly satellite services has brought significantly down the cost of international bandwidth at the wholesale level. However, there is room for improvement in the access to and adoption of broadband connectivity. While most mobile voice services have grown rapidly, mobile broadband internet penetration (the predominant means to access the world's Internet traffic, though fixed broadband is developing in the biggest cities) is still relatively low in most parts of Western Africa (See **Table 1: Key Digital Development Indicators**

<sup>14</sup> <https://www.ecowas.int/ecowas-encourages-engagement-and-cooperation-towards-the-development-of-a-digital-economy-at-the-12th-west-africa-internet-governance-forum-waigf/>

<sup>15</sup> World Bank, e-Economy Africa 2020 - Africa's \$180 Billion Internet Economy Future  
[https://www.ifc.org/wps/wcm/connect/publications\\_ext\\_content/ifc\\_external\\_publication\\_site/publications\\_listing\\_page/google-e-economy](https://www.ifc.org/wps/wcm/connect/publications_ext_content/ifc_external_publication_site/publications_listing_page/google-e-economy)

<sup>16</sup> World Bank, Supporting a resilient recovery. The World Bank's Western & Central Africa Region Priorities 2021-2025.  
<https://documents.banquemondiale.org/fr/publication/documents-reports/documentdetail/978911621917765713/supporting-a-resilient-recovery-the-world-bank-s-western-and-central-africa-region-priorities-2021-2025>

<sup>17</sup> 2020. Johns Hopkins Bloomberg School of Public Health. *Digital Solutions for COVID-19 Response*.  
[https://drive.google.com/file/d/1yCP7t1di\\_ofQ0YhuPAD1Oqcj1aTo74k5/view](https://drive.google.com/file/d/1yCP7t1di_ofQ0YhuPAD1Oqcj1aTo74k5/view)

<sup>18</sup> In order to catalyze private sector investment (i.e. a Maximizing Finance for Development approach - MFD) to improve digital infrastructure / broadband connectivity in Western Africa, the World Bank developed in the early 2010 the West Africa Regional Communications Program (WARCIP). 9 West African countries have benefitted from WARCIP (Sierra Leone, Liberia, Guinea, Gambia, Burkina Faso, Benin, Mauritania, Togo, Guinea Bissau), with 3 countries still having an active operation (Mauritania and Togo to close in 2021; and Guinea Bissau to close in 2022). WARCIP has been introduced at a time where most Western Africa countries were significantly lagging behind in broadband penetration and to take advantage of promising opportunities in new international submarine cable connectivity on an Open Access and Public Private Partnership (PPP) basis such as the African Coast to Europe (ACE).



), partly due to the high prices of mobile data in these countries.

**Table 1: Key Digital Development Indicators**

Country	Market Penetration, Total Mobile Connections %, 2021 (a)	Mobile broadband penetration (unique subscribers) %, 2021 (b)	Price as percentage of GNI (and rank <sup>^</sup> ) of 1 GB of mobile data per month (Out of 230), 2020 (c)	Number of Mobile Network Operators, 2021 (d)	Mobile concentration index HHI 2021 <sup>19</sup> (e)	ITU ICT Regulatory Tracker score, 2020 (max 100) (f)	Internet Users, %, 2017 <sup>20</sup> (g)
Benin	89.8	23.7	\$3.61 (162 <sup>nd</sup> )	3	5,059	65.33	14.12
Burkina Faso	111.9	26.0	\$4.52 (177 <sup>th</sup> )	4	3,874	84	15.88
Cabo Verde	102.8	52.9	\$4.78 (181 <sup>st</sup> )	2	5,668	78.33	57.16
Côte d'Ivoire	137.9	42.0	\$2.58 (130 <sup>th</sup> )	4	3,424	67.33	36.45
The Gambia	165.7	32.8	\$5.86 (192 <sup>nd</sup> )	4	2,955	73.67	19.84
<b>Guinea</b>	106.3	20.1	\$1.99 (105 <sup>th</sup> )	3	4,698	65.33	21.83
Guinea-Bissau	91.21	21.1	\$4.41 (173 <sup>rd</sup> )	2	5,019	52	3.93
<b>Liberia</b>	67.19	35.3	\$2.51 (131 <sup>st</sup> )	3	4,953	71.67	7.98
<b>Mali</b>	111.51	29.9	\$3.28 (153 <sup>rd</sup> )	3	4,747	78	12.72
Mauritania	101.38	40.0	\$5.56 (188 <sup>th</sup> )	3	4,137	68	20.8
Niger	47.3	16.1	\$0.88 (44 <sup>th</sup> )	4	3,351	78	5.25
Nigeria	82.3	43.4	\$1.28 (71 <sup>st</sup> )	9	3,004	86.33	7.47
Senegal	113.4	36.6	\$0.94 (50 <sup>th</sup> )	3	4,141	87	29.64
Sierra Leone	107.5	34.9	\$3.26 (152 <sup>nd</sup> )	4	4,144	56	13.24
Togo	90	34.3	\$4.69 (179 <sup>th</sup> )	2	5,255	75.67	12.36

Sources: (a,d,e) - GSMA Intelligence (2021); (b) – World Bank Digital Economy for Africa Broadband Dashboard (2021); (c) - Worldwide Mobile Data Pricing 2021 (cable.co.uk); (f) - ICT ITU Regulatory Tracker (2020); (g) ITU WTID 2020

**Most countries in the region still need to focus on strengthening the enabling environment to increase the affordability, availability, and adoption of broadband internet and digital services.** The Regulatory Watch Initiative (RWI)<sup>21</sup> assesses the extent to which best practice has been achieved in any particular country and across 5 regulatory themes – (i) Licensing and Authorizations, (ii) Fair Markets, (iii) International Access, (iv) Spectrum Management and (iv) Regulatory governance – and highlights remaining heterogeneity (see **Figure 1**) despite the existence of relevant regional ECOWAS regulations<sup>22</sup>

<sup>19</sup> The Herfindahl-Hirschman Index (HHI) is a measure of market concentration. A market with an HHI of less than 1,500 is considered to be a competitive marketplace, an HHI of 1,500 to 2,500 to be a moderately concentrated marketplace, and an HHI of 2,500 or greater to be a highly concentrated marketplace.

<sup>20</sup> Data for Côte d'Ivoire is for 2019, for Niger and Guinea 2018.

