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Report No: PAD00164

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT
ON
PROPOSED CREDITS

IN THE AMOUNT OF
EUR25.8 MILLION (US$28.0 MILLION EQUIVALENT)
AND
EUR66.3 MILLION (US$72.0 MILLION EQUIVALENT) FROM THE SCALE-UP WINDOW

TO THE

REPUBLIC OF TOGO

FOR A

TOGO DIGITAL ACCELERATION PROJECT – SERIES OF PROJECTS 1

November 25, 2024

Digital Development Global Practice
Western and Central Africa Region

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CURRENCY EQUIVALENTS

(Exchange Rate Effective October 31, 2024)

Currency Unit =	WEST African Financial Community Franc (FCFA/XOF), EURO (EUR)
US$1 =	EUR0.92017483
US$1 =	XOF603.59501189

FISCAL YEAR
January 1 - December 31

Regional Vice President:	Ousmane Diagana
Regional Director:	Paul Noumba Um
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Task Team Leaders:	Aneliya Muller, Natalija Gelvanovksa, Xavier Decoster

ABBREVIATIONS AND ACRONYMS

AI	Artificial Intelligence
AM	Accountability Mechanism
ANCy	National Cybersecurity Agency (*Agence Nationale de la Cybersécurité*)
ARCEP	Regulatory Authority for Electronic Communications and Posts (*Autorité de Régulation des Communications Electroniques et des Postes*)
ATD	Digital Togo Agency (*Agence Togo Digital*)
AU	African Union
CAPEX	Capital Expenditures
CCDR	Country Climate Development Report
CE	Citizen Engagement
CPF	Country Partnership Framework
CREWS	Climate Risk and Early Warning System
DE4A	Digital Economy for Africa
ESS	Environmental and Social Standards
EWS	Early Warning Systems
FM	Financial Management
GB	Gigabyte
GCP	Global Challenge Program
GDP	Gross Domestic Product
GHG	Green House Gas
GIZ	German Agency for International Cooperation (*Deutsche Gesellschaft für Internationale Zusammenarbeit*)
GNI	Gross National Income
GoT	Government of Togo
GSMA	Global System for Mobile Communications
GRM	Grievance Redress Mechanism
GRS	Grievance Redress Service
GVA	Group Vivendi Africa
HLO	High-Level Objective
ICT	Information Technology and Communications
IDEA	Inclusive Development through Electricity Access
IFC	International Finance Corporation
IPDCP	Body for the Protection of Personal Data (*Instance de Protection des Données à Caractère Personnel*)
IPF	Investment Project Financing
IPR	Independent Post Review
ISP	Internet Service Provider
ITU	International Telecommunication Union

KfW	German Development Bank (*Kreditanstalt für Wiederaufbau*)
M&E	Monitoring and Evaluation
MCC	Millenium Challenge Corporation
MENTD	Ministry of Digital Economy and Digital Transformation (*Ministère de l'Economie Numérique et de la Transformation Digitale*)
MFD	Maximizing Finance for Development
MSME	Micro, Small, and Medium Enterprise
NDC	Nationally Determined Contribution
OPEX	Operating Expenses
PAQEEB	Improving Quality and Equity of Basic Education Project
PCE	Private Capital Enabling
PCM	Private Capital Mobilization
PDO	Project Development Objective
PforR	Program for Results
PIU	Project Implementation Unit
PIM	Project Implementation Manual
PPA	Project Preparation Advance
PPP	Public-Private Partnership
PPR	Procurement Post Review
PPSD	Project Procurement Strategy for Development
PSC	Project Steering Committee
PWD	Persons with Disabilities
R&D	Research & Development
SEA	Sexual Exploitation and Abuse
SH	Sexual Harassment
SIN	Digital Infrastructure Company (*Société des Infrastructures Numériques*)
SSA	Sub-Saharan African
STEM	Science, Technology, Engineering, and Mathematics
STEP	Systematic Tracking of Exchanges in Procurement
SUW	Scale-Up Window
TA	Technical Assistance
ToC	Theory of Change
TVET	Technical Vocational Education and Training
UNICEF	United Nations Children's Fund
WARCIP	West African Regional Communications Infrastructure Program
WBG	World Bank Group
WDI	World Development Indicators
WURI	West Africa Unique Identification for Regional Integration and Inclusion Project

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DATASHEET

BASIC INFORMATION

Project Beneficiary(ies)	Operation Name		
Togo	Togo Digital Acceleration Project		
Operation ID	Financing Instrument	Environmental and Social Risk Classification	
P179138	Investment Project Financing (IPF)	Moderate	

Financing & Implementation Modalities

[ ] Multiphase Programmatic Approach (MPA)	[ ] Contingent Emergency Response Component (CERC)
[✓] Series of Projects (SOP)	[ ] Fragile State(s)
[ ] Performance-Based Conditions (PBCs)	[ ] Small State(s)
[ ] Financial Intermediaries (FI)	[ ] Fragile within a non-fragile Country
[ ] Project-Based Guarantee	[ ] Conflict
[ ] Deferred Drawdown	[ ] Responding to Natural or Man-made Disaster
[ ] Alternative Procurement Arrangements (APA)	[ ] Hands-on Expanded Implementation Support (HEIS)

Expected Approval Date	Expected Closing Date
18-Dec-2024	31-Jan-2030
Bank/IFC Collaboration	Joint Level
Yes	Complementary or Interdependent project requiring active coordination

Proposed Development Objective(s)

Expand access to affordable and climate-resilient broadband connectivity, enhance digital skills and digital entrepreneurship

Components

Component Name	Cost (US$)

Component 1. Expanding Broadband Connectivity	60,000,000.00
Component 2. Boosting Digital Skills and Entrepreneurship Ecosystem	40,000,000.00
Component 3. Strengthening Legal, Regulatory and Institutional Environment for Digital Economy	5,000,000.00
Component 4. Project Management	5,000,000.00

Organizations

Borrower:	Republic of Togo		
Contact	Title	Telephone No.	Email
Implementing Agency:	Ministry of Digital Economy and Digital Transformation		
Contact	Title	Telephone No.	Email
Kafui Ekouhoho	Director of Digital Togo Agency	22892218696	kafui.ekouhoho@numerique.gouv.tg

PROJECT FINANCING DATA (US$, Millions)

Maximizing Finance for Development

Is this an MFD-Enabling Project (MFD-EP)? Yes

Is this project Private Capital Enabling (PCE)? Yes

SUMMARY

Total Operation Cost	**110.00**
Total Financing	**110.00**
of which IBRD/IDA	**100.00**
Financing Gap	**0.00**

DETAILS

World Bank Group Financing

International Development Association (IDA)	100.00

IDA Credit	28.00
IDA Shorter Maturity Loan (SML)	72.00
Non-World Bank Group Financing	
Commercial Financing	10.00
Unguaranteed Commercial Financing	10.00

IDA Resources (US$, Millions)

	Credit Amount	Grant Amount	SML Amount	Guarantee Amount	Total Amount
National Performance-Based Allocations (PBA)	28.00	0.00	0.00	0.00	28.00
Scale-Up Window (SUW)	0.00	0.00	72.00	0.00	72.00
Total	**28.00**	**0.00**	**72.00**	**0.00**	**100.00**

Expected Disbursements (US$, Millions)

WB Fiscal Year	2025	2026	2027	2028	2029	2030
Annual	5.00	10.00	15.00	20.00	25.00	25.00
Cumulative	5.00	15.00	30.00	50.00	75.00	100.00

PRACTICE AREA(S)

Practice Area (Lead)

Digital Development

Contributing Practice Areas

Education; Finance, Competitiveness and Innovation; Jobs; Climate Change

CLIMATE

Climate Change and Disaster Screening

Yes, it has been screened and the results are discussed in the Operation Document

SYSTEMATIC OPERATIONS RISK- RATING TOOL (SORT)

Risk Category	Rating
1. Political and Governance	Moderate
2. Macroeconomic	Substantial
3. Sector Strategies and Policies	Moderate
4. Technical Design of Project or Program	Substantial
5. Institutional Capacity for Implementation and Sustainability	Moderate
6. Fiduciary	Substantial
7. Environment and Social	Moderate
8. Stakeholders	Moderate
9. Overall	Substantial

POLICY COMPLIANCE

Policy

Does the project depart from the CPF in content or in other significant respects?

[ ] Yes [✓] No

Does the project require any waivers of Bank policies?

[ ] Yes [✓] No

ENVIRONMENTAL AND SOCIAL

Environmental and Social Standards Relevance Given its Context at the Time of Appraisal

E & S Standards	Relevance
ESS 1: Assessment and Management of Environmental and Social Risks and Impacts	Relevant

ESS 10: Stakeholder Engagement and Information Disclosure	Relevant
ESS 2: Labor and Working Conditions	Relevant
ESS 3: Resource Efficiency and Pollution Prevention and Management	Relevant
ESS 4: Community Health and Safety	Relevant
ESS 5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Relevant
ESS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources	Relevant
ESS 7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	Not Currently Relevant
ESS 8: Cultural Heritage	Relevant
ESS 9: Financial Intermediaries	Not Currently Relevant

NOTE: For further information regarding the World Bank's due diligence assessment of the Project's potential environmental and social risks and impacts, please refer to the Project's Appraisal Environmental and Social Review Summary (ESRS).

LEGAL

Legal Covenants

Sections and Description
Schedule 2. Section I.D.1.(a): The Recipient shall prepare and furnish to the Association no later than one (1) month after the Effective Date a draft work plan and budget containing all the activities proposed to be carried out during the first year of Project implementation and a proposed financing plan for expenditures required for such activities, setting forth the proposed amounts and sources of financing. All subsequent annual work plans and budgets shall be prepared and furnished to the Association no later than November 30 of each Fiscal Year during the implementation of the Project.
Schedule 2. Section I.A.2.(a): The Recipient shall establish, no later than one (1) month after the Effective Date, or any later date agreed by the Association, and thereafter maintain, at all times during the implementation of the Project, a project steering committee with a composition, mandate, and resources satisfactory to the Association.
ESCP: The Recipient shall, no later than three (3) months after the Effective Date, adopt the sexual exploitation and abuse (SEA) and sexual harassment (SH) prevention and management action plan.
ESCP: The Recipient shall, no later than 90 days after the Effective Date, prepare a Grievance Redress Mechanism (GRM) and then operationalize and maintain it throughout project implementation.

Conditions

Type	Citation	Description	Financing Source
Disbursement	Schedule 2. Section III.B.1(b)	No withdrawal shall be made for Eligible Expenditures under Credit	IBRD/IDA

		(B) until 100% of Credit (A) is withdrawn.	
Disbursement	Schedule 2. Section III.B.1(c)	No withdrawal shall be made for Grants under Category (2), unless and until the Recipient has adopted the Grants Manual in form and substance satisfactory to the Association.	IBRD/IDA

I. STRATEGIC CONTEXT

A. Project Strategic Context

1. **Togo, a West African country of roughly eight million people, is endowed with a strategic location, a natural deep-water port, fertile land, and mineral resources**. It is positioning itself as a regional leader in several agricultural value chains as well as in port and logistics services. Togo has an advantageous geographical location in the heart of West Africa between Ghana to the west and Benin to the east. Its numerous natural assets include land resources favorable to agriculture, significant phosphates, and other mineral resources. Togo has the deepest port in the region, which can serve the landlocked countries of Mali, Burkina Faso, and Niger. It is also a regional air transport hub. Togo benefits from a stable currency and generally favorable financing conditions and can also tap into regional markets as a member of the West African Economic and Monetary Union.

2. **Growth in recent years has been resilient but unable to support rapid poverty reduction**. Growth averaged five percent between 2016 and 2019 and remained relatively strong at 4.8 percent between 2020 and 2023, despite a series of shocks since the onset of COVID-19. While Togo's recent economic performance has been positive, it has still fallen short of many peers with limited evidence of structural transformation. The national poverty rate declined only modestly from 45.5 percent in 2018 to 43.8 percent in 2021, with significant and widening geographical differences. This can be attributed to stagnant productivity, large disparities in economic opportunities and access to basic services between rural and urban areas, a small and highly concentrated formal private sector, and limited progress in industrialization, despite the expansion of port activities and the development of industrial zones. Climate change, with more frequent droughts, floods, and coastal erosion, is impacting economic activity and food security. Poverty reduction efforts have also been affected by escalating fragility, security risks, and governance issues, jeopardizing socioeconomic and political stability.

3. **Cognizant of multiple and compounding challenges, the Government of Togo (GoT) has recalibrated its strategic objectives to accelerate growth, including by leveraging digital technologies for inclusive and resilient socio-economic development**. In the wake of the pandemic, the GoT adopted in 2020 a new national development strategy, "Togo 2025 Government Roadmap", which keeps an overarching goal of making Togo a peaceful, modern nation and an emerging economy by 2030. The Roadmap recognizes digital technologies as a key lever for accelerating growth, driving the competitiveness of priority sectors, and creating high-value-added jobs. One of its ten ambitions is to make Togo a regional digital hub through regulatory measures and investment projects, underpinned by digitalization initiatives embedded in over two-thirds of all the other ambitions. This vision is complemented by a comprehensive sectoral strategy, Digital Togo 2025, adopted in 2022 under the leadership of the Ministry of Digital Economy and Digital Transformation (*Ministère de l'Economie Numérique et de la Transformation Digitale*, MENTD) and implemented by the Digital Togo Agency (*Agence Togo Digital,* ATD).[1] In support of the GoT strategic priorities, the proposed Togo Digital Acceleration Series of Projects (SOP) represents a programmatic engagement to concomitantly drive digital inclusion by addressing gaps in affordable broadband connectivity, while boosting digital skills and entrepreneurship to support digital usage, productivity growth, and job creation – key priorities outlined in the World Bank's new Global Challenge Program (GCP) "Accelerating Digitalization".[2] As detailed below, this is a transformational World Bank engagement that leverages integrated approach with the International Finance Corporation (IFC), other development partners and the World Bank financed projects in Togo to connect to broadband close to 8000 unconnected public institutions, creating positive externalities for private sector companies to connect households in the vicinity. Over a million people are expected to use new or enhanced internet as a result of project activities. It will also create a conductive environment and provide

[1] Digital Togo 2025 Strategy sets ambitious objectives to: (i) include all citizens in the society and economy through biometric identification and access to high-speed internet and equipment; (ii) digitize public and social services to bring the Administration closer to users; and (iii) accelerate the transformation of the economy and become a regional tech hub with an ecosystem of innovation, startups, and digital talent.

[2] World Bank, 2024. Global Challenge Program: Accelerating Digitalization. Approach Paper. http://documents.worldbank.org/curated/en/099302410042414534/SECBOS1bdfac040801889219f6b38f5150e

catalytic public funding to lift the entrepreneurship ecosystem from its nascent status, marking the market attractive to institutional investors, such as IFC, which will be launching a parallel upstream engagement to integrate "acceleration-to-investment" best practices into the entrepreneurship programs design and implementation.

4. **Importantly, enhancing Togo's resilience to climate change, including by leveraging digital technologies, will be critical given the country's high vulnerability to disaster risks.** Togo ranks 137th in vulnerability and 121st in readiness out of 184 countries in the 2021 Notre Dame Global Adaptation Initiative Index, indicating both its high exposure to climate change and its low readiness to face it. Temperatures have increased by 0.74°C since 1960, with the rate of increase more pronounced in more arid and poorer northern regions.[3] The main climate risks include floods (in coastal areas with a high concentration of industrial sites), droughts, water scarcity, heat waves, and wildfires (particularly in the northern Savanes and Kara regions).[4] Climate-related disasters, especially floods and rainfall, could damage infrastructure, including underground broadband networks that are concentrated in coastal areas.[5] In this context, investments in climate-resilient connectivity and the development of climate-informed guidelines for the digital sector under this project will contribute towards strengthening the infrastructure resilience, which is a key prerequisite for a smooth deployment and operation of innovative digital solutions for climate change adaptation, such as early warning systems, and weather and agricultural advisory services.

B. Sectoral and Institutional Context

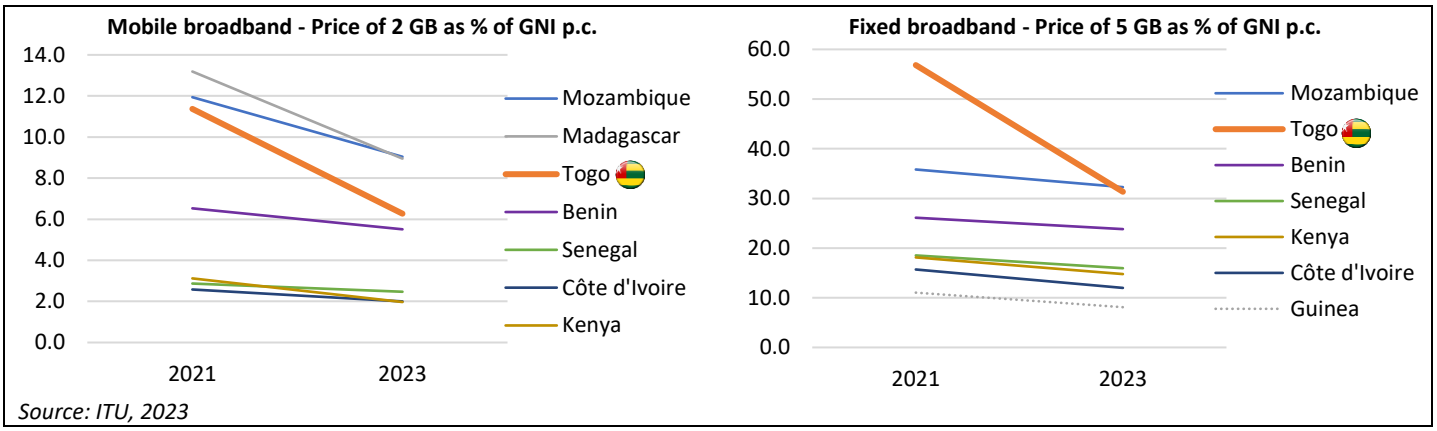
5. **The GoT has undertaken substantial efforts to create a favorable legal, regulatory, and institutional environment for the digital economy, including in critical domains of telecom market development, data protection, and cybersecurity.** The Regulatory Authority for Electronic Communications and Posts (*Autorité de Régulation des Communications Electroniques et des Postes*, ARCEP) is responsible for telecom market regulation, supervision, and spectrum management under the 2012 Law on Electronic Communications that, despite being comprehensive, requires continuous updates. Foundational legal texts pertaining to the digital economy include the 2017 Law on Electronic Transactions (that, jointly with the ensuing decree on electronic signatures, allows for the dematerialization of public procedures), the 2017 Guidance on Information Society, the 2018 Law on Cybersecurity and Cyber-criminality (updated in 2022), the 2019 Law on Personal Data Protection, and the 2020 Law on Biometric Identification (amended in 2022).[6] Based on the legal texts, the GoT established in 2019 the National Cybersecurity Agency (*Agence Nationale de la Cybersécurité*, ANCy), responsible for defining and implementing cybersecurity policy and strategic orientations, and in 2020 the Body for the Protection of Personal Data (*Instance de Protection des Données à Caractère Personnel*, IPDCP), which is currently being operationalized. Moreover, through an innovative public-private partnership (PPP) with ASSECO (a leading Polish information technology firm), the GoT has set up a national Cyber Incidence Response Team called Cyber Defense Africa, which functions as the operational and government-controlled arm in charge of cyberattacks detection, response, and remediation.[7] The GoT has also been active in advancing the regional cyber-resilience agenda with the creation of an African Center for Coordination and Research on Cybersecurity.[8] This progress, including the adoption in 2024 of a national cybersecurity strategy, is reflected in Togo's positive evaluation in the 2024 International

[3] World Bank Climate Change Knowledge Portal. 2023. https://climateknowledgeportal.worldbank.org/country/togo/climate-data-historical
[4] ThinkHazard!, 2022. https://thinkhazard.org/en/report/243-togo.
[5] The Global System for Mobile Communications (GSMA) mobile network coverage maps for Togo show a concentration of digital infrastructure, including mobile sites and copper-based networks, in coastal areas, making them vulnerable to sea level rise and flooding. For example, the 2015 climate events in Mozambique damaged telecom wooden poles, fiber optic and copper cables, with losses estimated at US$375,788 according to the Post-Disaster Needs Assessment. https://www.gfdrr.org/sites/default/files/publication/Mozambique%20Report-RapidAssessment-EN.pdf.
[6] The Laws on Data Protection and Biometric Identification were elaborated with the World Bank support provided through Togo Social Sector (P166670; closed); and West Africa Unique Identification for Regional Integration and Inclusion (WURI) Project - Phase 2 - (P169594).
[7] See, e.g., Box 1.19 in World Bank and United Nations. 2024. *Combatting Cybercrime: Tools and Capacity Building for Emerging Economies* (2nd ed).
[8] Operationalization of the Center is supported by a dedicated World Bank Trust Fund that helps the GoT to *inter alia* (i) refine its scope, ensuring it is demand-driven and aligned with regional initiatives; (ii) define a sustainable business model; and (iii) build consensus in the region for its support.

Telecommunications Union (ITU)'s Global Cybersecurity Index, which places the country in the advancing group, with its scores in all categories exceeding African average.

6. **Boosted by increased competition, fixed broadband penetration and affordability have been improving**. Recent improvements in the competition dynamics of the broadband market include privatizing the incumbent operator Togo Telecom in 2019 (with support from IFC), establishing in 2021 a colocation data center (Lomé Carrier Hotel) financed under the now closed World Bank-financed West African Regional Communications Infrastructure Program (WARCIP, P123093),[9] as well as facilitating the entry in 2022 of a new operator Csquared Woezon (with support from IFC)[10] and the landing of two new submarine cables.[11] In addition to Csquared, four other key players are active in the fixed broadband market: Togo Telecom (Togocom), Group Vivendi Africa (GVA), Café Informatique, and Teolis. On the back of improved competitive dynamics and ARCEP's regulatory actions,[12] ITU reported affordability for fixed broadband in Togo improving two-fold over the past two years (as per Figure 1). Despite these improvements, fixed household broadband penetration stands at 5.6 percent in 2024, behind the average of 8.6 percent in countries within the same Gross Domestic Product (GDP) per capita decile.[13] Importantly, there are significant connectivity gaps in public institutions – today, less than 1 percent of schools and less than 10 percent of health centers in Togo are estimated to be connected to internet, which undermines an effective use of digital education content, distance learning, telemedicine or development of innovative sectoral solutions.[14] To further boost the national high-speed fixed broadband coverage, the GoT adopted Decree 2020-116/PR and Arrêté 2021-002, obligating non-telecom utilities (such as electricity, water, and transport) to systematically deploy fiber optics during civil works and subsequently transfer them to a state-owned digital infrastructure company (*Société Infrastructures Numériques*, SIN), which has been mandated to hold and commercialize all public digital assets.

Figure 1. Broadband Affordability Dynamics, 2021-2023



Source: ITU, 2023

7. **Mobile broadband market has been also growing; however, gaps, including important gender and regional divides, remain.** The number of unique mobile broadband subscribers per 100 inhabitants in Togo, which stood at 25.7 percent in 2023, lags key regional comparators (43.4 percent in Côte d'Ivoire and 51.7 percent in Ghana).[15] Affordability,

[9] Lomé Carrier Hotel was privatized in January 2023 and is now owned and operated by a private company Horizon Data Centre Togo Company Ltd.
[10] CSquared's shareholders include IFC, Google, Convergence Partners (private equity firm) and Mitsui. CSquared's Togo (CSquared Woezon) is structured as a joint-venture with 56-percent owned by CSquared and 44-percent owned by the GoT through a state-owned digital infrastructure company SIN. It acts as an open-access wholesale operator, maintaining and operating: (i) terrestrial fiber optic networks, including the e-Government network as well as the terrestrial fiber deployed by the electric company Communauté Electrique du Bénin; and (ii) the Equiano submarine cable.
[11] Maroc Telecom (Moov) West Africa cable, operational since August 2021 and Google's Equiano cable operational since August 2023.
[12] These actions include regulatory decision on billing transparency and international roaming, as well as increased rigor to push operators to increase quality of service (QoS) and compliance (with cumulative fines reaching US$13million over the past two years).
[13] Telegeography, 2024 (data from June 2024).
[14] Data provided by MENTD based on consultations with the Ministries of Primary and Secondary Education and Health.
[15] World Bank's calculation based on GSMA and United Nations Population data.

while significantly improving (with the price of 2 Gigabyte (GB) dropping from 11.4 percent of Gross National Income (GNI) p.c. in 2021 to 6.3 percent in 2023), falls short of international affordable internet targets. However, additional regulatory measures[16] as well as increased international internet traffic from the Equiano submarine cable that became operational in August 2023 are expected to further enhance affordability and quality of broadband in the country. Internet use in Togo is closely tied to socioeconomic status, with significant gender and urban-rural divides (see Annex 2 for further detail). Based on the latest available data (2018), only 27 percent of women in urban areas used internet, compared to 49 percent of men, while rural usage was minimal (2.4 percent for women, 9 percent for men). Mobile phone ownership among women is 57 percent, below the Sub-Saharan African (SSA) average of 75 percent, due to barriers like affordability, digital skills, and security concerns.[17]

8. **The GoT has been working on creating an enabling environment for startups and entrepreneurs, including in the digital sector, to drive quality job creation, economic diversification, and demand-based innovations.** In 2023, the GoT adopted a Law on Innovation Ecosystem in Togo[18], which establishes legal grounds for identifying innovative startups to provide them with fiscal, financial, and administrative incentives. Effective operationalization of this Law requires the adoption of accompanying decrees and well-designed implementation mechanisms. Importantly, the country will need to expand a pipeline of viable startups, which – against the background of endemic informality – is currently considered quite modest, especially compared to regional peers (such as Ghana, Rwanda, and Senegal). Beyond digital connectivity gaps and limited online payment platforms, other major challenges for start-ups at all stages is access to finance, mentoring, trainings, and networking to grow their businesses[19] as well as digital adoption and availability and reliability of digital public services.[20] The incubation and support system for micro, small, and medium enterprises (MSMEs) and startups is still nascent, with limited financial and human resources. Importantly, there is limited development of the institutionally backed pre-seed or seed stage investment funds operating in Togo today. A handful of small incubators based in Lomé promote digital technology innovation and research, namely Nunya Lab[21] and Djanta hub; however, support services remain fragmented and insufficient to help the innovation ecosystem reach scale.

9. **To effectively drive innovation, Togo is looking to address the shortage of professionals with specialized digital skills, accentuated by a clear gender divide**. A mismatch between the quantity and quality of skilled workers supplied by the formal education system and what is required by firms represents one of the key constraints to private sector-led growth, while a sizeable share of the labor force remains under-employed. Tertiary education enrollment remains very low, particularly in science, technology, engineering, and mathematics (STEM) fields. According to the Ministry of Higher Education and Research, a mere 1.7 percent of students in Togo are enrolled in Information Technology and Communications (ICT) related courses. Among the latter, a little less than 2 out of 10 students (17.3 percent) are female.[22] When considering a wider range of scientific and technological courses, the share of students increases to 23.6 percent, of which just over 2 out of 12 students (15.6 percent) are female. The GoT has undertaken some initiatives to address these challenges; however, they remain ad hoc and small in scale. For example, beyond the "Wi-Fi Campus" project, which has connected to fiber optic two main universities,[23] the GoT has been working on updating education curricula of

[16] Among the measures planned by ARCEP are the adoption of regulatory decrees for more affordable wholesale broadband tariffs.
[17] With only 55.1 percent of women considered literate and female labor participation stagnant at 55 percent, these challenges hinder women's digital inclusion and financial independence.
[18] The law is similar to Start-up Acts adopted by other countries (e.g., France, Italy, Brazil, South Korea, Argentina, Tunis, Senegal, etc.) aimed at fostering the development of local startups by alleviating tax burden and administrative procedures as well as facilitating their access to financing and markets, assuming they meet specific criteria (such as the creation of high added value products and services and growth potential).
[19] German Agency for International Cooperation (*Deutsche Gesellschaft für Internationale Zusammenarbeit*, GIZ), 2022. Analysis of Digital Ecosystem in Togo.
[20] World Bank. 2024. Business Ready Report. https://www.worldbank.org/en/businessready.
[21] Currently operates small-scale incubation and acceleration programs for digital businesses in selected sectors (e.g., agriculture, education, energy).
[22] Ministry of Higher Education and Research. 2018-2019 Statistical Yearbook of Higher Education.
[23] The interconnectivity to the University of Lomé and the University of Kara was provided in partnership with Togo Telecom, enabling access to the high-speed internet for 72,000 students and professors as well as 121 faculty buildings connected with fiber-optic.

public universities and vocational training programs with new modules and courses on cybersecurity, Artificial Intelligence (AI), software engineering, big data, and data science.[24] The University of Lomé has been exploring an opportunity for online digital trainings with an Indian partner, while MENTD has been in talks with an eLearning content provider "Udacity" to launch a pilot facilitating access of university students and/or company staff and job seekers to online digital skills trainings. Several other programs led by MENTD have been under implementation, namely the Digital Work Environment Project[25] and the National Research and Education Network project.

10. **Overall, advancing Togo's digital transformation and closing existing digital divides will help the country accelerate inclusive and resilient growth and drive the creation of quality jobs.** Expansion and widespread adoption of affordable and resilient broadband and improved digital skills – two foundational catalysts of digital transformation and innovation – can enhance productivity, strengthen the country's resilience to shocks, and unlock opportunities across the economy. As highlighted by the 2023 Digital Africa Report, it is critical to "prioritize digital tools for productive use to generate inclusive, jobs-related spillover effects while expanding coverage of higher-quality broadband internet" and spurring innovation essential to empower people with fewer skills, boosting their potential to generate higher earnings. This can create a positive loop from the "interdependency between demand and supply" of the digital economy, wherein more widespread and affordable digital connectivity stimulates demand for digital services that, in turn, leads to increased investments in higher-quality digital and complementary technologies.[26] Importantly, mounting evidence demonstrates that digital connectivity and technologies can be harnessed for poverty reduction and socio-economic inclusion by improving household welfare and expanding access to basic digital services (further detailed in Section IV.A).

11. **In this context and underpinned by the GoT's long-term commitment to supporting digital transformation, a programmatic engagement through a SOP is proposed, in synergies with projects of other development partners.** To foster inclusive and resilient economic growth by leveraging digital technologies, the first operation (SOP1) will focus on foundational enablers, without which digital transformation and innovation is impossible: (i) expanding affordable broadband connectivity with a focus on social sectors, such as education and health, and providing equipment to connected institutions (addressing supply side constraints of digital economy and service provision); (ii) boosting digital skills and digital entrepreneurship to drive adoption and job creation (addressing demand side factors); and (iii) reinforcing legal and regulatory framework, including on operationalizing IPDCP, developing a cloud strategy and creating conditions for data-based innovation and cross-border data flows (as a transversal foundational block). A second, overlapping project (SOP2) will build on these foundations to bring impact at scale with a stronger focus on regional integration and cutting-edge innovation. To that effect, SOP2 will aim to (i) strengthen digital-based service delivery and digital content creation, leveraging AI (with continued focus on education and health[27]); (ii) reinforce regional connectivity by targeting missing links in the border areas to better interconnect Togo to its neighbors – in alignment with the West Africa Regional Digital Integration Program (WARDIP, P176932);[28] and (iii) conduct other regional activities (both on the investment and reform side). Parallel engagements of other development partners, particularly Millenium Challenge Corporation (MCC), GIZ and German Development Bank (*Kreditanstalt für Wiederaufbau*, KfW) will help amplify the impact, while hedging the risks, as detailed in Table 2.

[24] World bank, 2020. Togo Digital Economy Diagnostic Report.
[25] In 2018, MENTD launched the Digital Work Environment Project targeted at 10 technical and scientific high schools, which were provided with connectivity and a digital exchange platform for students, teachers, and parents to access school-related information and digital learning resources.
[26] Begazo, T.; Dutz, M.; Blimpo, M. 2023. Digital Africa: Technological Transformation for Jobs.
[27] For example, it could support further digitizing education content as well as management and administration processes in selected education institutions to drive efficiency gains. This could also include activities focused on electronic medical records and telemedicine.
[28] SOP2 will also explore opportunities to support secure, interoperable, and standardized shared digital systems at a national and regional scale.