<sup>21</sup> The Regulatory Watch Initiative (RWI) has been developed by the World Bank to help countries optimize their regulatory frameworks and reap the growing benefits of the digital economy. It is an easy-to-use and effective tool for advising World Bank operations across sectors and guiding regulatory reform nationally and regionally. The RWI currently covers all major issues of telecom regulation across 27 countries located in West Africa, East Africa and Mediterranean MENA.

<sup>22</sup> Supplementary Act A/SA. 1/01/07 on the harmonization of Policies and of the Regulatory Framework of ICT sector. Supplementary Act A/SA. 2/01/07 on Access and Interconnection in Respect of ICT Sector Networks and Services. Supplementary Act A/SA. 3/01/07 on the Legal Regime Applicable to Network Operators and Service Providers. Supplementary Act A/SA 4/ 01/07 on Numbering Plan Management. Supplementary Act A/SA.5/01/07 on the Management of the Radio-frequency Spectrum. Supplementary Act A/SA 6/01/07 on Universal Service Access. Regulation C/REG.06/06/12 on Conditions for Access to Submarine Cable Landing Stations. Regulation C/REG. 19/12/16 on Conditions of access to National and International Bandwidth on Terrestrial Networks within the ECOWAS Region.



as well as at West African Economic and Monetary Union (WAEMU)<sup>23</sup> level. The forthcoming WB ECOWAS InfraSAP highlights the following three priorities for improved regional harmonization: (i) licensing/authorization, (ii) infrastructure-sharing, and (iii) spectrum management.<sup>24</sup> To improve understanding of the key policies and regulations for removing cross-border barriers to digital infrastructure investment and improved connectivity in the ECOWAS region, the World Bank commissioned a market assessment of a group of six West African states with contiguous borders – Burkina Faso, Cote d’Ivoire, Guinea, Liberia, Mali and Sierra Leone – covering three main areas: Connectivity and Digital Infrastructures, Data Protection and Online Regulation. The report identified 8 crucial issues that are impacting connectivity and digital infrastructures in the six countries, namely: 1) the persistence of exclusive rights; 2) Restrictive Licensing Regimes; 3) Incomplete regulation of SMP and Lack of Competition Law; 4) Complex and Uncoordinated Procedures for Rights of Way and Public Work Authorizations; 5) Unused Universal Service Funds; 6) Anti-Business Taxation; 7) Lack of Implementation of Rights Granted by Regional Texts and Lack of Regional Coordination and 8) Inefficient Spectrum Regulation.<sup>25</sup>

**New efforts at the regional level to promote a harmonized regulatory and policy framework are underway; however, their success hinges on their localization, implementation, and effective monitoring and enforcement at national level.**

Both ECOWAS and WAEMU<sup>26</sup> have discussed various aspects of communications infrastructure development, including competition frameworks, mobile voice roaming charges, national broadband strategies, analogue-to-digital television migration, cross border links, cybercrime and data and consumer protection. As a result, the ECOWAS and WAEMU treaties require their member states to implement similar communications policies, laws, and regulations that aim at creating a modern legal environment for efficient national network operation, and to provide reliable interconnection between countries. With assistance from the European Union (EU), they are currently drafting a new digital economy regulatory framework aimed at creating a Single Digital Market (SDM) through among other things: (i) creating a harmonized framework for regulating the electronic communications networks and digital services sector; (ii) setting the foundations for developing a SDM; (iii) defining a series of procedures to ensure a harmonized application of the regulatory framework in the ECOWAS; and (iv) promoting the establishment of an effective, transparent, non-discriminatory sustainable and competitive sector (See Annex 3).<sup>27</sup> The West African Telecommunications Regulators Assembly (WATRA) also identified access to submarine cables as “one of the most pressing priorities” of ECOWAS Member States and developed Guidelines (with the support of the Government of Germany) regarding its access.<sup>28</sup>

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<sup>23</sup> Directive No. 01/2006/CM/UEMOA on the harmonization of control and regulatory policies for the telecommunications sector. Directive No. 02/2006/CM/UEMOA on the harmonization of the regimes applicable to network operators and service providers. Directive No. 03/2006/CM/UEMOA on the interconnection of telecommunications networks and services. Directive No. 05/2006/CM/UEMOA on the harmonization of tariff-setting for telecommunications services. Directive No. 06/2006/CM/UEMOA organizing the overall framework for cooperation among national telecommunications regulatory authorities. Decision No. 09/2006/CM/UEMOA creating the Committee of National Telecommunications Regulators of WAEMU Member States.

<sup>24</sup> ECOWAS Region Infrastructure Sector Assessment (InfraSAP) (P171771)

<sup>25</sup> World Bank Group, West Africa: Regional Broadband Market Development Assessment, 25 July 2021 (P171710).

<sup>26</sup> WAEMU Member countries are Benin, Burkina Faso, Côte D’Ivoire, Guinea-Bissau, Mali, Niger, Senegal, and Togo.

<sup>27</sup> Preliminary draft of the single market regulation. [https://www.uemoa.int/sites/default/files/bibliotheque/europeaid.140-319.dd\\_ser\\_.bf\\_-\\_18.04.2021\\_-\\_projet\\_nouveau\\_cadre\\_en\\_afrique\\_ouest.pdf](https://www.uemoa.int/sites/default/files/bibliotheque/europeaid.140-319.dd_ser_.bf_-_18.04.2021_-_projet_nouveau_cadre_en_afrique_ouest.pdf)

<sup>28</sup> HIPSSA – Access to Submarine Cables in West Africa – WATRA Guidelines. [https://www.itu.int/en/ITU-D/Projects/ITU-EC-ACP/HIPSSA/Documents/FINAL%20DOCUMENTS/FINAL%20DOCS%20ENGLISH/submarine\\_cables\\_watra\\_guidelines.pdf](https://www.itu.int/en/ITU-D/Projects/ITU-EC-ACP/HIPSSA/Documents/FINAL%20DOCUMENTS/FINAL%20DOCS%20ENGLISH/submarine_cables_watra_guidelines.pdf).