Relevance to Higher Level Objectives

12. **The project is fully aligned with a new World Bank Group's (WBG's) Country Partnership Framework (CPF) FY25-29 for Togo,[29] which identifies digital technology as a critical cross-cutting enabler for achieving its high-level objectives (HLOs).** Components 1 and 2 will contribute to HLO2 (improving human capital), specifically addressing Objective 4 (improving the quality of education and health services), by (i) connecting health and education facilities to internet; and (ii) helping people, particularly the youth, women, and people with disabilities (PWD), access educational content and develop digital and other skills in line with labor market needs. Furthermore, Component 1 will support HLO3 (promoting inclusive and sustainable territorial development), namely Objective 6 (increasing access to climate resilient infrastructure and services), by expanding affordable, climate-resilient broadband connectivity, while leveraging private capital. This will drive digital inclusion in underserved and remote areas and strengthen community resilience to climate change by providing reliable access to information and services (Objective 7). Finally, interventions under Component 2 seeking to boost digital skills and entrepreneurship will underpin quality employment growth in the private sector (HLO1).

13. **The project contributes to several global and regional strategies, including from the Western and Central Africa Region, the African Union (AU), IDA-20, as well as the World Bank Gender Strategy.** The project is aligned with the 2021–2025 World Bank Western and Central Africa Regional Priorities, in which broadband is seen as critical for economic transformation and the creation of better jobs for more people, and with the AU Digital Transformation Strategy, which aims to ensure that every African individual, business, and government is digitally enabled by 2030. The project's focus on key enablers of the digital economy (broadband connectivity, digital skills, and regulations) based on the approach combining supply and demand side interventions to foster productive digital use will help achieve this objective. It will also contribute toward IDA-20 technology policy commitments, including expanding broadband access and usage for jobs of the future and closing the gap in digital technology. Finally, the project aligns with the strategic objectives of the new WBG Gender Strategy (2024-2030), as detailed in Annex 2.[30]

14. **The project supports green, resilient, and inclusive development (GRID)[31], as well as the WBG Climate Change Action Plan 2021-25.[32]** The project is aligned with the GRID approach by focusing on enhancing climate change mitigation and adaptation, strengthening infrastructure resilience, and promoting inclusive development through digital technologies. The project integrates mitigation and climate adaptation measures to address country-specific climate risks and to strengthen the country's preparedness for climate emergencies through the deployment of climate-resilient broadband infrastructure. By establishing a digital tech hub and a knowledge network, the project also aims to support digital adoption, foster the development of innovative green-tech champions, and stimulate an active participation of women in the digital economy, thus contributing to close the digital gender gap in Togo.

15. **The project is consistent with the GoT's adaptation and mitigation goals defined in the country's 2021 Nationally Determined Contributions (NDC) and is aligned with the Paris Agreement.** The adoption of green technologies and innovation is outlined in the NDC as one of the country's key priorities to accelerate the transformational change toward long-term low-carbon and climate-resilient development. With respect to climate change mitigation, the low-carbon deployment of digital connectivity infrastructure under this project contributes to the current NDC objective to reduce the national greenhouse gas (GHG) emission levels by 20.5 percent below business-as-usual (unconditional target) by 2030. The project activities include key recommended actions identified in the forthcoming Country Climate Development Report (CCDR) and will contribute to the NDCs objectives by supporting the GoT in developing strategies and regulations for the development of low-carbon and energy-efficient digital infrastructure, including e-waste

[29] WBG, 2024. Togo CPF. Report No. 185419-TG.
[30] The project aims to support: (i) stronger and more resilient human capital (Outcome 2); (ii) more and better jobs, including jobs of the future (Outcome 3); (iii) greater ownership and use of economic assets (Outcome 4); and (iv) wider access to and use of enabling services (Outcome 5).
[31] World Bank. 2021. Green, Resilient, and Inclusive Development. Available at: https://hdl.handle.net/10986/36322.
[32] WBG, 2021. World Bank Group Climate Change Action Plan 2021–2025: Supporting Green, Resilient, and Inclusive Development. Available at: https://openknowledge.worldbank.org/handle/10986/35799.

management. The project is also consistent with the National Adaptation Plan by deploying climate-resilient digital infrastructure and developing standards and guidelines for the digital infrastructure to withstand climate shocks. Specific measures with respect to the mitigation and adaptation aspects of the Paris Agreement commitment have been included in the design of this project to lower climate adaptation risks to an acceptable level (see Annex 3 for further details).

16. **The project adopts a Maximizing Finance for Development (MFD) and private capital mobilization (PCM) approach, ensuring that public interventions address market failures and crowd in private investment**. Under Component 1, the project will leverage catalytic public financing to incentivize private investment in digital infrastructure expansion in areas where operators are unwilling or unable to invest without public support or incentives. A minimum amount of unguaranteed commercial financing into expanding connectivity (under Component 1) is expected to be US$10million. Additional US$27million of private investments will be generated as positive externalities by connecting households in vicinity of targeted public institutions and telecom towers on the way. Moreover, private expertise and financing will be leveraged under Component 2, which is private capital enabling (PCE) in nature to: (i) operate the incubation and acceleration programs; (ii) provide certificate-based globally recognized courses on digital skills to be offered by a hybrid academy; and (iii) co-finance or manage renovation works to improve and expand facilities of the tech hub. To reinforce the PCM / PCE approach and maximize private sector participation in all project activities, the project has been designed in close collaboration with IFC, active in the telecom sector in Togo (with investments in telecom operators, including CSquared and privatized incumbent Togocom).

17. **Importantly, the project leverages synergies with other World Bank projects in Togo, adopting an integrated approach within the portfolio.** The proposed operation builds on the gains achieved by the closed Togo WARCIP (P123093) that supported the ICT sector development, as well as recommendations of the Togo Digital Economy for Africa (DE4A) Country Diagnostic (P170440), IFC Private Sector Diagnostic and Jobs Diagnostics included in the Integrated Jobs Strategy for Togo (P175453). As detailed in Annex 4, significant synergies are leveraged with other World Bank-financed projects under implementation, including WURI (P169594), whose project implementation unit (PIU) is responsible for the preparation and execution of the project preparation advance (PPA), as well as Improving Quality and Equity of Basic Education Project (PAQEEB, P172674), Togo Public Sector Strengthening for Service Delivery Program for Results (PforR, P176883), Togo Social Assistance Transformation for Resilience PforR (P178835), Togo Urban Water Security (P176902), and Inclusive Development through Electricity Access (IDEA, P176769). The project will also leverage synergies with the pipeline the Togo Transport Connectivity and Logistics Improvement Project (P181461).

18. **Against this background, a SOP approach signals a long-term engagement to support digital sector development in Togo, allowing for a phased and structured implementation, ensuring that foundational elements are established and are sustainable before scaling up.** The phased approach, consisting of SOP1 (FY25-FY30) and SOP2 (tentatively FY28-FY33), will ensure each project builds on the achievements of the previous one, creating a robust and scalable digital ecosystem in Togo, while opening markets for more private sector investment. Signaling long-term commitment of the World Bank to the digital agenda in Togo from the onset (rather than preparing stand-alone projects in a piecemeal fashion) will also allow to more effectively crowd in private sector capital, amplifying sustainability and impact. This approach mitigates risks by enabling adjustments based on lessons learned from the first project as well as from other countries, ensuring subsequent phases are more effective and efficient. It also allows for continuous monitoring and evaluation (M&E), providing opportunities to refine interventions.

II. PROJECT DESCRIPTION

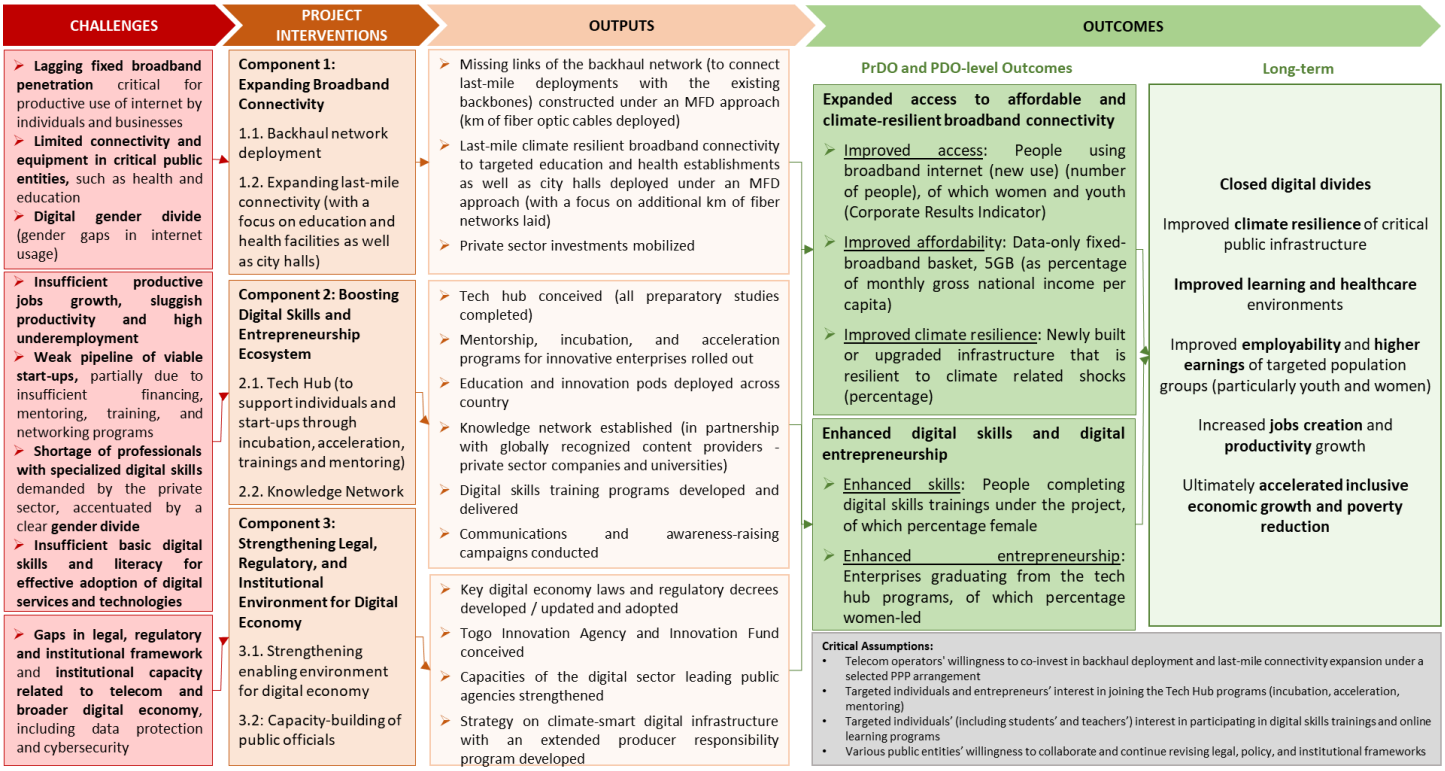
A. Project Development Objective (PDO)

The SOP program development objective (PrDO), aligned with the SOP1 PDO, is to expand access to affordable and climate-resilient broadband connectivity, enhance digital skills and digital entrepreneurship.

B. Theory of Change (ToC) and PDO Indicators

19. **The ToC of the proposed project demonstrates how it addresses key identified development challenges and contributes to a long-term objective of inclusive and resilient economic growth.** First, the project tackles lagging fixed broadband penetration (which has a direct impact on GDP growth), particularly limited connectivity and equipment in critical public entities in priority social sectors (health and education), and remaining gender digital divide. By leveraging scarce public resources to mobilize private financing to connect these facilities to affordable internet, the project will improve learning and healthcare environments and the provision of services in these critical sectors (which literally means saving lives). Second, the project addresses the challenge of insufficient productive job growth, sluggish productivity, and high underemployment by enhancing digital skills and creating employment opportunities, particularly for youth, women, and PWD. Moreover, the establishment of a tech hub will support the startup and MSMEs ecosystem by providing incubation / acceleration support, mentoring, and networking programs with possibility of targeted financing, thereby growing a pipeline of viable startups. Finally, the project tackles remaining gaps in the legal, regulatory, and institutional frameworks and public sector capacity constraints to develop these frameworks and effectively implement digital initiatives. Thus, the project aims to create a more conducive environment for digital transactions, market regulation / competition and private sector led growth.

Figure 2: Theory of Change



20. **The achievement of the PDO will be measured by the following result indicators.**

Expand access to affordable and climate-resilient broadband connectivity:

- PDO 1.1 (Access): People using broadband internet (new use) (number of people), of which women and youth (Corporate Results Indicator);
- PDO 1.2 (Affordability): Data-only fixed-broadband basket, 5GB (as percentage of monthly GNI p.c.);

- PDO 1.3 (Climate resilience): Newly built or upgraded digital infrastructure that is resilient to climate-related shocks (percentage).[33]

Enhance digital skills and digital entrepreneurship:

- PDO 2.1 (Skills): People completing digital skills trainings under the project[34] (number), of which women;
- PDO 2.2 (Entrepreneurship): Enterprises graduating from the tech hub programs[35] (number), of which women led.

C. Project Beneficiaries

21. **The project is poised to impact a wide range of direct and indirect beneficiaries**:

i. **Individuals.** Over 1 million people is expected to benefit from new and enhanced broadband connectivity under the project. Connecting public entities, including education and health facilities, to internet will improve learning and healthcare environments and related services, with significant, albeit not necessarily quantifiable impact. Positive externalities will be created for households and final users. Over 90,000 individuals will be targeted by digital skills trainings, with over 12,000 expected to improve their employment status.

ii. **Businesses.** Businesses will benefit from (i) catalytic public funding to expand broadband connectivity, particularly last-mile connectivity in commercially inviable zones, improving their business case to connect households and enterprises in the vicinity of targeted public institutions; (ii) a more conducive legal and regulatory framework that will enhance trust in digital transactions; (iii) a growing digital-savvy consumer base (users with strengthened digital skills driving demand for digital services) and strengthened digital talent; (iv) incubation and acceleration services offered by the tech hub; and (v) enabling conditions to attract institutional investors at pre-seed and seed level.

iii. **Government:** The GoT will benefit through (i) 7789 public institutions (1637 under SOP1 and 6152 under SOP2), including schools, technical vocational education and training (TVET) establishments, universities, hospitals, health centers, and townhalls, connected to internet; and (ii) targeted trainings and change management activities (with at least 200 officials / civil servants trained and certified in digital economy topics).

D. Project Components

22. **In alignment with the GoT priorities and the GCP approach, the proposed Togo Digital Acceleration SOP1 is articulated around three main components focused on digital infrastructure (supply), digital skills and entrepreneurship (demand), and enabling policy environment (cross-cutting foundation), in addition to a project management component**. These components seek to (i) expand resilient and affordable broadband infrastructure with a focus on high-speed last-mile access networks in selected schools, hospitals, and city halls in Togo; (ii) boost digital skills and entrepreneurship to drive digital adoption and job creation, while maximizing digital dividends with a focus on women, youth, PWD and other marginalized population groups; (iii) enhance the enabling legal, regulatory, and institutional environment for a safe and inclusive digital economy; and (iv) support project management.

[33] The newly built and upgraded infrastructure will be subject to quality standards that include compliance with the requirements for disaster response and for climate change mitigation (to be elaborated in bidding documents). These requirements will include, for example, the usage of weather-resistant materials, waterproof coverings, and underground infrastructure with climate-resilient design to withstand floods.
[34] "Completing" implies obtaining a nationally/internationally recognized certificate under the project.
[35] The indicator measures the total number of start-ups and MSMEs that have successfully completed the tech hub's incubation and acceleration programs. An enterprise is considered « graduated » when it has met all program requirements and milestones, such as business model validation, product development, market readiness (i.e., reaching a minimum viable product stage, or achieving defined growth metrics.

Table 1. Project Financing Split

Components	IDA financing (US$, millions)	Unguaranteed commercial financing (US$, millions)	Total financing (US$, millions)
1. Expanding Broadband Connectivity	**50**	**10**	**60**
1.1. Backhaul Network Deployment	27	8	35
1.2. Expanding Last-Mile Connectivity	23	2	25
2. Boosting Digital Skills and Entrepreneurship Ecosystem	**40**	**-**	**40**
2.1. Tech Hub	27	-	
2.2. Knowledge Network	13	-	
3. Strengthening Legal, Regulatory, and Institutional Environment for Digital Economy	**5**	**-**	**5**
3.1. Enabling Environment for Digital Economy	4	-	
3.2. Capacity-building for Public Officials	1	-	
4. Project Management	**5**	**-**	**5**
TOTAL	**100**	**10**	**110**

Component 1: Expanding Broadband Connectivity (US$60.0 million equivalent, including US$10 million equivalent expected in unguaranteed commercial financing)

23. **This component aims to expand affordable broadband connectivity by densifying the distribution network (backhaul[36]) as well as extending last-mile connectivity to public facilities (education, health, and city halls) that are electrified but not connected to internet.** The ambition of the GoT is to provide all education and health institutions as well as townhalls with affordable, high-quality, and resilient broadband, connecting 6,849 education institutions with more than 100 students[37] (1,293 under SOP1 and 5,556 under SOP2), and 804 health establishments (226 under SOP1 and 578 under SOP2), and 118 city halls (all to be connected under SOP1).[38] The engagement will be national in scope (with the bidding split in six geographic lots covering the entire territory[39]). This represents 40 percent of students across all grades, 90 percent of the current hospital capacity, and 100 percent of all city halls. Under an MFD approach, the connectivity expansion will leverage catalytic public funds to de-risk the market by financing infrastructure deployment at the backhaul level and thus crowd in private sector investments (PCM) for the last-mile connectivity, as detailed below. The approach has been developed and refined in consultations with the private sector (conducted jointly by MENTD and KPMG) in February and October 2024[40]; additional public-private consultations will be conducted prior to the launch of bidding. The project will also include complementary investments to ensure an effective use of the provided connectivity in targeted institutions (e.g., internal wiring / cabling work and equipping establishments with suitable terminals / setting up computer classrooms in targeted schools and selected health facilities, etc.). This is critical to support the usage of digital content and services, including e-learning, telemedicine and municipal e-services provided by targeted public institutions. Finally, as SOP1 covers facilities that are electrified today, SOP2 will expand the target group to newly electrified institutions, including those benefiting from the investments under the IDEA Project (P176769). Technical assistance (TA) conducted in close collaboration with the World Bank energy tam will help establish the best strategy to expand connectivity to facilities that are not unelectrified today but will be in the near future (Cf. Component 3).

[36] The backhaul network comprises intermediate links between the core backbone network and small subnetworks (access nodes) at the edge.
[37] Education institutions include primary and secondary public schools, colleges, TVETs, and universities.
[38] The numbers are based on the feasibility work conducted under the leadership of MENTS by a consortium of TACTIS and KPMG in the context of the MCC's Threshold Program and in preparation of the Compact Program in Togo.
[39] It is expected that implementation of Sub-components 1.1 and 1.2 will be tendered under one tender process per region.
[40] The following operators and internet service providers (ISPs) participated in one-on-one interviews (held in February 2024): CSquared Woezon, Togocom, Moov, GVA, Café Informatique & Teolis. Follow-up consultations happened during an MCC-organized workshop on October 1, 2024.

Subcomponent 1.1: Backhaul Network Deployment (US$35.0 million equivalent, including US$8.0million equivalent expected in unguaranteed commercial financing)

24. **The project will support the densification of the fiber optic backhaul network to connect existing backbones with the access networks to be deployed under subcomponent 1.2.** The project will focus of the deployment of fiber optics for backhaul to create a robust, high-capacity fiber optic network to future-proof the infrastructure and support growing demand for high-speed internet. The backhaul expansion will be done through a procurement of network construction and civil works, crowding in operators, with the network route specified in tender documents (already under elaboration). Bidding operators will have an option to either (i) finance a specific backhaul segment on their own and retain its ownership; or (ii) contribute to a portion of the capital expenditures (CAPEX) for a segment that will remain in public ownership (through SIN), receiving in return an "Indefeasible Right of Use"[41] of the network capacity (bandwidth) for a given period (which will generate PCM). Each scenario will generate significant private investments (through a mix of CAPEX and operational expenditures (OPEX)), ensuring a catalytic use of public financing (covered by the project). The bidding for the expansion of backhaul segments will be split into five geographically separate tenders to mitigate the risk of market power concentration. Each operator will be able to win a maximum of two tenders. Finally, the tender specifications will include mandatory open access guarantees to ensure that the deployed infrastructure will be made available at a reasonable cost to all telecom operators in the country. This will be supervised and enforced by ARCEP, who is currently developing a decision to set wholesale prices.

Subcomponent 1.2: Expanding Last-Mile Connectivity (US$25.0 million equivalent, including US$2.0million equivalent expected in unguaranteed commercial financing)

25. **This subcomponent will provide catalytic funding to expand last-mile broadband connectivity to targeted public institutions, where (i) the electric grid is already deployed, and (ii) the commercial incentive for broadband network expansion is too weak, indicating a market failure, prioritizing communes with the highest climate and socioeconomic vulnerabilities**. This subcomponent will finance the procurement of connectivity services for education and health facilities as well as city halls, with a required bandwidth and prices defined in the tender (similar to a pre-purchase of capacity model). Such anchor contracts will leverage private investments for the construction and maintenance of access networks to connect those institutions to the backhaul (see Subcomponent 1.1) and existing backbone infrastructure, thus generating PCM. The private operators that will deploy the last mile infrastructure will remain its owners. These publicly supported deployments will improve the operators' business case to connect households in the vicinity. With increased demand for broadband from end users, prices are expected to decrease further during the lifespan of the project, contributing to its sustainability.

26. **For both subcomponents, the project will utilize a competitive procurement process, based on international good practices, to ensure transparency and value for money.** The procurement strategy will include the following key elements: (i) Open and Transparent Bidding with qualified bidders invited to submit proposals for the provision of goods and services; (ii) Lot-Based Approach with the project dividing the country into six geographic lots, allowing for multiple bidders to participate in the procurement process and ensuring competition; (iii) Technical and Financial Evaluation of bids, ensuring that the selected bidders have the necessary expertise and capacity to deliver the project successfully; (iv) Contract Management with the project implementing robust contract management procedures to ensure that selected bidders fulfill their contractual obligations and deliver on time and within budget; and (v) Open Access principles on the fiber backhaul to ensure a fair, transparent, non-discriminatory access to the infrastructure at a reasonable cost for all other telecom operators in the country. The project will conduct phased implementation (one selected geographic region first) to fine-tune the procurement process and identify the best possible design preferred by the GoT and network operators. The project will also finance an impact evaluation study that will accompany the deployment phase. Study will

[41] "Indefeasible Right of Use" is a telecom lease permanent contract (that cannot be annulled, or voided, or undone) for an exclusive, unconditional, and irrevocable right to use a portion of a network. These contracts obligate the purchaser to cover the OPEX as well as maintenance costs.

evaluate the effectiveness of the selected infrastructure deployment approach (including cost-benefit analysis of various technological solutions), and its findings will inform subsequent infrastructure expansion under SOP2.

27. **For both subcomponents, all digital infrastructure built under the project will incorporate low-carbon measures[42] and integrate climate risk considerations and disaster response measures in the design.**[43] The project will aim to follow energy-efficient civil works standards, improving energy efficiency and fuel consumption in the newly built infrastructure. Importantly, the broadband deployment under Component 1 (and associated civil works) will rely as much as possible on underground cabling to withstand potential damage from climate risks (including floods and intense precipitation). In addition, the project will support the country's early warning systems, the adequate and efficient functioning of which is currently hindered by limited digital access[44] in remote areas, resulting in delayed emergency alerts and insufficient time for people to take necessary precautions or evacuate hazardous areas. As such, the project will connect vulnerable communities to digital infrastructure in climate "hotspots" in rural areas (including the regions of Savanes, Kara, Centrale, Plateaux, and Maritimes), which would allow people to have connectivity during and after extreme climate events, thus helping them receive early warning/weather forecast in time as well as facilitate recovery and response (e.g., emergency cash transfers through mobile money) in the aftermath of extreme climate events.

Component 2: Boosting Digital Skills and Entrepreneurship Ecosystem (US$40.0 million equivalent)

28. **This component will aim to equip people with in-demand digital skills to drive their employability and participation in the digital economy, while supporting the entrepreneurship ecosystem to create scalable businesses and jobs**. The project interventions under this Component will aim to address job creation challenges and operationalize some of the recommendations of the World Bank-financed Togo Jobs Diagnostic (P175453)[45], helping Togo leverage its youthful and dynamic human capital for quality job creation, while building a robust pipeline of local innovative start-ups and businesses. The programs of the tech hub and its satellite centers across the country will target both individuals, digital start-ups, and businesses to support the adoption of digital and complementary skills (from basic to specialized) and the roll out of incubation, acceleration, mentoring, training, and networking services. The deployment of innovation and education pods as satellite facilities of the tech hub in each of the six regions of the country envisioned under the component is a cost-effective starting point, allowing to test various approaches, locations and synergies to see whether multiple tech hubs could flourish in the country and lean on impact evaluation before scaling.

Subcomponent 2.1: Tech Hub (US$27 million equivalent)

29. **This subcomponent aims to support the GoT in establishing a regional tech hub through multiple facilities for supporting entrepreneurship and providing in-demand digital skills training programs, thus contributing to job creation, economic diversification, and inclusion**. Based on an extensive pre-feasibility conducted for MENTD by an Massachusetts Institute of Technology -based consulting company (Tekuma) as well as conclusions of the analytics and scoping trips financed by MCC[46], the tech hub with its multiple facilities / satellites across the country will provide

[42] The infrastructure deployed will embed low-carbon measures, including: (i) requirements for renewable energy solutions (e.g., solar or wind power and battery storage) to power the infrastructure to be built, to the extent possible, and identification of opportunities for co-deployment of green energy solutions/mini grids to power both towers and local communities; and (ii) following internationally recognized best practices on energy efficiency, such as Green ICT Standards and Supplements, and/or recommendations from The European Commission's Joint Research Centre report Best Environmental Management Practice in the Telecommunications and ICT Services Sector.

[43] Climate risk considerations are incorporated in the design to increase infrastructure resilience to floods, erosion, and intense rainfall, prevalent in Togo, and to reduce GHG emissions to the extent possible (e.g., with the use of solar panels whenever appropriate and of energy efficient equipment).

[44] World Bank. 2024. Togo CCDR.

[45] The diagnostic highlights a mismatch between the quantity and quality of skilled workers supplied by the formal education system and what is required by firms represent one of the key constraints to the private sector-led growth, while a sizeable share of the labor force remains under-employed. The report points that given a projected population growth, Togo's economy will need to create an additional one million jobs by 2030 to absorb its increasing labor force supply, which is what the project will aim to contribute to.

[46] These studies, funded by MCC as part of the Compact Program preparation, included a socio-economic diagnostic, a preliminary commercial feasibility study, and a study on governance and partnerships.

incubation and acceleration programs accompanied by mentorships and networking for eligible enterprises (at various stages of growth) as well as digital skills trainings for individuals with a focus on youth and women. A land for the hub has already been identified and provided to MENTD in the immediate vicinity of the University of Lomé, which can allow synergetic effects with academia and research and development (R&D). SOP1 will focus on soft elements (programming) as well as additional detailed studies and design for the construction of the tech hub, which – contingent on favorable conclusions of the reports – could be supported under SOP2. To ensure the sustainability of the tech hub business model aligned with lessons learnt from other countries, the GoT will collaborate with IFC, globally recognized private sector partners and academic institutions that have expertise and experience in establishing and operating such hubs, as well as launching digital skills and entrepreneurship programs.[47]

30. **Key activities to be financed will include the following**:

(i) TA to elaborate a detailed business case and master plans for the tech hub and its programs, including a detailed architectural design, economic and financial evaluations of each program, and appropriate management models to ensure future operational sustainability.

(ii) TA to conduct a feasibility study and elaborate a detailed business case and governance model of a possible Start-up Fund.

(iii) Leveraging the outcomes of these TAs, SOP1 will finance the following programs:

- (a) Incubation and acceleration programs and (b) small financing schemes for eligible digital entrepreneurs, startups, and MSMEs, designed and implemented by an investment-backed acceleration partner that has experience and track-record in raising pre-seed/seed capital from institutional partners. This activity will leverage lessons learnt from ongoing projects and initiatives, including GIZ,[48] Lomé U+ Incubator, and TogoX Accelerator.[49] Through a dedicated parallel upstream engagement, IFC would provide guidance based on its experience from the IFC Startup Catalyst program (see Annex 6 for details). Importantly, businesses developing climate-smart and green technologies and solutions to address specific regional or national / sector needs, such as agriculture productivity, and building resilience to natural disasters and climate change vulnerabilities will receive focused support.[50]
- Establishing a hybrid digital academy that will offer face-to-face and virtual digital skills courses (targeting intermediate to advanced and specialized levels) with internationally recognized certification. Target audience will comprise students and adults, including those from the informal sector (for reskilling and upskilling[51]). The programs – rolled out in collaboration with MCC – will explore professional development

[47] MENTD has been exploring various PPP models and aims to have the tech hub programs operated/managed by a private sector company with solid experience, expertise, and resources. Discussions have been held with Y Combinator, Plug & Play, clean tech incubator in the port of Los Angeles, and CChub (a Nigerian technology-oriented social innovation center founded in 2010 which is one of the few financially sustainable hubs in Africa).
[48] GIZ is currently funding Djanta Tech, an incubation program with approximately three million euros. This program, set to launch in November 2024, will be managed by the CChub and will offer three-month pre-incubation programs and six-month incubation programs. The World Bank-financed project will learn from this experience and scale it up.
[49] Lomé U+ is a combination of different incubation programs to support early-stage entrepreneurs, in partnership with existing incubators. TogoX is a cohort-based programs supporting early-stage technology startups and businesses linked to the informal economy. It offers mentoring, partnerships, funding, and educational elements, drawing on successful models.
[50] Partnerships with local and international universities could be leveraged to foster R&D as well as commercial adoption of digital-by-design, innovative, and climate-smart solutions for productive, resilient, and sustainable sectors that tend to be big GHG emitters (e.g., agriculture and transport). Lessons will be leveraged from other World Bank-financed projects, such as Digital Cameroon (P173240), which supported the development of digital information systems for farmers to provide them with timely information on climate variability and droughts (including early warning systems) as well as financed e-voucher schemes for famers to adopt climate-smart techniques, such as drought-resistant seeds.
[51] The training programs will aim to upskill young people (students that would like to complement their studies with practical knowledge) as well as re-skill adults looking to change career tracks for digital jobs or improve their employment conditions.

modules, such as internships, apprenticeships, job matching, and placement. Effort will be made to ensure increased participation of girls / women and PWD.

- Renovation costs and equipment provision to improve and/or expand existing facilities owned by the GoT and accorded to MENTD, which will host the above programs. This will be done while ensuring energy efficiency (including the use of renewable energy) and implementing other climate resilience measures, where applicable and feasible.
- Design, assembly and deployment of six pilot education and innovation pods (prefabricated mobile facilities, outfitted with electricity and internet, designed to be assembled, disassembled, and relocated as necessary) in selected localities to target population unable to access the tech hub programs delivered in Lome.[52] The pods will also benefit the personnel of education and health facilities that would benefit from new connectivity under the project. The localities will be selected in line with the growth poles supported by the World Bank-financed Secondary Cities Program (P501278) under preparation. The project will support the operations of the pods under the pilot phase (staffing and programs execution) as well as their impact evaluation (including the assessment of a viability of several tech hubs in the country) with a possible scale-up.[53]

Subcomponent 2.2: Knowledge Network (US$13.0 million equivalent)

31. **This subcomponent will support the creation of a national "knowledge network", aimed at engaging various population groups in inclusive and collaborative online learning focused on digital and complementary skills**. The knowledge network will be a web-based platform with local and international training content accessible to everyone in the country that will equitably offer basic to intermediate digital skills trainings and other learning opportunities to all population groups with a focus on women, PWD, and other marginalized population groups. The knowledge network will also be a central platform for disseminating knowledge and offering training programs tailored to market needs and technological developments. This will not only promote quality education but will strengthen skills and employability by addressing the need for students and individuals to be ready for the changing nature of work. The work will be done in close collaboration and alignment with connectivity expansion under Component 1 to ensure that targeted education institutions benefit from strengthened digital content as well as with the World Bank-financed PAQEEB Project (P172674).

32. **Key activities to be financed under this subcomponent include the following:**

(i) TA[54] to conduct a detailed study and extensive consultations with all stakeholders on the approach and content of the knowledge network with a comprehensive mapping of existing digital skills programs and initiatives (both within and outside of the formal education system), an assessment of digital skills adoption levels and gaps[55], and strategies to deploy an online learning platform with relevant content to spread knowledge in an inclusive and efficient manner.