**Figure 1: Regulatory Watch Initiative attainment level in Western Africa<sup>29</sup>**

**Structure of RWI: 5 Regulatory Clusters**



Cluster	Indicator <sup>30</sup>	ECOWAS	Benin	Burkina Faso	Cabo Verde	Côte d'Ivoire	The Gambia	Guinea	Guinea-Bissau	Liberia	Mali	Niger	Nigeria	Senegal	Sierra Leone	Togo
Licensing and Authorizations	Market Openness	63%	67%	67%	83%	83%	83%	33%	33%	83%	67%	67%	83%	67%	17%	33%
	Infrastructure licensing	60%	83%	33%	67%	33%	17%	67%	67%	83%	33%	67%	100%	67%	67%	33%
	Transparency of Award Procedures	60%	67%	83%	33%	67%	83%	67%	67%	17%	83%	67%	67%	33%	83%	33%
Fair Markets	SMP Regulation in Place	73%	100%	83%	83%	83%	83%	100%	100%	100%	67%	33%	33%	83%	17%	83%
	Favorability of OTT Regulation	61%	83%	67%	33%	67%	67%	67%	67%	33%	33%	33%	83%	83%	33%	83%
	SMP Enforcement	50%	83%	67%	83%	83%	17%	67%	0%	33%	33%	67%	33%	17%	17%	33%
	RIO Availability	43%	100%	67%	100%	83%	17%	17%	0%	0%	0%	67%	0%	0%	0%	83%
International Access	Exclusivity Not Permitted	62%	67%	83%	67%	83%	83%	0%	67%	83%	67%	67%	100%	83%	33%	67%
	Absence of International Traffic Taxes	67%	83%	100%	100%	100%	83%	0%	83%	17%	83%	17%	100%	100%	33%	67%
	Regulation of International Access	41%	83%	0%	100%	83%	17%	17%	0%	83%	17%	17%	67%	83%	17%	33%
Spectrum Management	Procedures	79%	100%	83%	83%	100%	83%	83%	100%	67%	100%	100%	100%	83%	17%	17%
	Tariffs	46%	83%	67%	83%	17%	83%	17%	17%	17%	33%	33%	17%	17%	83%	83%
	Transparency	39%	17%	17%	83%	83%	83%	83%	17%	17%	17%	17%	83%	17%	17%	17%
	Assignment	51%	33%	67%	33%	67%	100%	0%	17%	50%	50%	50%	83%	67%	0%	50%
Regulatory Governance	Independence	36%	83%	17%	67%	17%	33%	33%	33%	33%	33%	17%	33%	33%	33%	17%
	Financing	60%	83%	67%	50%	83%	17%	83%	33%	83%	33%	83%	83%	83%	17%	17%
	Universal Service Fund	42%	83%	33%	17%	83%	17%	33%	17%	17%	33%	17%	83%	17%	17%	83%
	Transparency	73%	83%	67%	83%	67%	83%	83%	83%	83%	67%	83%	83%	83%	17%	83%

Source: World Bank. <https://documents.worldbank.org/pt/publication/documents-reports/documentdetail/303601616414309025/ecowas-ict-african-regulatory-watch-initiative-on-licensing-regimes-otts-and-international-gateway-liberalization-executive-summary-and-full-report>

**There remains an unfinished agenda of increasing the geographical reach of broadband networks and reducing the costs/ increasing the quality of communications services, with an emphasis on strengthened resiliency of core regional**

<sup>29</sup> Mauritania will be included under RWI3 which is currently under implementation and will finalize end of FY22.

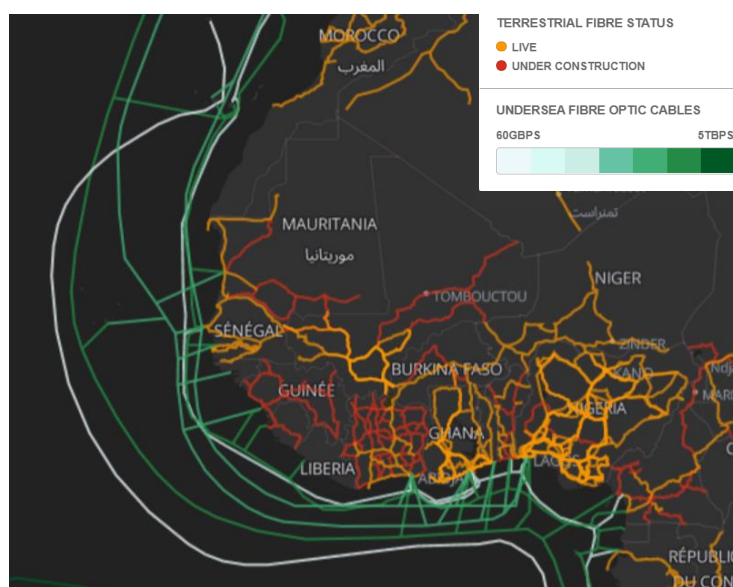
<sup>30</sup> SMP means significant market power; OTT, over the top services; and RIO, reference interconnection offer.





**broadband networks to crisis such as COVID-19.** As shown below (**Figure 2**), most countries in Western Africa are connected to at least one submarine cable (first mile of the broadband value chain) and there are significant developments inland to connect capital cities of landlocked countries as well as main secondary cities to broadband internet (middle mile of the broadband value chain). However, drawing lessons from the COVID-19 pandemic, where countries such as Mauritania or The Gambia lost access to the world's web traffic due to regular disruptions of their only submarine landing station and lack of an affordable back-up option, there remains an urgent need for some countries to strengthen regional connectivity, both in terms of capacity and redundancy under a Maximizing Financing for Development (MFD) approach and with the principle of open access. For the first mile, the focus should be on limiting dependency of countries to only one or two submarine cable landing stations through either an additional submarine cable landing in country or through terrestrial (including excess fiber optic capacity along electricity lines) cross border fiber optic cables to access another landing station in a neighboring country (ideally a landing station of a different submarine cable). This will ensure both sustainability of international connectivity in light of rapidly increasing traffic demand (some of the existing submarine cables are reaching saturation) and resiliency (in case of an outage with a submarine landing cable). A new generation of submarine fiber optic cables are being deployed along the Western Coast of the continent in the next few years. This should significantly increase the available international internet bandwidth and contribute to international connectivity redundancy.<sup>31</sup> A consortium led by Facebook, named 2Africa, will have an overall potential capacity of 180Tbps, the Equiano from Google 144Tbps, and EllaLink of 100Tbps. For the middle mile, the focus should be on ensuring redundant connectivity of all large population/economic centers through fiber optic backbones, focusing on main administrative cities of layers 1 and 2. This will ensure government and private sector business continuity in large population/economic centers (core regional broadband networks) across Western Africa.

**Figure 2: Overview of fiber optic backbone infrastructure (first and middle mile) in Western Africa**



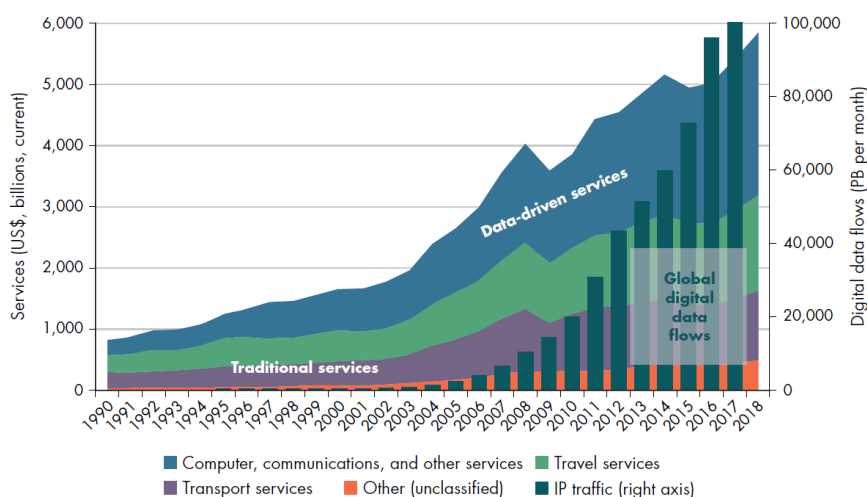
Source: African Undersea and Terrestrial Fibre Optic Cables ([online link](#))

<sup>31</sup> Examples of planned cables include 2Africa, PEACE, Africa-1, DARE-2, G2A etc. Existing cables include EASSy, SEACOM, DARE-1, TEAMS, Centurion, Telecom Egypt, Reliance Jio etc.

### Trusted data flows and uptake of productive digital services

**Innovative data content and online services are emerging across Western Africa, but barriers to cross-border expansion, lack of access for users, and impediments to investment are holding back the growth of these digital services—furthermore, legal and regulatory frameworks for online regulations remain incomplete and their implementation is at its embryonic stage.** Since 1990, the global trade in data-driven services has grown exponentially and now constitutes half of trade in services (see **Figure 3**). Most online services originate from, and are stored, outside the Western Africa region. They are also dominated by large firms that have the resources to navigate complex licensing procedures, taxation and other barriers which require businesses to set up relatively independent operations in each country rather than seamlessly expanding across borders. In addition, although some countries have developed legal and regulatory frameworks applicable to consumer protection and electronic transactions, some still do not have any consumer protection authority (The Gambia, Guinea, and Liberia) and associated regulations still need to be developed in most of the Western African countries. Robust cybersecurity and anti-cybercrime legislation and institutions are also needed to address growing threats and risks facing global cyberspace and digital networks, information systems. This requires good coordination among the relevant departments, effective response mechanisms to cyberattacks, cybersecurity curricula that ensures capacity is in place to fight cybercrime, experts and users of digital services sensitized and trained in good practices, active private sector participation, enhanced protection of the most essential digital services and infrastructure, as well as regional collaboration and international cooperation. Support to advance trusted data flows would also be important to ensure productive and value-add use of internet bandwidth with the uptake of digital services responding to the needs of individuals and businesses. According to the 2021 World Bank Report *West Africa: Regional Broadband Market Development Assessment (P171710)*, a key challenge with respect to data protection in the countries studies is the lack of applicable legal and regulatory frameworks or lack of implementation thereof. Further, regional texts do not seem sufficient (*i.e.*, not in force yet and / or not directly applicable). At the national level, the situation varies greatly between countries.

**Figure 3: Global trade in data-driven services**



Source: World Bank WDR2021. WDR 2021 team calculations, based on World Bank, WITS (World Integrated Trade Solution) database, <http://wits.worldbank.org/WITS/>. Data at [http://bit.do/WDR2021-Fig-O\\_5](http://bit.do/WDR2021-Fig-O_5)<sup>32</sup>

<sup>32</sup> Note: IP = Internet Protocol; PB = petabytes



**The Data Regulation Diagnostic in the World Bank Development Report 2021 conducts a detailed assessment of domestic laws, regulations, and administrative requirements in 80 countries.** The Diagnostic includes two pillars: Enablers and Safeguards. Different dimensions are covered under each pillar (i) enablers pillar includes e-commerce/transactions, public intent data and private intent data; (ii) the Safeguards pillar includes personal data, non-personal data, cybersecurity and cybercrime, and cross-border data transactions/flows. Each dimension comprises questions designed to determine if a country has adopted certain good regulatory practices. Responses are scored and averaged under each dimension to provide an overall sense of how a country performs in the corresponding regulatory and legal dimension. Within the eleven Western Africa countries covered in the diagnostic (Benin, Burkina Faso, Côte d'Ivoire, The Gambia, Ghana, Liberia, Mali, Nigeria, Senegal, Sierra Leone, Togo), there remains significant heterogeneity (see **Figure 4**) despite the existence of some relevant regional regulations at the ECOWAS<sup>33</sup> level. Some countries have already set up the necessary institutions and have reached a certain degree of preparation. Nonetheless, most of the others are still at an insufficient level, which endangers their nation as well as the rest of the region. For instance, several countries in the region are leading critical efforts. Notably, among these efforts is the WB-funded West Africa Unique Identification for Regional Integration and Inclusion (WURI) Program,<sup>34</sup> which seeks to facilitate access to services through the free provision of basic unique foundational identity credentials to all persons in the territory of each country, regardless of legal status, and thus seeks to develop a strong data environment. Notwithstanding ongoing efforts such as WURI, additional efforts are needed to strengthen the data protection and cybersecurity environments in the region, especially from a legal and institutional perspective.<sup>35</sup> For example, The Gambia has not transposed the ECOWAS Supplementary Act A/SA.1/01/10 on personal data into domestic law, is without a data protection authority, and has yet to develop key cybersecurity regulations, such as the adoption of a law on cybercrime and updating existing laws. Furthermore, countries in the region face a shortage of expertise in these areas, and the heterogeneity of the systems in place across the different countries considerably limits any attempt at regional cooperation. As such, harmonization of these regimes must be a top priority.