(ii) Development (or acquisition/customization depending on the outcomes of the preceding TA), and deployment of an open-source digital learning platform accessible to everyone in the country. The project will implement best practices in user-experience design to ensure inclusive access for the general population, including underserved groups (women, PWD, ethnic minorities, and populations with low literacy and skill levels). This platform will

[52] The "innovation pods" will be tech-hub satellites located closer to rural communities across the country, where entrepreneurs can come for advice or guidance on improving their businesses. The "education pods" represent spaces within schools, connected under Component 1 that will serve as computer labs and offer digital skills and vocational trainings as well as mentorships and sensibilization programs to young people in formal education.
[53] Based on the impact of the pilot phase, the ambition of MENTD is to deploy one pod in each of the 117 municipalities across the country, making them community centers for learning and expertise exchange as well as centers for several value-added services offered (e.g., market studies, etc.).
[54] This TA will complement the demand analyses for the tech hub and knowledge network conducted for MENTD by McKinsey and Digiole.
[55] The assessment will include a review of existing learning materials for potential gender biases and stereotypes.

include advanced features to enhance its efficiency, such as an AI-tutor to guide users and optimize their learning experience. Additionally, it will integrate a statistical management system to periodically assess the supply and demand of digital skills nationwide.

(iii) Acquisition or creation and hosting of educational content, with a focus to English trainings, digitizing K-12 curriculum, promoting the use of ICT tools and online, and self-paced digital skills training modules. This aggregation platform will offer both local and international content[56], which will cover (i) courses within secondary and university education programs; and (ii) specialized trainings outside of the formal education system focused on digital and non-digital skills. The priority for roll-out of this content will be given to education institutions targeted under Component 1 to maximize the impact.

(iv) Trainings, capacity building and change management activities for course providers (teachers and subject experts) as well as for content curators and users (students and adults) on content creation and utilization of the digital learning platform.

Component 3: Strengthening Legal, Regulatory, and Institutional Environment for Digital Economy (US$5.0 million equivalent)

33. **This component will finance TA activities for MENTD and other key stakeholders, such as ARCEP, IPDCP, ATD, and ANCy, to strengthen 'analog foundations' to underpin a safe and inclusive digital economy.** The overarching objective of this Component will be to support telecom market development, boost digital public services delivery and uptake, and enhance people's trust in digital transactions.

Subcomponent 3.1: Strengthening Enabling Environment for Digital Economy (US$4.0 million equivalent)

34. **This subcomponent will aim to close key legal and regulatory gaps across various priority areas**, including data protection and cybersecurity. In line with this, the project will *inter alia* focus on supporting the following TAs:

(i) Updating the Togo Digital 2025 Strategy, including incorporating the "Cloud" Strategy.

(ii) Supporting the implementation of the 2023 Law on Innovation Ecosystem Development, including the preparation of implementing decrees, alignment with other existing laws.[57]

(iii) Supporting operationalization of the IPDCP and building capacity of the ATD.

(iv) Feasibility and strategic studies on establishing an Innovation Agency[58] to be mandated to spearhead digital innovation and adoption in the country as well as elaboration of associated legal, regulatory and statutory acts.

(v) Benchmarking of intellectual property laws and providing recommendations for GoT to close possible gaps.

(vi) Studies[59] to prepare an inventory / conduct an audit of the government's information systems and data registers, and to develop associated implementation roadmaps / master plans for possibilities of function integration and secure data exchange between databases of priority MDAs.

(vii) TA for ARCEP to support the preparation of relevant telecom legal and regulatory acts and strengthen its capacity to supervise different segments of the telecom market with the objective to boost competition and further improve the affordability of broadband services (for both mobile and fixed broadband).

[56] Content will be either created locally or acquired through partnerships with existing providers.
[57] Focused on (i) regulatory environment for R&D, including issues on the intellectual property, technology transfer, tax incentives, etc.; (ii) competition policy (beyond broadband); (iii) trade-related policy; (iv) entrepreneurship-related labor regulation, etc.
[58] Within the project's framework, an agency's objectives could include forging relevant PPPs and coordinating activities, such as the creation and updating of platforms, identifying and negotiating with content providers, and training content creators and curators, among other tasks.
[59] These studies will determine possible SOP2 investments for the implementation of the Government Enterprise Architecture and related activities.

(viii) TA to (a) assess climate risks of broadband infrastructure (including from energy efficiency standpoint) and support defining and implementing standards for climate change and natural disaster resilience;[60] (b) develop a national strategy on climate-smart digital infrastructure that will establish an Extended Producer Responsibility (EPR) program to reduce the digital sector's carbon and environmental footprint through e-waste collection, dismantling, refurbishing, and recycling;[61] and (c) build capacity for effective implementation of e-waste recycling or safe disposal aligned with the Africa Environmental Health and Pollution Management Program.

(ix) TA to assess strategies to provide broadband to currently unelectrified facilities in Togo, considering factors such as cost-effectiveness, sustainability, and scalability. The assessment will include consultations with key stakeholders and will be done in collaboration with the IDEA Project (P176769).

Subcomponent 3.2: Capacity-building for Public Officials (US$1.0 million equivalent)

35. **This subcomponent will include capacity building of relevant GoT officials on subjects of critical importance for the supported investments**. This will include capacity-building for developing, reinforcing, and implementing legal and regulatory frameworks for the digital sector, including on telecom, innovation, entrepreneurship, data protection, cybersecurity, and PPP structuring and management. It will also include capacity and awareness building activities of various MDAs to reinforce the adoption and usage of digital technologies. Moreover, it will include hands-on support to MENTD to reinforce its key functions throughout the project cycle. Particular attention will be given to the following:

(i) Promote a culture of cybersecurity and data protection and strengthen related capacity and technical knowledge;

(ii) Incorporate climate mitigation and adaptation measures and standards for broadband deployment and public sector digitalization (training on standards and new technologies to 'green' the economy as well as using data analytics for disaster risk management and early warning practices);

(iii) Integrate gender-informed inclusion measures into strategies, policies, and initiatives within the digital sector;

(iv) Incorporate transparency and feedback mechanisms while developing activities aimed at broad citizen engagement (CE) in the digital economy.

Component 4: Project Management (US$5.0 million equivalent)

36. **This component will provide support for the management and implementation of project activities.** Project financing under this component will cover operating and staff costs of a PIU established at MENTD for the first two years of the project implementation, including the recruitment of key experts. The ultimate objective would be for the PIU staff to progressively transfer the knowledge and responsibility for project management to MENTD, paving the way for sustainable project management going forward (including for SOP2). This component will also cover environmental and social studies and their implementation and monitoring, independent audits and learning/training for the PIU, MENTD and key implementation partners. Special attention will be devoted to promoting equal participation of women in all decision-making bodies under the project and contributing to tackling barriers to their recruitment, retention, and promotion. Finally, the Component will finance community engagement and communications, including a grievance redress mechanism (GRM), project communication, and CE through periodic (e.g., semi-annual) and collaborative workshops, focus group consultations, public information events reporting project results, and participatory M&E efforts. The collective feedback will then be captured in a feedback summary report which will be an integral part of the project

[60] These could comprise the following: (i) plans for ensuring business continuity in case of climate-related disruptions to the digital connectivity network; (ii) adding system robustness and building the system capacity to quickly repair and restore service for business continuity; (iii) integrating improved technical design standards or more resilient materials to reduce the vulnerability to manage the risk and embed appropriate measures to manage those risks; (iv) elaborating data standards for data recovery and backup to prevent data loss in the event of natural disasters (including climate-related disasters); and (v) developing specific measures to withstand extreme heat and high temperatures; etc.

[61] Efficient recycling of e-waste can greatly reduce the demand for virgin raw materials, thus contributing to limiting GHG emissions.

implementation status and result reports (along with the financial and procurement reports) to be submitted by the PIU, reflecting progress toward project outcomes.

E. Role of Partners

38. **The project has benefitted from close coordination with various development partners active in the digital domain in the country**, as detailed in Table 2 below (non-exhaustive).

Table 2. Overview of Coordination with Key Development Partners

Partner	Nature of Involvement /Description
MCC	The project has been designed in close collaboration with MCC, which has two digital engagements in Togo: (i) a Threshold Program (US$20 million, active since 2017 and closing by 2025), providing analytical and operational support to MENTD, ATD, ARCEP, and SIN; and (ii) a Compact Program under preparation (tentatively US$150 million to be approved mid-2025) that will provide investments into connectivity (with a focus on missing backbone and backhaul links and complimentary access networks targeting households), digital payments, and digital skills. More specifically, the project leveraged MCC-funded feasibility studies (including KPMG's study with connectivity analysis and McKinsey's study on skills and entrepreneurship) and extensive stakeholder consultations. MCC's and World Bank's parallel and closely aligned investments help hedge mutual risks, while amplifying the impact.
KfW	The project team has been also closely liaising with KfW, which is in the final stages of preparation of the E-Governance Project (EUR 20 million, contract signature expected by January 2025) led by MENTD with a focus on (i) extension of the fiber optic connectivity in the southern region with a goal to connect mayors' and prefects' offices; (ii) digitalizing civil registry services in the same communes (as key services provided at the communal level).
GIZ	GIZ has an active "ProDigit" Project (EUR 13.5 million) led by MENTD and ATD jointly with the Chamber of Commerce focused on reinforcing digital skills and entrepreneurship ecosystem (Djanta Hub). Following several rounds of consultations, it has been agreed that the World Bank engagement will build on the GIZ's project and help scale it up.

F. Lessons Learned and Reflected in the Project Design

39. **The deployment of high-speed broadband networks under the project incorporates best practices of engaging the private sector and reusing public infrastructure**. In the developing world there are many regions that do not generate the volumes of traffic, even if aggregated, to convince private actors to invest. Therefore, public intervention in infrastructure deployment is essential to incentivize the private sector to co-invest or make matching investments. The advantages of private sector participation include sharing costs and risks, building expertise, and adding critical financial insight and caution. The project's design embeds contracting last mile delivery to operators and ISPs. Further, the key principles of reusing public utility facilities -- such as ducts and poles, buildings, land rights, and even fiber networks for deployment of new broadband infrastructure -- are incorporated into project design. This will ensure that long-lived assets can be repurposed, commercialized, or otherwise brought back into productive use and facilitate new entry for the benefit of all. Multiple World Bank financed projects with similar design and private sector co-investments in backhaul and last-mile connectivity have been implemented or are being implemented elsewhere, including ongoing engagements in Georgia (P169698), Ghana (P176126), Kenya (P170941), Rwanda (P173373), etc.

40. **The project also takes a comprehensive approach to help GoT move to the next level of the digital innovation and entrepreneurship, leveraging lessons learned from more advanced economies and regional peers**. The project incorporates international good practices on developing enabling environments for digital entrepreneurs and businesses (e.g., regulatory environments in Italy, the Philippines, Senegal, and Tunisia). It also draws lessons from the implementation of tech hubs, incubation and acceleration programs as well as digital skills trainings, including but not limited to the following projects: including, but not limited to (i) Armenia e-Society and Innovation for Competitiveness Project (P115647, closed) that supported programs, financial mechanisms, infrastructure, and skills development to boost the development of new knowledge- and IT technology-driven companies and enterprise innovation; (ii) Mexico Information Technology Sector Development Project (P106589, closed) that contributed to developing the IT and ITES

Industry in Mexico by improving human capital and skills, infrastructure, and links between local and global companies; (iii) Strengthening Data Infrastructure to Close Digital Gap in Argentina Project (P178609, ongoing) that has a sizeable component providing digital skills training courses for people and enterprises in collaboration with universities and local private sector actors; (iv) Jordan's Youth, Technology, and Jobs Project (P170669, ongoing) that supports thousand students to upskill their digital knowledge, and established several tech hubs in underserved areas, thus creating 10,000 income-generation opportunities; (v) Nigeria Innovation Development and Effectiveness in the Acquisition of Skills Project (P166239, ongoing) that groups in partnership with local actors rolled out digital skills program in Kaduna state to improve employment opportunities of youth and vulnerable women aged 18-40, and (vi) Ghana Digital Acceleration Project (P176126) that invests in tech hubs across the country. Importantly, lessons from IFC's engagements focused on incubators, accelerators, start-up funding and digital skills, including in countries, such as Morocco, Madagascar, and Georgia[62], has informed the project design. For the knowledge network, the project will lean on the lessons related to platforms based on the principles of digital public infrastructure, such as Diksha.[63]

III. PROJECT IMPLEMENTATION

A. Institutional and Implementation Arrangements

41. **The overall project implementation will be supported by a dedicated PIU anchored at MENTD, which will gradually transfer responsibility for project management to MENTD staff.** The PIU was established in November 2024[64] and includes a project coordinator[65] and a competitively recruited core team: a procurement specialist, a Financial Management (FM) specialist, an M&E specialist, an environment specialist, and a social specialist who will also cover gender aspects (all the recruitments completed in November 2024). The PIU will also include an accountant (to be recruited during the first year of the project implementation), an administrative assistant, and technical experts, as needed. For the first two years of the project implementation, the PIU will be responsible for all project-related fiduciary functions, including FM and procurement, implementation of project-related environmental and social standards (ESS) commitments, overall project planning, delivery, and M&E, leveraging key project management tools, such as annual work plans and budgets. The PIU will be also reinforcing capacity of MENTD with a focus on the World Bank rules and procedures with the aim of gradually transferring responsibility for project management to MENTD staff, subject to positive World Bank evaluation of the MENTD capacity. Detailed processes and procedures for implementing, monitoring, and evaluating the project, ensuring compliance with the World Bank policies as well as implementing the GRM, are described in the Project Implementation Manual (PIM) prepared by MENTD and validated by the World Bank.

42. **A Project Steering Committee (PSC) will provide overall strategic guidance to the PIU.** The PSC will be chaired by the Prime Minister's office and, beyond MENTD, will comprise representatives from other relevant GoT stakeholders, including but not limited to Ministries of (i) Economy and Finance; (ii) Higher Education; (iii) Primary, Secondary and Technical Education; (iv) Health; (v) Development Planning and Cooperation; and (vi) Territorial Administration. In addition, the PSC can invite representatives from the communes, the private sector, academia, civil society (including parents/teachers associations) and heads of beneficiary public institutions (schools, universities, health centers, hospitals) on an ad hoc basis. The PSC could meet on a quarterly or bi-annual basis to provide overall strategic guidance to the project and regularly monitor its progress. The mandate, procedures and terms for the PSC are detailed in the PIM.

[62] In 2024, IFC committed US$4 million to 500 Eurasia Fund ("500 Eurasia" or the "Fund"), a venture capital fund and accelerator with a target size of US$20 million mainly focusing on pre-seed and seed investments in Georgia and the broader South Caucasus and Central Asia region.
[63] Diksha is an initiative of the Government of India designed to enhance digital learning and knowledge dissemination across the country. By leveraging technology, Diksha bridges the digital divide, promotes inclusive education, and supports lifelong learning through a comprehensive, accessible, and interactive digital infrastructure for students, teachers, and professionals.
[64] As per Decree No. 010/24/MENTD/CAB signed on November 3, 2024.
[65] Nominated as per Decree No. 009/24/MENTD/CAB signed on November 3, 2024.

B. Results M&E, and Verification Arrangements

43. **The PIU will be responsible for the project M&E, tracking the achievement of the PDO and intermediate indicators, based on the results framework detailed in Section VII.** MENTD has recruited an M&E specialist, tasked with setting up and maintaining an adequate M&E system that will aggregate reporting from all project implementation stakeholders based on the M&E plan detailed in the results framework. The status of project implementation will be documented in progress reports prepared on a semi-annual basis, typically just ahead of an implementation support mission, and submitted to the World Bank for review. These reports will include updates on results, disbursements, FM, procurement, and social and environmental policies and guidelines, as well as an updated work plan. Monitoring instruments include bi-annual progress reports on project implementation, output, and performance indicators. Innovative technologies such as Geo-Enabling Initiative for Monitoring and Supervision will also be leveraged to support the project supervision capacity. The project will track the user experience of selected digital trainings that the project supports by ensuring that real-time feedback tools and functions will be embedded directly into the design of the training delivery. Feedback received from end-users will be tracked and reflected in training updates or upgrades.

C. Disbursement Arrangements

44. **The MENTD will be responsible for obtaining required budgetary allocations for the project based on annual budget estimates aligned with the GoT's Public Investment Program requirements**. MENTD will follow the World Bank financial management rules and procedures (instead of adopting Public Financial Regulation of Togo) in carrying out project FM transactions. Detailed FM arrangements are reflected in the PIM.

45. **Disbursements for the project will be report-based using Interim unaudited financial reports.** The PIU will open an FCFA denominated designated account in a commercial bank under conditions and terms satisfactory to the World Bank. Advances to the designated account will be made based on six months projected expenditure and these funds will be solely used to finance eligible expenditures. No funds transfer to other project implementing or GoT entities is envisaged. Actual expenditures incurred will be tracked and recorded in the interim unaudited financial report in the prescribed format prepared by the PIU and will be submitted on a semi-annual basis to the World Bank, and within 45 days after the end of each calendar semester. The World Bank loan proceeds will be used to finance eligible expenditures necessary to meet the development objectives of the project, with due attention to efficiency and cost-effectiveness. If the World Bank determines that the project funds have been used to finance ineligible expenditures, the amounts used for such expenditures shall be refunded to the World Bank by the GoT.

IV. PROJECT APPRAISAL SUMMARY

A. Technical, Economic and Financial Analysis

46. **The project is in full alignment with Paris Agreement objectives on both mitigation and adaptation.**

(i) **Assessment and Reduction of Adaptation Risks:** The project design considers the climate and disaster risks identified using the Climate and Disaster Risk Screening Tool, such as floods and heat waves, that can potentially damage digital infrastructure deployed under the project, causing service disruptions. To manage these risks, the project will (i) support the introduction of resilient requirements and climate design standards for infrastructure construction;[66] (ii) finance disaster- and climate-resilient digital infrastructure designed with weather resistant materials (e.g., waterproof coverings to withstand extreme weather events); and (iii) rehabilitate buildings hosting the tech hub based on site-specific climate risk assessment and adequate measures to mitigate flood and heat stress risks. Expanding high quality internet access to climate hotspots and vulnerable populations will provide access to access early warning systems and weather-related alerts. Additionally, this project will invest in

[66] With a focus on reducing/adapting to potential climate change impact and guidelines on embedding climate resilience for infrastructure.

improving digital skills among public officials and various population groups that will increase adoption of digital technologies and enable them to utilize digital services and effectively respond to climate-related disasters and shocks. Overall, these measures will ensure that adaptation risks are reduced to an "acceptable" level.

(ii) **Assessment and Reduction of Mitigation Risks**: The project is pursuing a low-carbon, energy-efficient approach in the deployment of broadband infrastructure (backhaul and last mile), as well as in the renovation of the buildings that will host the digital tech hub. Mitigation risks will be reduced to a low level by prioritizing renewable energy to power the deployed infrastructure and tech hub facilities (solar-powered back-up generators) and by following internationally recognized best practice recommendations on telecom energy efficiency (see more in Annex 3). All ICT equipment (such as computers, switches, routers, etc.) and electrical appliances (such as air conditioning units) procured and installed under Components 1 and 2 will comply with international standards[67] on energy efficient technology in Togo, surpassing current energy efficiency standards defined in the National Energy Efficiency Plan, and will be Energy Star[68] certified (or equivalent). In areas not serviced by the grid, solar-powered energy will be utilized to power the IT infrastructure, as well as education and innovation pods. Moreover, tech hub buildings will be required to obtain an EDGE green building certification on energy efficiency[69] with the related climate risk assessment informing the scope of works to be performed[70]. These measures will jointly ensure that (i) the project will not increase carbon lock-in in the long term; and (ii) it has a low risk of preventing the country's transition to low-carbon development pathways (more details in Annex 3).

Citizen Engagement (CE)

47. **CE is incorporated throughout the project design.** Intervention-specific CE activities will be fully streamlined at the component level, while general cross-cutting public outreach is planned under Component 4. In addition to GRM, periodic public consultations (e.g., semi-annual) and user satisfaction surveys (including as part of the mid-term project evaluation) will be conducted to ensure interactive and continuous dialogue and feedback loop with targeted project beneficiaries (including education and health institutions targeted for connectivity provision as well as young people, women and entrepreneurs targeted by innovation and skills support services) and stakeholders (such as implementing agencies, collaborating private sector actors, and civil society). Building on existing CE mechanisms and experiences from other World Bank-financed projects (particularly, WURI, P169594), the project will embed additional mechanisms, such as consultations throughout the delivery chain to enable MENTD and ATD to listen to beneficiaries, improve transparency, address concerns. The collected feedback and suggestions will be integrated into project interventions to improve performance and implement any necessary corrective measures, thereby closing the feedback loop. The project has a CE results indicator ("beneficiaries receiving training under the project who expressed satisfaction").

Gender

48. **Gender considerations are embedded in all project interventions designed to close gender gaps in Togo.** Aligned with IDA-20 Digital Commitments, WBG Gender Strategy (2024-2030)[71], and Digital Development Gender Strategy[72], the

[67] These standards include: European Commission's Joint Research Centre's Best Environmental Management Practices in the Telecom and ICT sector https://publications.jrc.ec.europa.eu/repository/handle/JRC121781; ITU Green ICT standards https://www.itu.int/net/ITU-T/lists/standards.aspx?Group=5&Domain=28; and IEEE 802.3az on energy efficient ethernet https://standards.ieee.org/ieee/802.3az/4270/.

[68] Energy Star is an international and reputed performance labelling system/standard. The energy efficiency level of equipment/appliances procured under this project will be at a level substantially higher than the current standards established by Togo's National Energy Efficiency Plan. Energy star certification. https://www.energystar.gov/about?s=footer

[69] Facilities will be required to obtain at least the Level 1 EDGE certification which assess the Power Usage Efficiency (PUE).

[70] This includes a proper insulation, natural ventilation and window placement (see Annex 3).

[71] WBG Gender Strategy 2024 - 2030: Accelerate Gender Equality to End Poverty on a Livable Planet (English). Washington, D.C.:WBG. http://documents.worldbank.org/curated/en/099061124182033630/BOSIB17e6952570c51b49812a89c05be6a4

[72] World Bank, 2021. The Digital Development Gender Strategy. https://thedocs.worldbank.org/en/doc/61714f214ed04bcd6e9623ad0e215897-0400012021/related/Digital-Development-Note-on-Gender-Equality-November2021-final.pdf.

project has identified opportunities to narrow gender gaps in digital use and adoption in Togo. More specifically, the project includes targeted activities that (i) address gender gaps in access to and use of broadband connectivity (Component 1); (ii) design and implement gender-smart digital skills training, mentorships, and networking opportunities, as well as promote subsequent participation of girls in digital / STEM education programs and employment of women in tech industry (Component 2); (iii) provide targeted incubation and acceleration support to female entrepreneurs; (iv) integrate a gender lens into the digital policy and regulatory environment (Component 3); and (v) collect comprehensive sex-disaggregated ICT data during project implementation cycle (Component 4). Further details are provided in Annex 2.

Economic and Financial Analysis

49. **The benefits of investing into broadband expansion are expected to be substantial.** The impact of increased broadband coverage and uptake on the economic growth, poverty reduction, and employment has been widely documented.[73] The latest ITU region-specific modelling demonstrates that, in Africa, a 10 percent increase in mobile broadband penetration results in an additional 2.5 percent GDP growth, while a 10-percent increase in fixed broadband penetration leads to additional 0.77 percent GDP growth.[74] Access to broadband in a community is linked to the creation and expansion of new firms, especially in rural areas, as it allows firms to link to suppliers and markets at lower costs and create jobs. Several studies have found that broadband expansion has positive impacts on new businesses (particularly women-led) through access to nontraditional market channels in rural areas.[75] Interestingly, connectivity investment is pointed out to have a long-run economic multiplier effect and potential climate impact.[76] Importantly, better connectivity can drive labor and poverty outcomes. As highlighted by the 2023 Digital Africa Report, when high-quality internet[77] was available for at least three years, labor force participation increased by 3 p. p. in Nigeria and by 8 p. p. in Tanzania. In addition, poverty rates fell by 7 p. p. in each country. These welfare impacts were higher among poorer and less-educated households. In a similar study in Senegal, mobile broadband coverage has been associated with a 14 percent higher total consumption for covered households and 10 percent lower extreme poverty rates than non-covered households.[78] The benefits of the investments in expanding access to digital connectivity in Togo are likewise expected to be substantial.

50. **The support for the entrepreneurship ecosystem will also generate important benefits and positive externalities.** The project's direct support to local start-ups and individuals through the tech hub and the knowledge network is expected to improve the performance and productivity of businesses, increase employment, and enable access to better-paying jobs due to skills upgrade. At least 150 start-ups are expected to receive direct support through technical trainings, incubation, and acceleration programs. Moreover, 90,000 individuals are expected to be trained in digital skills, tapping into new employment opportunities and improved earnings. Studies show that people, who acquire foundational digital skills, achieve an increase between 3-10 percent in annual earnings, while those developing more

[73] ITU. 2018. The Economic Contribution of Broadband, Digitization, and ICT Regulation. Available at: https://www.itu.int/en/ITU-D/Regulatory-Market/Documents/FINAL_1d_18-00513_Broadband-and-Digital-Transformation-E.pdf. Choi, J., Dutz, M., Usman, Z. 2019. The Future of Work in Africa: Harnessing the Potential of Digital Technologies for All. Washington, DC: World Bank. https://openknowledge.worldbank.org/handle/10986/32124.

[74] ITU. 2020. How Broadband, Digitalization and ICT Regulation Impact the Global Economy. Global Econometric Modeling. November 2020. Available at: https://www.itu.int/dms_pub/itu-d/opb/pref/D-PREF-EF.BDR-2020-PDF-E.pdf.

[75] Conroy, T & Low, S.A, 2021. Entrepreneurship, Broadband, and Gender: Evidence from Establishment Births in Rural America. https://doi.org/10.1177/016001762110187

[76] According to a survey conducted in April 2020 with 231 respondents, including high-ranking officials and economists from various Finance Ministries, Central Banks, World Bank, International Monetary Fund and other International Financial Institutions, representing 53 countries, to ascertain their perspectives on COVID-19 fiscal recovery packages. As per Hepburn, C., O'Callaghan, B., Stern, N., Stiglitz, J., and Zenghelis, D. Will COVID-19 Fiscal Recovery Accelerate or Retard Progress on Climate Change? Oxford Smith School of Enterprise and the Environment | Working Paper No. 20-02 ISSN 2732-4214. Available at: https://www.smithschool.ox.ac.uk/publications/wpapers/workingpaper20-02.pdf.

[77] Third- or fourth-generation mobile communications technology, 3G or 4G

[78] World Bank. 2021. Digital Senegal for Inclusive Growth: Technological Transformation for Better and More Jobs. By Cruz, M., Dutz, M., and Rodriguez-Castelan, C. World Bank, Washington DC. https://openknowledge.worldbank.org/handle/10986/36860.

advanced levels of digital skills are likely to see an even more significant increase.[79] While the project's support for the development of the tech hub and knowledge network accrues direct economic benefits for the private sector, the impact of an enabling environment goes far beyond specific direct benefits. Such hubs provide communities with numerous indirect benefits, such as local economies' diversification, women empowerment, and minority-led entrepreneurship.

51. **The project-level economic and financial assessment follows a standard Cost-Benefit Analysis approach and indicates a significant positive impact.** The model relies on available secondary data and reasonable assumptions, based on similar interventions, but also additional evidence sourced from consultations.[80] Based on the model, the overall Net Present Value for the project under a neutral scenario is estimated at US$21.25 million, while an Internal Rate of Return is 24 percent over a ten-year period.[81] Importantly, private co-investments under Component 1 increase the financial viability of the entire intervention. Finally, the GoT can also expect an increase in value-added tax due to increased subscriber base in these areas, and job creation to operate and maintain the sites deployed.

B. Fiduciary

Financial Management (FM)

52. **The proposed FM arrangements, including planning, budgeting, accounting, internal controls, funds flow, financial reporting and external auditing are in accordance with the fiduciary requirements of the World Bank Operational Policies and Principles for Investment Project Financing (IPF).** The project will be anchored at MENTD, which will be responsible for the overall FM coordination and monitoring of project activities. The PIU will maintain FM arrangements at all project implementation levels, including (i) ensuring compliance with the Legal Agreement; (ii) obtaining funds from the World Bank and managing such funds in an efficient, effective, and transparent manner; (iii) providing financial reports and project audit reports to the World Bank; (iv) ensuring overall management of payments and accounting functions of the project; (v) managing internal and external audits and following up on audit issues; and (vi) responding to any other World Bank requests related to FM matters.

53. **An FM assessment was carried out by the World Bank team prior to appraisal, which reviewed the existing FM arrangements at MENTD and covered elements of budgeting, accounting, financial reporting, funds flow, internal controls, and external auditing.** The assessment found that the PIUs of other World Bank-financed operations under the direct coordination and supervision of MENTD, including the Togo portion of the now closed WARCIP (P123093) and ongoing WURI (P169594), have been performing in a satisfactory manner, without any serious accountability or FM issues. At the same time, MENTD itself does not have a direct experience in the World Bank FM procedures, or a dedicated FM team.[82] For this project, a dedicated PIU has been established and staffed with qualified and experienced personnel, satisfactory to the World Bank and recruited on a competitive basis, including an FM specialist (already recruited) and an accountant (to be added during the first year of the project implementation), who will jointly manage and coordinate the overall FM arrangements related to the project. There will be a knowledge transfer between the newly recruited PIU staff and experienced finance staff of the WURI PIU, which has been responsible for the preparation and implementation of the PPA. The recruited FM specialist and an accountant will subsequently train MENTD's designated FM team, with the

[79] Centre for Economics and Business Research, 2022. The economic impact of digital inclusion in the UK. https://www.goodthingsfoundation.org/insights/the-economic-impact-of-digital-inclusion-in-the-uk/#:~:text=This%20report%2C%20launched%20by%20Good%20Things%20Foundation%2C%20sets,This%20is%20%C2%A39.48%20return%20for%20every%20%C2%A31%20invested.

[80] The Cost-Benefit Analysis model is used to run a cash flow and financial analysis at the country level that features three different scenarios: neutral, optimistic, and pessimistic. Where possible, the model also runs sensitivity analysis to quantify the benefits and costs attributable to the project against current baseline indicators.

[81] The discount rate used for the economic and financial calculations is 14.11 percent, which includes a spread to account for the project and country risk (source: https://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/ctryprem.html).

[82] No evidence of the existence of a specific organizational chart for the directorate in charge of administrative and financial affairs, as it is common in most ministries in Togo, has been received.

objective of transferring to them full responsibility for FM management of the project subject to positive conclusions of a new FM assessment to be conducted by the World Bank during year two of the project implementation.

Procurement Arrangements

54. **Procedures and Standard Procurement Documents.** Procurement under the proposed project will be carried out in accordance with the "World Bank Procurement Regulations for Investment Project Financing Borrowers" dated September 2023, the "Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants" dated October 15, 2006 and revised in January 2011 and as of July 1, 2016, and beneficiary disclosure requirements, as well as other provisions stipulated in the project Legal Agreements. The project will use the World Bank's Systematic Tracking of Exchanges in Procurement (STEP), an online planning and tracking system that will provide data on procurement activities, establish benchmarks, monitor delays and measure procurement performance. Use of STEP is mandatory for all procurement transactions subject to post and prior review under the project. The project shall use the World Bank's latest Standard Procurement Document versions for the procurement of consulting services, non-consulting services, and goods.

55. **Procurement Planning.** The Project Procurement Strategy for Development (PPSD) and Procurement Plan for the first 18 months, outlining the procurement procedures to be used to plan and monitor implementation of investment activities, have been drafted by the client and validated by the World Bank. The PPSD describes how procurement activities will support project operations for the achievement of PDO and deliver value for money. The PPSD is linked to the project implementation approaches ensuring proper sequencing of the activities. The analysis shows that Togo has a favorable context for effective procurement, with expertise in environmental and social impact management. However, it lacks a sustainable procurement policy and electronic systems. While technological or innovative needs are minimal, the risk of procurement being affected by uncontrolled environmental, social, or political factors is assessed as Moderate**.**

56. **Advance Contracting and Retroactive Financing.** The project design will provide a window for the Borrower to carry out advance contracting and retroactive financing in accordance with Section V (Paragraphs 5.1 and 5.2) of the World Bank Procurement Regulations for IPF Borrowers of September 2023.

57. **Procurement Post Reviews (PPRs) and Independent Post Reviews (IPRs) by the World Bank and Procurement Methods.** Based on the assessed implementation risk for procurement, which is Substantial, the World Bank will carry out PPRs or IPRs for all contracts based on the approved procurement plan not subject to prior review by the World Bank. The Borrower will use the procurement methods and market approach in accordance with the Procurement Regulations. Open National Market Approach is a competitive bidding procedure normally used for public procurement in the country of the Borrower and may be used to procure goods, works, or non-consultant services provided it meets the requirements of paragraphs 5.3 to 5.6 of the Procurement Regulations. The thresholds for specific market approaches and procurement methods are included in Annex 5.