**New efforts at the regional level to promote a harmonized regulatory and policy framework are underway.** A comprehensive ECOWAS Regional Cybersecurity and Cybercrime Strategy was adopted in January 2021,<sup>36</sup> which sets forth, five strategic objectives: (i) formulate national cybersecurity and cybercrime policy and strategy;<sup>37</sup> (ii) strengthen cybersecurity for a safe and secure cyberspace;<sup>38</sup> (iii) reduce cybercrime incidents with an enabled environment and

<sup>33</sup> (i) Supplementary Act A/SA.1/01/10 on personal data sets out the security obligations incumbent on those responsible for processing such data to ensure confidentiality; (ii) Supplementary Act A/SA.2/01/10 on electronic transactions sets the conditions for acceptance of electronic signature; (iii) Directive C/DIR 1/08/11 on fighting cybercrime adapts the substantive criminal law and the criminal procedure of Member States to address the cybercrime phenomenon.

<sup>34</sup> Phase 1 - P161329 (Côte d'Ivoire, Guinea, the ECOWAS Commission); Phase 2 - P169594 (Benin, Burkina Faso, Niger, Togo).

<sup>35</sup> The WURI Program is designed in two phases: Phase 1 includes Côte d'Ivoire, Guinea and the Economic Community of West African States (ECOWAS) Commission; and Phase 2 includes Togo, Benin, Burkina Faso and Niger.

<sup>36</sup> <https://parl.ecowas.int/information-and-communication-technology-ecowas-adopts-a-regional-strategy-for-cybersecurity-and-the-fight-against-cybercrime/>.

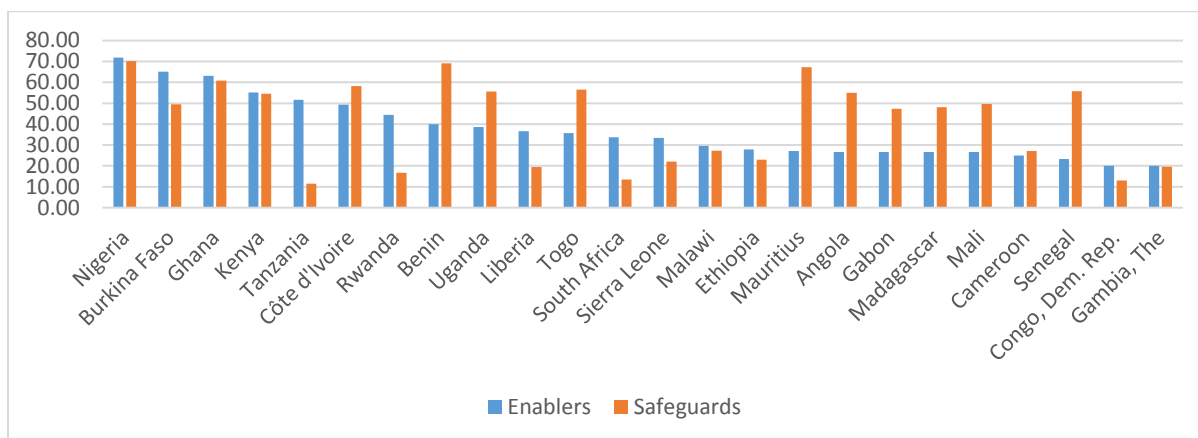
<sup>37</sup> Sub-objectives: Each Member State should adopt and update at least every five years national cybersecurity and cybercrime policy and strategy, considering this Regional Strategy; Each Member State should define a monitoring and evaluation mechanism for the actions planned by its national cybersecurity and cybercrime strategy and implement it at least annually.

<sup>38</sup> Sub-objectives: Establish a national cybersecurity Authority, establish alert and incident response capabilities (CSIRTs), establish a risk management approach, strengthen cybersecurity for critical infrastructure and essential services, Adopt information security policies, Develop a general security baseline, Enhance cybersecurity skills development, Ensure development of the cybersecurity offer.



capability to bring perpetrators to justice;<sup>39</sup> (iv) promote coordination and cooperation in enhancing cybersecurity and fighting cybercrime;<sup>40</sup> and (v) establish regional mechanisms.<sup>41</sup>

Figure 4: Data Regulation Diagnostic Across South Saharan Countries, 2020



Source: World Bank WDR2021. Global Data Regulation Diagnostic Survey Dataset 2021

**Recognizing the critical role digital services can play as drivers of intra-regional trade and economic development, efforts are being renewed across the Sub-Saharan Africa to advance regional development and economic integration with an emphasis on digital economy.** Both the African Continental Free Trade Area<sup>42</sup> (AfCFTA) founded in 2018, and more recently the Declaration of the Summit of the Financing of African Economies held in Paris on May 18, 2021, have recently highlighted the benefits of regional cooperation for the development of African countries. The WB estimates that once tariff elimination and trade facilitation measures are implemented, the potential impact of the AfCFTA could result in a 29 percent increase of total exports and 81 percent increase of intra-regional trade by 2035.<sup>43</sup> The Declaration calls for special attention to “enhancing regional integration and its long-term benefits to develop local and regional markets and sustainable growth”. Both initiatives emphasize the catalytic role digital services and platforms (both public and private) will need to play in achieving their vision and objectives to leverage the largely untapped potential of the African markets in terms of inter-regional trade in goods and services, job creation at the regional level and addressing supply issues at country level, such as food security. Digital financial services (DFS) and electronic signature have been identified as key enablers for intra-regional trade.<sup>44</sup>

### Digital transformation and climate change

<sup>39</sup> Sub-objectives: Adopt penal and procedural provisions, Build capacities against cybercrime.

<sup>40</sup> Sub-objectives: Promote ratification of conventions, ensure promotion of the cybersecurity culture, ensure national coordination, Promote regional and international cooperation.

<sup>41</sup> Sub-objectives: Establish a regional assistance plan for the implementation of the Regional Strategy, establish a regional Strategy monitoring system, establish a cybersecurity Coordination Centre, Identify and pursue funding for national cybersecurity and cybercrime arrangements.

<sup>42</sup> The AfCFTA brings together the 54 member states of the African Union (AU) including more than 1.2 billion people and a combined gross domestic product (GDP) of US\$3.4 trillion. <https://au.int/en/ti/cfta/about>

<sup>43</sup> World Bank Group 2020. The African Continental Free Trade Area. Economic Distributional Effects. <https://openknowledge.worldbank.org/bitstream/handle/10986/34139/9781464815591.pdf>

<sup>44</sup> Africa-Wide Regional Payments Platform ASA (P176377)



**Increased use of digital infrastructure and services across the region is expected to result in increasing quantities of e-waste and significantly greater energy usage.** As of today, there are no regional or national guidelines to assist in addressing pollution from e-waste or to reduce or mitigate the long-term climate change impact of the energy consumption associated with digital economy.