58. **Procurement risks.** The risks and mitigation measures are provided in Table 3.

Table 3. Procurement Risks and Mitigation Measures

Procurement Risk	Mitigation Measures	Responsibility and Deadline
A PIM, including a section on procurement, is not available	Elaborate and submit to the World Bank for validation, a satisfactory draft PIM comprising a procurement section	MENTD; by project negotiations *(completed)*
At present, there is no qualified Procurement Specialist within PIU	-Maintain the procurement specialist recruited to support the MENTD Public Procurement Division and reinforce his capacity -Recruit a qualified procurement specialist for the PIU	MENTD; by project negotiations *(completed)*
Delays in procurement process and approval by the procurement commissions and other entities	Set up a procurement monitoring tool and ensure that the procurement commissions comply with procurement service standard times for contract no objection (approval)	MENTD; by the Board approval

Limited knowledge of STEP	Reinforce the capacity of PIU on STEP	PIU/World Bank; on an ongoing basis

C. Environmental, Social and Legal Operational Policies

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

59. **The project is likely to generate low to moderate environmental and social risks and impacts on project beneficiaries, government officials, the public, workers, targeted communities, and vegetation**. The environmental risks are site-specific, largely generated during the construction phase, and can be mitigated with measures that are known. They include (i) disruption of traffic flow and increased traffic safety risks during construction; (ii) disposal and management of large amounts of excavated material generated from construction activities; (iii) occupational health and safety of workers both during the construction and operational phases; (iv) destruction of vegetation and natural habitat; (v) water pollution by the waste; (vi) increased level of dust, noise, and vibration from moving of construction vehicles and machinery; and (vii) community health and safety-related risk (which include include the general risk of labor-related accidents, fire from the presence of flammable materials, etc.). The social risks, as well as risks of sexual exploitation and abuse (SEA) and sexual harassment (SH) posed by the project, are also deemed moderate. The impacts associated with these risks will be localized and can be prevented and/or mitigated through the implementation of the project Labor Management Procedures, which has been prepared by the GoT, consulted upon and disclosed in-country on September 24, 2024 and on October 18, 2024 on the World Bank website. The GoT has also prepared a Stakeholder Engagement Plan, disclosed in-country on September 24, 2024 and on October 22, 2024 on the World Bank website. Security risks are significant in the northern part of the country, including threats stemming from the jihadist insurgency in the central Sahel. A detailed security risks evaluation and security risks management plan were prepared by the GoT, with the summary published in-country on September 24, 2024 and on November 25, 2024 on the World Bank website. Moreover, the GoT has prepared and validated at a national workshop an Environmental and Social Management Framework, disclosed in-country on October 24, 2024 and on November 23, 2024 on the World Bank website, that will guide the preparation of Environmental and Social Impact Assessments / Environmental and Social Management Plans for the subprojects. The specific locations and scope of civil works are currently undetermined. A Resettlement Framework has also been prepared, validated at a national workshop and disclosed in-country on October 24, 2024 and on November 23, 2024 on the World Bank website to provide guidance for the screening and management of any unavoidable involuntary physical or economic displacement. Finally, the Environmental and Social Commitment Plan, which forms part of the Financing Agreement, has been prepared and discussed. Its negotiated version was disclosed in-country and on the World Bank website on November 23, 2024.

Grievance Redress Services

62. Communities and individuals who believe that they are adversely affected by a project supported by the World Bank may submit complaints to existing project-level grievance mechanisms or the World Bank's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed to address project-related concerns. Project affected communities and individuals may submit their complaint to the World Bank's independent Accountability

Mechanism (AM). The AM houses the Inspection Panel, which determines whether harm occurred, or could occur, as a result of World Bank non-compliance with its policies and procedures, and the Dispute Resolution Service, which provides communities and borrowers with the opportunity to address complaints through dispute resolution. Complaints may be submitted to the AM at any time after concerns have been brought directly to the attention of World Bank Management and after Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's GRS, visit http://www.worldbank.org/GRS. For information on how to submit complaints to the World Bank's AM, visit https://accountability.worldbank.org.

V. KEY RISKS

63. **The overall risk of the project is rated Substantial,** reflecting significant chances that macroeconomic environment, coupled with technical complexity and fiduciary risks would affect the achievement of the PDO.

64. **Macroeconomic risk is rated Substantial.** Like other countries in the region, Togo has been adversely impacted by a deteriorating global environment marked by high inflation and regional instability, which could persist or even worsen throughout project implementation, risking further straining public finances and undermining the achievement of the PDO. The materialization of key downside risks, including security threats requiring additional military spending or financial stress on regional markets exacerbating refinancing pressures, could raise concerns about fiscal sustainability and impact the GoT's focus on the digital agenda, supported by the project. Moreover, availability and prices of key imported ICT goods depend on improvements in external accounts. These risks are partially mitigated by reforms supported by the World Bank-financed development policy financing operations (P179294 and P181238), including those focused on domestic revenue mobilization and fiscal risk management. Importantly, in the wake of the pandemic, the GoT has demonstrated its continued commitment to accelerating digital transformation with an emphasis on digital connectivity and digital public services, as reflected in the revised 2025 Roadmap objectives. The project is consistent with the GoT's budgetary and other macroeconomic policies, as it aims to decrease connectivity costs, attract investment, and help create jobs. At the same time, considering uncertainties related to the global and Togo-specific economic outlook potentially affecting the appetite of private companies to participate in the infrastructure expansion PPP schemes under Component 1, substantial residual risk remains.

65. **Technical design of project risk is rated Substantial.** Under Component 1, the project will rely on the participation of telecom operators and ISPs in co-financing infrastructure expansion, which will require critical technical and financial expertise (to define suitable governance arrangements with private partners, etc.). Consultations held with the private sector in February-October 2024 (based on detailed feasibility studies prepared by KPMG) to gauge their co-investing appetite, discuss targeted zones and institutions and define implementation modalities serve as major mitigation measures. Parallel, synergetic and closely coordinated investments of other development partners (particularly MCC, KfW, and GIZ) help hedge the risks as well. Moreover, the project proposes to (i) leverage lessons learned from other similar projects, and (ii) include strategic TAs and capacity building activities (as suggested under Component 3) to support the implementation of complex activities and reinforce key project stakeholders (such as ARCEP). Despite these mitigation measures, the residual risk remains substantial.

66. **Fiduciary risk is rated Substantial.** As mentioned in Section IV.B, no FM-specific issues, overdue audits, or mis-procurements have been noted under closed or ongoing investment projects led by MENTD (WARCIP, P123093 and WURI, P169594). FM and procurement risks are nevertheless rated substantial, mainly due to the fact a new PIU has been created and will need to be trained in managing World Bank-supported operations. The FM and procurement assessments have identified key risks and proposed mitigation measures to ensure adequate FM and procurement arrangements are in place for the project funds to be used for the purposes, for which the financing was provided, with due attention to considerations of economy and efficiency.

ANNEX 1. RESULTS FRAMEWORK

PDO Indicators by PDO Outcomes

Baseline	Period 1	Period 2	Period 3	Period 4	Closing Period
Expand access to affordable and climate-resilient broadband connectivity					
Data-only fixed-broadband basket, 5GB (as percentage of monthly GNI per capita) (Percentage)					
Dec/2023	Dec/2025	Dec/2026	Dec/2027	Dec/2028	Dec/2029
31.30	30	26	22	18	15
Newly built or upgraded infrastructure that is resilient to climate-related shocks (Percentage)					
Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028	Dec/2029
0	100	100	100	100	100
People using broadband internet (new use) (Number of people) CRI					
Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028	Dec/2029
0	70,000	210,000	385,000	596,000	701,000
➢People using broadband internet (new use) - Female (Number of people) CRI					
Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028	Dec/2029
0	0	84,000	154,000	228,000	280,000
➢People using broadband internet (new use) - Youth (Number of people) CRI					
Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028	Dec/2029
0	0	168,000	308,000	477,000	561,000
Enhance digital skills and digital entrepreneurship					
People completing digital skills trainings under the project (Number)					
Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028	Dec/2029
0	3,900	13,650	36,100	62,750	91,200
➢of which women (Number)					
Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028	Dec/2029
0	1,950	6,800	18,000	31,300	45,600
Enterprises graduating from the tech hub programs (Number)					
Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028	Dec/2029
0	30	60	90	120	150

➢of which women-led (Number)					
Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028	Dec/2029
0	15	30	45	60	75

Intermediate Indicators by Components

Baseline	Period 1	Period 2	Period 3	Period 4	Closing Period
Component 1. Expanding Broadband Connectivity					
Public institutions provided with new or enhanced access to broadband internet under the project (Number)					
Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028	Dec/2029
0	164	491	900	1,391	1,637
➢of which education institutions (Number)					
Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028	Dec/2029
0	129	388	711	1,099	1,293
➢of which health institutions (Number)					
Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028	Dec/2029
0	23	68	124	192	226
➢of which city halls (Number)					
Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028	Dec/2029
0	12	35	65	100	118
Value of private sector investment leveraged under the project (Amount(USD))					
Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028	Dec/2029
0	1,000,000	3,000,000	5,500,000	8,500,000	10,000,000
Data-only mobile-broadband basket, 2GB (as percentage of monthly GNI per capita) (Percentage)					
Dec/2023	Dec/2025	Dec/2026	Dec/2027	Dec/2028	Dec/2029
6.30	5	4	3	2	1.50
People using broadband internet (enhanced use) (Number of people) CRI					
Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028	Dec/2029
0	0	106,000	195,000	302,000	356,000
➢People using broadband internet (enhanced use) - Female (Number of people) CRI					
Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028	Dec/2029
0	0	26,000	48,000	75,000	89,000
➢People using broadband internet (enhanced use) - Youth (Number of people) CRI					

Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028	Dec/2029
0	0	53,000	97,000	151,000	178,000
Component 2. Boosting Digital Skills and Entrepreneurship Ecosystem					
Beneficiaries receiving trainings under the project who expressed satisfaction (Percentage)					
Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028	Dec/2029
0	90	90	90	90	90
People using digitally enabled services (enhanced services) (Number of people) CRI					
Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028	Dec/2029
0	30,000	100,000	300,000	500,000	700,000
➢People using digitally enabled services (enhanced services) - Female (Number of people) CRI					
Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028	Dec/2029
0	12,000	40,000	120,000	200,000	280,000
➢People using digitally enabled services (enhanced services) - Youth (Number of people) CRI					
Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028	Dec/2029
0	18,000	60,000	180,000	300,000	420,000
Individuals who enhanced employment status following completion of project-supported digital skills trainings (Number)					
Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028	Dec/2029
0	500	1,800	4,700	8,200	12,000
➢Individuals who enhanced employment status following completion of project-supported digital skills trainings - Female (Number)					
Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028	Dec/2029
0	250	900	2,350	4,100	6,000
People benefitting from climate focused trainings (Number)					
Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028	Dec/2029
0	100	200	400	1,000	2,000
Component 3. Strengthening Legal, Regulatory and Institutional Environment for Digital Economy					
Completion of feasibility and strategic studies for the establishment of a National Innovation Agency (Yes/No)					
Nov/2023	Dec/2025	Dec/2026	Dec/2027	Dec/2028	Dec/2029
No	No	Yes	Yes	Yes	Yes
Cloud Strategy adopted (Yes/No)					
Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028	Dec/2029
No	No	No	Yes	Yes	Yes
e-Waste strategy developed, consulted, and published (Yes/No)					
Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028	Dec/2029
No	No	No	Yes	Yes	Yes

Digital Code developed, reviewed, and adopted (Yes/No)					
Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028	Dec/2029
No	No	No	Yes	Yes	Yes
Officials and civil servants trained and certified in the digital economy topics, new strategies and regulations (Number)					
Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028	Dec/2029
0	0	50	100	150	200
Component 4. Project Management					
Grievances addressed within the project approval timeline (Percentage)					
Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028	Dec/2029
0	70	80	90	90	90

M&E Plan: PDO Indicators by PDO Outcomes

Expand access to affordable and climate-resilient broadband connectivity	
People using broadband internet (new use) (Number)	
Description	The number of people who use new internet broadband facilitated through the project. Use is measured as the number of users (with female and youth disaggregation).
Frequency	Annual
Data source	Project implementation reports submitted by PIU
Methodology for Data Collection	Data consolidated by PIU
Responsibility for Data Collection	PIU
Data-only fixed-broadband basket, 5GB (as percentage of monthly GNI per capita) (Percentage)	
Description	Price of basket of 5GB of fixed broadband measured as a percentage of Gross National Income per capita
Frequency	Annual
Data source	ITU
Methodology for Data Collection	Data consolidated by PIU
Responsibility for Data Collection	PIU
Newly built or upgraded infrastructure that is resilient to climate-related shocks (Percentage)	
Description	Newly built or upgraded infrastructure that is built according to standards to be resilient to shocks, as determined by the tender documentations prepared under the project.
Frequency	Annual
Data source	Project implementation reports submitted by PIU
Methodology for Data Collection	Data consolidated by PIU
Responsibility for Data Collection	PIU
Enhance digital skills and digital entrepreneurship	
People completing digital skills trainings under the project (Number)	
Description	People completing a training; “completing” implies obtaining a nationally/internationally recognized certificate under the project (with female disaggregation).
Frequency	Annual
Data source	Project implementation reports submitted by PIU
Methodology for Data Collection	Data to be consolidated by MCENDA and PIU
Responsibility for Data Collection	PIU
Enterprises graduating from the tech hub programs (Number)	
Description	Total cumulative number of digital start-ups, entrepreneurs, and businesses that use a tech solution for commercial purposes supported through the incubator programs delivered by the Tech Hub. A ”woman-led firm“ is defined as a firm with more than 50 percent of female ownership or with a woman top manager.
Frequency	Annual
Data source	Project implementation reports submitted by PIU
Methodology for Data Collection	Data consolidated by PIU
Responsibility for Data Collection	PIU

M&E: Intermediate Results Indicators by Components

Component 1. Expanding Broadband Connectivity and Digital Inclusion	
Public institutions provided with new or enhanced access to broadband internet under the project (Number)	
Description	Number of facilities connected to new broadband access (with breakdown by city halls, health facilities, education facilities).
Frequency	Annual
Data source	Project implementation reports submitted by PIU
Methodology for Data Collection	Data consolidated by PIU
Responsibility for Data Collection	PIU
People using broadband internet (enhanced use) (Number)	
Description	The number of people who use enhanced internet broadband access through the project. Use is measured as the number of users (with female and youth disaggregation).
Frequency	Annual
Data source	Project implementation reports submitted by PIU
Methodology for Data Collection	Data consolidated by PIU
Responsibility for Data Collection	PIU
Data-only mobile-broadband basket, 2GB (as percentage of monthly GNI per capita) (Percentage)	
Description	Price of basket of 2GB of mobile broadband measured as a percentage of Gross National Income per capita.
Frequency	Annual
Data source	ITU
Methodology for Data Collection	Data consolidated by PIU
Responsibility for Data Collection	PIU
Value of private sector investment leveraged under the project (Amount(USD))	
Description	Value, in m. US$, of additional (or incremental) private sector investment in Togo's ICT sector through the project. It is anticipated that this will primarily be leveraged through the backhaul and last-mile connectivity expansion. Other components of the project may also leverage private sector investment through partnerships.
Frequency	Annual
Data source	Project implementation reports submitted by PIU
Methodology for Data Collection	Data consolidated by PIU
Responsibility for Data Collection	PIU, in conjunction with bidders winning tenders.
Component 2. Boosting Digital Skills and Entrepreneurship Ecosystem	
People using digitally enabled services (enhanced services) (Number of people)	
Description	The indicator counts the number of unique users of the Knowledge Network platform (with female and youth disaggregation).
Frequency	Annual
Data source	Project implementation reports submitted by PIU
Methodology for Data Collection	Data consolidated by PIU
Responsibility for Data Collection	PIU.
Individuals who enhanced employment status following completion of project-supported digital skills trainings (Number)	