**Western Africa faces severe impacts from climate change.** Rising temperatures, desertification, deforestation and increased coastal flooding are among the key challenges. Climate change is contributing to food insecurity, forced displacement, conflict, land degradation and poverty.<sup>45</sup>

**These regional trends are also apparent at the country level.** The Gambia is vulnerable to a number of climate impacts, including sea level rise, decrease in rainfall and rising temperatures.<sup>46</sup> Specific high-risk vulnerabilities include: i) river, urban and coastal flooding, meaning that life-threatening floods are expected to happen at least once in the next ten years; ii) water scarcity, meaning that droughts are expected to take place every five years on average; iii) prolonged and extreme heat (every five years on average); and iv) wildfire risks (there is more than 50 percent likelihood of a significant wildfire that might result in the loss of life and property).<sup>47</sup> Mauritania experiences similar climate change vulnerabilities. River, urban and coastal flooding are considered high risk. There are also challenges with water scarcity due to increase competition over fewer water resources, increased temperatures and more evaporation of surface waters. Other issues include extreme heat and violent winds that contribute to erosion.<sup>48</sup> Guinea faces an even higher level of risk. The risks of river, urban and coastal flooding are also rated as high. In addition, landslide susceptibility is a key concern, therefore site planning would need to take this into account. Other issues include extreme heat and wildfire risk, which are rated as high. The risk of water scarcity is classified as medium risk.<sup>49</sup>

Relationship to CPF

**The proposed Western Africa Regional Digital Integration Program (WARDIP), supported by this first in a series of proposed WARDIP projects (SOP1), is aligned with various regional strategies of the World Bank Group (WBG).** There is growing consensus that the digital infrastructure, markets and solutions are now critical inputs to development and for the achievement of the WBG's twin goals of boosting shared prosperity and of ending extreme poverty. By leveraging digital solutions, countries can strive for more inclusive economic development, economic diversification, job creation and offer innovative products and services as inputs to other sectors. Expected contributions of the proposed program to IDA19 Digital Commitments are further elaborated in Annex 1. The program is aligned with the objectives of the following WBG strategies:

- **The WB's Western and Central Africa Region Priorities (2021-2025):** Their first objective is to improve effective and inclusive service delivery, including through digital solutions. Their second goal relates to filling infrastructure gaps, including digital connectivity, while their third priority is to empower women through enhancing their human capital and facilitating their access to markets.<sup>50</sup>
- **Africa Regional Integration and Cooperation Strategy Update (FY21–23):** Pillar 1 of this Regional Strategy Update,

<sup>45</sup> Supporting A Resilient Recovery : The World Bank's Western and Central Africa Region Priorities 2021-2025 (English). Washington, D.C. : World Bank Group. <http://documents.worldbank.org/curated/en/978911621917765713/Supporting-A-Resilient-Recovery-The-World-Bank-s-Western-and-Central-Africa-Region-Priorities-2021-2025>

<sup>46</sup> <https://climateknowledgeportal.worldbank.org/country/gambia/vulnerability>

<sup>47</sup> <https://thinkhazard.org/en/report/90-the-gambia/WF>

<sup>48</sup> <https://climateknowledgeportal.worldbank.org/country/mauritania/vulnerability>

<sup>49</sup> <https://thinkhazard.org/en/report/106-guinea/DG>

<sup>50</sup> Washington, D.C.: World Bank Group. <http://documents.worldbank.org/curated/en/978911621917765713/Supporting-A-Resilient-Recovery-The-World-Bank-s-Western-and-Central-Africa-Region-Priorities-2021-2025>



‘Building Regional Connectivity’, supports the integration of digital markets including broadband infrastructure connectivity and financial payment platforms, in line with what WARDIP aims to achieve.<sup>51</sup>

- **Strategy for Fragility, Conflict and Violence (FCV), 2020–2025**<sup>52</sup>: The FCV Strategy aims to ameliorate conflicts by addressing drivers of fragility, including climate change, and enhancing partnerships with regional institutions to bolster regional markets. The FCV Strategy recognizes that “digital transformation has the potential to play a positive role in promoting peace but can also widen economic gaps and drive exclusion”. The proposed project would support the development of the underlying digital infrastructure to support the required digital solutions, and the support the development of an enabling regulatory environment for digital economy.
- **Digital Economy for Africa Initiative (DE4A)**:<sup>53</sup> WARDIP would support the WBG Digital Economy for Africa (DE4A) initiative which aims to contribute to the operationalization of the African Union (AU) Digital Transformation Strategy and is aligned with the findings and recommendations of several WB analytical / TA reports focused on digital economy, digital technologies and financial services. The AU strategy sets out a bold vision that calls for every African individual, business, and government to be digitally enabled by 2030, to drive the digital transformation of Africa and ensure its full participation in the global digital economy.
- **The WARDIP is expected to contribute to key IDA20 priorities related to digital.** While these priorities are not officially settled yet, the proposed program would support in particular on “Jobs and Economic Transformation” (digital financial services) and on “Technology: Harnessing the Benefits of Digital Connectivity and Data Infrastructure” (broadband internet)<sup>54</sup>. In addition, as IDA countries embrace digital transformation, they have emerging threats to cybersecurity and data privacy. Risks relating to data protection, privacy and cybersecurity are growing rapidly with digitalization, and are further compounded by lack of adequate legal frameworks and institutional capacity in many IDA countries. IDA20 is expected to assist countries to formulate appropriate legal and regulatory frameworks, build systems and institutional capacity for cybersecurity and data protection, and provide the training and investments needed to strengthen resilience against cyberattacks

**The WARDIP is also aligned with strategies of regional and sub-regional bodies in SSA:** These include but are not limited to the:

- **The Digital Transformation Strategy for Africa (DTS4A) (2020-2030)**:<sup>55</sup> This document, adopted by the AU on February 9, 2020, includes a series of recommendations and actions to drive the digital transformation, propel industrialization in Africa and contribute to the digital economy in support of AfCFTA. The strategy covers foundational pillars, critical sectors and five cross-cutting themes (Digital Content & Applications, Digital ID, Emerging Technologies, Cybersecurity, Privacy and Personal Data Protection, Research and Development) to support the digital ecosystem. The DTS4A also underscores the criticality of creating a conducive environment for the uptake of digital financial services and promoting digital trade.
- **SMART Africa Strategic Vision**:<sup>56</sup> The SMART Africa Manifesto was endorsed by all Heads of State and Government of the African Union in 2014. The umbrella objective is to accelerate sustainable socio-economic development on the continent through the development of a knowledge economy through affordable access to broadband and usage of information and communications technologies (ICT). The proposed program could support the Smart Africa vision to accelerate the digitalization of the continent and create to create a single digital market in Africa by 2030. The proposed project could also support the Smart Africa Alliance e-Payments initiative, which aims to facilitate trade across the continent, building practical solutions that will promote economic integration and

<sup>51</sup> <https://documents1.worldbank.org/curated/en/249911623450779120/pdf/Supporting-Africa-s-Recovery-and-Transformation-Regional-Integration-and-Cooperation-Assistance-Strategy-Update-for-the-Period-FY21-FY23.pdf>

<sup>52</sup> <https://www.worldbank.org/en/topic/fragilityconflictviolence/publication/world-bank-group-strategy-for-fragility-conflict-and-violence-2020-2025>

<sup>53</sup> <https://www.worldbank.org/en/programs/all-africa-digital-transformation>

<sup>54</sup> see Annex 3 for alignment with current IDA19 priorities related to digital

<sup>55</sup> <https://au.int/en/documents/20200518/digital-transformation-strategy-africa-2020-2030>

<sup>56</sup> <https://smartafrica.org>



achieve Africa’s potential.

In addition, at the country level, the first proposed WARDIP SOP 1 supports the objectives of each participating country’s (The Gambia, Guinea, and Mauritania) Country Partnership Framework (CPF), which include objectives focused on strengthening regional integration, improving the overall infrastructure to stimulate private investments and access to markets, and increase human capital.

Table 2: Relationship to CPF in each of the countries participating to the SOP 1 of WARDIP

CPF	Relevant objectives
<a href="#">The Gambia, Draft CPF FY22-26</a>	<ul style="list-style-type: none"> <li>Focus Area 2: Enable Inclusive and Resilient Private Sector Driven Job Creation/ Objective 2.4. Catalyze development of an inclusive Digital Economy</li> </ul>
<a href="#">Republic of Guinea, CPF FY18-23</a>	<ul style="list-style-type: none"> <li>Pillar 3: Create Agricultural productivity and economic growth / Objective 8: Improve Business environment and Objective 9: Maximize access to job opportunities, especially young people</li> </ul>
<a href="#">Mauritania, CPF FY18-23</a>	<ul style="list-style-type: none"> <li>Focus Area 1: Promote Economic Transition for Diversified and Resilient Growth / Objective 1.3: Promote the development of productive cities and adjacent territories in the context of decentralization</li> <li>Focus Area 3: Strengthen Economic Governance and Private Sector-Led Growth / Objective 3.2 Improve private sector participation in economic activities</li> </ul>

The program aims to enhance resilience and adaptation to climate change and decrease the emissions of Green House Gases (GHG) in alignment with the World Bank Group Climate Action Plan 2020-2025. The objectives in the Climate Action Plan include increasing financing for climate change, integrating climate considerations into the operations and activities, including screening projects for climate risks and building in appropriate risk mitigation measures, and supporting the integration of climate considerations in policy planning, investment design, implementation and evaluation.

The proposed WARDIP SOP 1 components include several opportunities to reduce the emission of GHG and to increase resilience and adaptation to climate change. Some of the climate co-benefits would be direct (support to safeguard broadband infrastructure from climate related risks and to increase climate resilience of digital infrastructure, and development of eWaste management strategy). Other climate co-benefits would be indirect (e.g.: online market development, digital capabilities and e-commerce).

Specific approaches include guidelines and standards for climate resilience, adaption and mitigation at the regional level. For example, standards for the design of climate-resilient digital infrastructure, like subsea cables, landing stations, and data centers that are energy-efficient and climate resilient. Guidelines for post-disaster backup procedures are also important, particularly repair and recovery options for digital infrastructure, such as mobile network antennas, poles and towers.<sup>57</sup> Other approaches include: i) capacity-building and information sharing with good practices on adaptation and mitigation that can be localized at the country-level; ii) facilitating access to climate experts who can support the development of relevant analysis, including topographical assessments to evaluate flood risks in project-specific locations, heat vulnerability assessments and drought-risk assessments; as well as iii) regional guidelines on infrastructure

<sup>57</sup> <https://openknowledge.worldbank.org/handle/10986/31912>



specifications, building codes, infrastructure procurement; and the procurement of hardware and software. Program climate co-benefits are relevant in several of the components (See Annex 5 for details).

### C. Proposed Development Objective(s)

The development objective is to increase access to broadband and digital services through the development and integration of digital markets in the Western Africa region.

#### Key Results (From PCN)

The proposed PDO-level results indicators for the WARDIP may include:

Increase access to broadband and digital services

- a) Increase in the number of unique mobile broadband subscribers, in the region and in participating countries (of whom, female users);
- b) Decrease in the monthly price of 1 GB mobile broadband data as a percent of GNI
- c) Percentage of businesses accessing services digitally

Development and integration of digital markets

- a) Increased number of digital cross border transactions
- b) Increased volume of international traffic (Kbit/s per person)

### D. Concept Description

**The overall WARDIP objective is to support Western African countries in jointly developing a single digital market whilst strengthening as needed specific aspects of the enabling environment such as digital skills and innovation environment.**

A comprehensive regional approach to digital transformation is needed to not only achieve regional objectives but also achieve national digital development objectives more effectively and rapidly. Cooperation between the countries to develop regional policies, regulations and agreements and effectively implement them would need to be further enhanced to remove barriers to cross-border connectivity, data flows and digital services, allowing a seamless and competitive regional digital ecosystem to emerge. This would drive a reinforcing cycle of economic growth, investment, innovation, job creation and improved service delivery. Developing a regional digital market would also mean establishing a critical mass of resources, supporting cooperation to identify and address shared challenges as well as take advantage of shared opportunities, particularly important for the smaller economies. The proposed program will therefore build on the SDM framework<sup>58</sup> developed for the Eastern African Countries, which maps out the simultaneous integration of the connectivity, data, and online market layers. Advancement in each distinct market layer is expected to create a virtuous cycle as each segment builds on another, reinforcing the development, expansion and integration of the region's digital market.

The proposed program would comprise four components. Regional grant financing provided to ECOWAS (see Annex 1) would support the following activities under components one to three: (i) development of regional regulatory framework when needed; (ii) monitoring of the implementation at the national level of regional frameworks; and (iii) capacity building/ support to national countries in trans positioning of the regional framework.

<sup>58</sup> World Bank, A Single Digital Market for East Africa: Presenting Vision, Strategic Framework, Implementation Roadmap, and Impact Assessment, 2019.





**Component 1: “Connectivity Market Development and Integration”, would support reforms to reduce barriers to the provision of cross-border telecoms services through open markets as well as broadband connectivity infrastructure deployment under an MFD approach.** Broadband infrastructure, such as fiber optic and mobile networks, as well as broadband services, benefit greatly from scale, as the cost of capital investment and operating costs can be spread across more users through infrastructure sharing based on open access. Economies of scale from a regionally integrated market could also attract more private investment. Increased competition would enable wholesale, and subsequently, retail connectivity services prices to fall in the region. More affordable prices would in turn help expand access and boost demand for related services, generating increased data traffic and online activity critical to the business case for further network investment in capacity upgrades and expansion to new areas. Doing so can help address deficits for landlocked countries or close to urban-rural divide, which is a key lever for job creation and advancing inclusive economic growth. Lower cost and more accessible connectivity would also pave the way for more innovative services and digital businesses that rely on higher bandwidth capacity, further reinforcing this positive cycle. In line with regional goals, this component could potentially include support to national objectives which would be critical to set the path for integration.<sup>59</sup>

**Component 2: “Data Market Development and Integration”, aims to enable the secure exchange, storage and processing of data across borders to support regional deployment and access to data-driven services, innovation and infrastructure, including reducing regional restrictions on the free flow of data and increasing investments into data infrastructure.** Hence improving legal and regulatory environment for cybersecurity, and data protection and privacy is key. A more integrated data market in Western Africa could boost innovation and enhance data analytics, resulting in significant economic and social benefits and efficacy gains across virtually all sectors. The creation of a larger data market would also generate substantial cost savings by creating economies of scale that make investment in regional data centers that support online services, including cloud hosting, more financially viable. In line with regional goals, this component could potentially include support to national objectives which would be critical to set the path for integration.<sup>60</sup>

**Component 3: “Online Market Development and Integration”, aims to support the development and integration of the online market, which would enhance the enabling environment for the cross-border delivery and access of digital goods or services.** This component would support governments, firms and citizens in participating countries to access and deliver private and public services online, as well as to make online purchases seamlessly from anywhere in the region. When recognized across borders through regional frameworks, e-signatures can accelerate trade and integration by enabling secure cross-border transactions. This would also help to enable cross-border payments and commerce, which this component will further enhance by reducing additional barriers around cross-border transactions and increasing regional coordination in particular on digital payments and other digital financial services. Digital payments need to be supported by sound and proportionate legal framework to ensure their effective operations. In this context regulatory frameworks based on good practices and international standards need to be in place and harmonized at regional level to be applicable across countries. In addition, the component would also support the deployment of key public digital services to help citizens and businesses streamline online interaction with the government, following digital standards developed at the Regional level to facilitate regional cross-border flow and exchange of data. Digital skills are key to boost technologies adoption, digital innovation and entrepreneurship, which would be supported under this component by targeting strategic regional priority economic sectors, such as agriculture and tourism. As a result, citizens and businesses would gain larger access to a wider range of digitally enabled services. In line with regional goals, this component could potentially include support to national objectives which would be critical to set the path for integration. It is also worthy to note that many activities under this component will contribute to the reduction of GHG emission from transportation needs due to availability of online market enabling remote access to goods or services.

<sup>59</sup> National projects that are relevant to, and aligned with, the regional outcomes of this project may be added to this component.

<sup>60</sup> National projects that are relevant to, and aligned with, the regional outcomes of this project may be added to this component.



**Component 4: “Project Management”, would provide technical assistance and capacity support for program preparation and implementation.** It would finance the operating costs of the Project Implementation Units (PIUs) for each participating country as well as a PIU embedded in the participating regional body. Support would be provided to ensure the establishment of adequate social and environmental safeguards capacity, as well as fiduciary and monitoring and evaluation (M&E), for the implementation of activities. Due to potential high safeguards risks associated with the program, particular attention would be provided to ensure adequate development of technical studies and capacity building of relevant institutions and coordination measures. Program preparation would also include a set of technical studies to ensure PCM approach is taken as well as the necessary environment and social safeguards studies and assessment around climate co-benefits.

**The concept for the proposed program is based on a Series of Projects (SOP) approach.** It is proposed to adopt a SOP approach to allow countries and regional bodies to join in the future (subject to the availability of IDA funds and meeting eligibility criteria) and to ensure coherence of interventions at country level to advance the objective of achieving a Single Digital Market in West Africa by 2030. It is therefore proposed that WARDIP incorporates both regional IDA credit and grant financing to meet the needs of the participating countries in progressing on the different layers of the SDM framework, as well as IDA grant financing to relevant regional organizations to support renewed legal and regulatory harmonization efforts among member countries. It is proposed to have ECOWAS joining SOP 1 to establish a strong feedback loop on the timely implementation of upcoming new regional regulations in countries through supporting countries and monitoring implementation of regional regulation at the national level to achieve – similarly to the European Union where each country is effectively functioning in accordance to a unified regional framework - a set of digital national markets in Western Africa with uniform rules. The proposed SOP structure (with around 3 participating countries per SOP) will allow countries eligible for IDA financing at the time of their application for IDA support under the WARDIP Project to join on a commitment and/or readiness basis.

Legal Operational Policies	Triggered?
Projects on International Waterways OP 7.50	TBD
Projects in Disputed Areas OP 7.60	No

Summary of Screening of Environmental and Social Risks and Impacts

At Concept stage, the overall environmental and social risks and impacts is substantial (Substantial for environment and moderate for social). Main physical works are expected under component 1, regarding the construction of submarine cables, and also during the establishment of a data center.

The rating also takes into consideration the fact that implementing agencies are not familiar with the Bank Environmental and Social Framework. close support and capacity building sessions will be set out to help clients.



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