Description	Measures the number of individuals who reported they were able to find new job opportunities - including starting a new business, added new income streams while self-employed, or secured revenue-generating activities as a result of targeted trainings or other project-funded activities (with female disaggregation).
Frequency	Annual
Data source	Project implementation reports submitted by PIU
Methodology for Data Collection	Data consolidated by PIU
Responsibility for Data Collection	PIU, in conjunction with bidders winning tenders.
Beneficiaries receiving trainings under the project who expressed satisfaction (Percentage)	
Description	Beneficiaries expressing satisfaction on the quality of the trainings received.
Frequency	Annual
Data source	Project implementation reports submitted by PIU
Methodology for Data Collection	Data consolidated by PIU based on survey.
Responsibility for Data Collection	PIU, in conjunction with bidders winning tenders.
People benefitting from climate focused trainings (Number)	
Description	These trainings will cover topics, such as climate resilience, climate mitigation and adaptation measures, climate-smart solutions and tools, and other related topics.
Frequency	Annual
Data source	Project implementation reports submitted by PIU
Methodology for Data Collection	Data consolidated by PIU based on survey
Responsibility for Data Collection	PIU, in conjunction with bidders winning tenders
Component 3. Strengthening Legal, Regulatory and Institutional Environment for Digital Economy	
Completion of feasibility and strategic studies for the establishment of a National Innovation Agency (Yes/No)	
Description	Strategic study completed by the MENTD.
Frequency	Annual
Data source	Project implementation reports submitted by PIU
Methodology for Data Collection	Data to be consolidated by PIU.
Responsibility for Data Collection	PIU.
Cloud Strategy adopted (Yes/No)	
Description	Adoption of the Cloud Strategy (integrating gender-informed inclusion measures to boost trust in digital services and promote online safety particularly for women and girls).
Frequency	Annual
Data source	Project implementation reports submitted by PIU
Methodology for Data Collection	Data to be consolidated by PIU.
Responsibility for Data Collection	PIU.
e-Waste strategy developed, consulted, and published (Yes/No)	
Description	Development of a e-Waste strategy
Frequency	Annual
Data source	Project implementation reports submitted by PIU
Methodology for Data Collection	Data to be consolidated by PIU.
Responsibility for Data Collection	PIU.
Digital Code developed, reviewed, and adopted (Yes/No)	

Description	Development and adoption of a new Digital Code
Frequency	Annual
Data source	Project implementation reports submitted by PIU
Methodology for Data Collection	Data to be consolidated by PIU
Responsibility for Data Collection	PIU
Officials and civil servants trained and certified in the digital economy topics, new strategies and regulations (Number)	
Description	Training programs can be related to telecommunication sector, digital innovation ecosystem, digital skills development implementation, data governance, data protection and cybersecurity, etc.
Frequency	Annual
Data source	Project implementation reports submitted by PIU
Methodology for Data Collection	Data to be consolidated by PIU
Responsibility for Data Collection	PIU
Component 4. Project management and knowledge transfer	
Grievances addressed within the project approval timeline (Percentage)	
Description	Percentage of grievances or complaints relating to the project, which are addressed within the stipulated service standards for response time. Service standards (including response times) will be defined in the Project Implementation Manual.
Frequency	Quarterly
Data source	Grievance Redress Mechanism
Methodology for Data Collection	GRM reports administrative data
Responsibility for Data Collection	PIU

ANNEX 2: Identified Gender Barriers and Proposed Actions

1. **Despite significant progress in gender equality, important gaps remain in Togo.** Togo's achievements[83] are reflected in its 97.5 score in the 2024 Women, Business, and the Law Index[84], the highest in SSA, marking a 15.6-point improvement from the previous year. However, despite legal progress, women remain economically dependent on men, and restrictive social norms persist, contributing to disparities in endowments and economic opportunities. Women also face weaker access to education, professional training, and financing, which restricts their ability to start and grow businesses. Gaps remain in areas, such as wage employment and entrepreneurship. For instance, only 13.5 percent of women hold waged jobs outside of agriculture, compared to 54 percent of men. Additionally, underemployment rate for women (53 percent) is much higher than for men (34 percent), and the situation has worsened in recent years.[85] Gender gaps persist in the digital domain as well, with key challenges related to uneven access to broadband, low ownership and usage of digital devices, digital gender-based harassment, and cultural beliefs that perpetuate stigma and gender stereotyping in the digital and technology sectors. The project aims to address some of the identified constraints, by adopting a gender lens across its key activities. This includes targeted efforts to increase women's access to broadband, promote digital literacy, and provide women with access to financing and professional training opportunities. These interventions are designed to empower women in Togo, fostering their greater digital inclusion and economic participation.

Table A2.4. Identified Gender Barriers and Proposed Actions

ANALYSIS *(Gender gaps identified)*	**ACTIONS** *(Proposed actions to address the gaps)*	**INDICATORS** *(How the gaps are bridged)*
Gender gaps in digital usage Up-to-date data on internet usage is lacking. Based on 2018, United Nations Children's Fund (UNICEF)-supported survey,[86] less than a third of women, compared to almost half of men (27 percent versus 49.3 percent, respectively) reported using internet in urban areas, while those living in rural areas reported hardly any use at all (2.4 percent for women compared to 9 percent for men). Proxies from more recent sources, such as Afrobarometer (2023), show that 45 percent of women versus 61 percent of men report using internet "every day", "a few times a week" or "a few times a month," indicating a 16 p.p. gap.[87]	**Promoting women's access to and usage of broadband services** While connecting targeted education and health facilities (which happen to have a lot of female workers and attendees) under Component 1, the project will address digital divide, including digital gender divide. Moreover, the MENDT will identify public/community spaces, where women and girls concentrate to setup public WIFI access points and develop outreach and communication activities targeted at women and gender equality advocates.	**PDO Indicator:** • People using broadband internet (new use) (number) - Female (number of women).

[83] The include *inter alia*: (i) the adoption of the 2006 Labor Code (amended in 2021), which prohibits gender discrimination and mandates equal pay, (ii) the creation of the Ministry of Social Action, Promotion of Women in 2010 to oversee gender mainstreaming efforts; (iii) the adoption of the 2011 National Policy on Gender Equality and Equity; and (iv) reforms to the 1980 Persons and Family Code, removing discriminatory provisions.

[84] World Bank, 2024. Women, Business and the Law 2024. https://openknowledge.worldbank.org/server/api/core/bitstreams/b339e2a7-ea65-4ed0-a471-d285ded8c4c7/content

[85] World Bank, 2023. Togo Systematic Country Diagnostic Update. Internal Document.

[86] UNICEF, 2018. Multiple Indicator Cluster Surveys 6th round, Final Report, Lomé, Togo.

[87] Afrobarometer, 2023. https://www.afrobarometer.org/wp-content/uploads/2023/06/AD656-Ecarts-dopinions-entre-hommes-et-femmes-au-Togo-Que-retenir-Afrobarometer-22juin23-.pdf

Low digital literacy and skills and labor market participation among women[88] Togo faces a shortage of professionals with specialized digital skills, accentuated by a significant gender divide. This can partly be attributed to the fact that Togo is facing a learning crisis. Although sex-disaggregated data on basic digital skills are not available, other data sources serve as proxies: only 59.9 percent of girls complete secondary school compared to 66.8 percent of boys. Moreover, the completion rates for secondary education reveal a significant drop-off as at the tertiary level, only 1.71 percent of students are enrolled in ICT-related courses, with just 3 percent being female. In broader scientific and technological fields, women make up just 15.6 percent of students. Addressing this digital divide is challenging, as only 55.1 percent of women aged 15 and above are literate, and female labor market participation has stagnated at 55 percent. Factors affecting completion rates of female students include child labor, early marriage, teenage pregnancy, coupled with the existence of policies and decrees that specifically aim at excluding pregnant girls from the education system.	**Enhancing digital skills and employment opportunities with a particular focus on women** To support women and girls in acquiring digital skills, Subcomponent 2.1 will facilitate access to and support gender-inclusive certificate-based hybrid courses, training, and mentorship opportunities. It will also support employment of graduates, with a particular focus on women. The project will also facilitate peer learning opportunities, virtual hackathons, and innovation challenges to engage female participants in hands-on experiences, particularly focusing on equipping women with the skills needed for the digital economy. Under Subcomponent 2.2 (Establishing Knowledge Network) the project will offer a range of digital learning programs accessible to the entire connected population. Tailored programs will be offered to women, marginalized and vulnerable groups through various channels, including community groups events, which can host female role models in the digital sector. Partnerships with local Non-governmental organizations, schools, and women's organizations will be leveraged to expand reach and ensure inclusivity.	**PDO Indicator:** • People completing digital skills trainings under the project (number), of which female (number). **Intermediate Indicator:** • Individuals who enhanced employment status following completion of project-supported digital skills trainings (number), of which female (number).
Low share of women led innovative / tech start-ups The 2024 Women Business and the Law gives Togo a score of 27.5 out of 100.0 for supportive frameworks, which is lower than the global average (39.5) although slightly higher than the SSA average (24.5).[89] Specific data on women-led[90] digital entrepreneurship are not available, however, data on women's entrepreneurship serve as a proxy: 25 percent of firms have female participation in entrepreneurship and 10.9 percent have majority female ownership.[91] Women typically run small-scale businesses in informal sectors and cite limited access to	**Scaling up female-led digital entrepreneurship and innovation** The tech hub to be established under subcomponent 2.1 will prioritize comprehensive support for women-led (or co-led) businesses, including business and soft skills training, mentorship, and facilitated access to networks and finance. The project will also consider utilizing frameworks such as the EU's EntreComp[94] to identify the specific needs of female entrepreneurs. Additionally, the project will explore offering support services such as on-site childcare and designing flexible training programs that cater to women entrepreneurs' needs. Communication	**PDO Indicator:** • Enterprises graduating from the tech hub programs (number), of which women led (number).

[88] https://www.iicba.unesco.org/en/node/89
[89] WBG, 2024. https://wbl.worldbank.org/content/dam/documents/wbl/2024/pilot/WBL24-2-0-Togo.pdf
[90] A "woman-led firm" is defined as a firm with more than 50 percent of female ownership or with a woman top manager. https://openknowledge.worldbank.org/server/api/core/bitstreams/21bce9c8-a715-4326-bd1e-93654e3cc15e/content
[91] Enterprise Surveys: https://www.enterprisesurveys.org/en/data/exploretopics/gender
[94] This framework, which includes scientifically designed assessments for women entrepreneurs, will help tailor support more effectively. https://ec.europa.eu/jrc/en/entrecomp

finance as a major[92] barrier. Additionally, women are more likely to prioritize household and caregiving responsibilities, spending twice as much time on these tasks compared to men. This combined with other factors, makes female-owned businesses less likely to introduce innovative or digital technologies in their operations.[93]	campaigns aimed at reshaping gender norms, along with incentives, will also be integrated to encourage greater female participation. All training programs (under Component 2) will aim to create a safe environment by incorporating anti-discrimination and anti-sexual harassment policies and reporting mechanisms.	
Insufficient regulatory frameworks to promote women's participation in the digital economy The GoT adopted "Togo 2025" — a roadmap that sets out a vision for the development across economic, social and environmental sectors. It aims to position Togo into a regional ICT leader by promoting the strengthening of the regulatory framework (particularly pertaining to mobile payments, e-commerce, data governance, and the like). Nonetheless, it is worth noting that the roadmap fails to include gender-informed inclusion measures to provide women with opportunities to overcome legal barriers to their full participation in the digital economy.	**Tackling legal barriers to unlock women's potential in the digital economy** As part of this action, the project (sub-component 3.1) will support (i) the design and operationalization of several policy, legal and regulatory instruments (including the Cloud Strategy and the Law on the Development of Innovation Ecosystem with its implementing decrees), ensuring that gender perspectives are included in their development, and (ii) support the reinforcement of legal and regulatory framework for the telecom sector, data governance, data protection and cybersecurity integrating gender-informed inclusion measures to boost trust in digital services and promote online safety particularly for women and girls.	**Intermediate Indicator:** • Adoption of a "Cloud strategy" (integrating gender-informed inclusion measures to boost trust in digital services and promote online safety particularly for women and girls) by GoT (Yes/No)

[92] UNESCO and Africa Women's Forum, 2021. Challenges and Opportunities for Women Entrepreneurs in Africa: A Survey of Science Usage.
[93] World Bank, 2019. Profiting from Parity: Unlocking the Potential of Women's Business in Africa. http://hdl.handle.net/10986/31421 /

ANNEX 3: Identified Climate Risks and Proposed Actions Aligned with Paris Commitments

Climate Vulnerability and Risks in Togo

1. **Togo has experienced several natural disasters and is among the most vulnerable countries to climate change due to its geographical location and weak readiness to cope with the adverse climatic effects**. The country's main climate-related threats are river floods (high risk), water scarcity (high risk), extreme heat (high risk in northern regions and medium risk in southern regions), urban and coastal floods (medium risk) and landslide (medium risk).[95] Togo's vulnerability to climate change is exacerbated by its heavy dependence on rain-fed agriculture and livestock, making it challenging for low-income and disadvantaged communities to cope with climate-related risks. By 2060, temperatures are projected to increase by up to 3.1°C, impacting human health, worker productivity, and agricultural yields. Temperature increases are expected to continue, affecting key sectors, such as agriculture, infrastructure, energy, health, housing, water resources. Coastal erosion and the loss of goods and services are a significant concern, given that over 90 percent of industrial units are located in coastal areas.[96] Extreme temperatures, measured in days with above 35 degrees, are predicted to rise significantly, and flooding is a recurring climate hazard, affecting both coastal and northern regions, with past floods causing substantial social and economic losses (the 2010 flooding affected 83,000 people and resulted in estimated losses of around US$43.9 million, according to the Post-Disaster Needs Assessment).

Proposed Actions for Addressing Climate Vulnerability

2. **The project is expected to strengthen climate mitigation, adaptation, and resilience in Togo, and contribute to the country's NDC 2021 objectives.**[97] This will be achieved through the economy-wide digital acceleration, namely (i) developing green ICT sector framework; and (ii) connecting health and education facilities to affordable and climate-resilient broadband, thus facilitating the expansion of digital health and education services. The expansion of connectivity will also indirectly benefit households in proximity of connected public institutions (the marginal cost of connecting them will reduce significantly for the operators, thus increasing the probability of digital adoption). Coupled with climate-related capacity-building program for public servants, this is also expected to boost the use of digital technologies, such as early warning systems (EWS) and extreme weather alerts, thus increasing preparedness and the implementation of adaptive measures to respond to the consequences of climate change. Moreover, the project aims to develop an open-source learning platform to enable targeted populations, including youth and women, to have continuous access to education even during climate shocks, such as flooding. Finally, support (through incubation and acceleration programs) of climate-resilient and green startups planned under the project will help foster the development of innovative green digital solutions to strengthen the adaptation and resilience of vulnerable communities. The below table provides more information on activities designed to improve climate adaptation, mitigation, and resilience in Togo.

[95] Global Facility for Disaster Reduction and Recovery, ThinkHazard! Togo Climate risks. https://thinkhazard.org/en/report/243-togo
[96] World Bank. 2023. Country Climate Knowledge Portal. https://climateknowledgeportal.worldbank.org/country/togo/
[97] Togo, 2021. Nationally Determined Contributions.
https://unfccc.int/sites/default/files/NDC/2022-06/CDN%20Revis%C3%A9es_Togo_Document%20int%C3%A9rimaire_rv_11%2010%2021.pdf

Table A3.1. Project Interventions for Climate Change Adaptation and Mitigation

Climate adaptation and mitigation activities under the project (including estimated costs of climate-related parts of the activities)	US$ millions (subcomponents / activities)
Component 1 – Expanding Broadband Connectivity	**50**
Subcomponents 1.1. and 1.2. – Financing new construction and upgrades of the backhaul and last-mile network infrastructure ***100 percent of the US$50 million under Component 1 is going towards financing physical infrastructure (backhaul and last mile), including energy efficient active IT equipment and fiber optic cables, which is the best available technology in terms of energy efficiency and energy performance compared to microwave links prevalent in the country.*** **Adaptation** By financing backhaul and last-mile connectivity in unconnected areas, the project will (i) increase coverage and efficiency of Togo's EWS, the usage of which is currently limited by low digital access[98] (by connecting climate hotspots in rural areas, including the regions of Savanes, Kara, Centrale, Plateaux, and Maritimes, where vulnerable communities have insufficient time to take necessary precautions or evacuate hazardous areas); (ii) enable populations to have connectivity and receive early warning/weather forecast in time as well as facilitate recovery and response during and after extreme climate events; (iii) allow a remote access to basic services, such as the Novissi platform;[99] and (iv) ensure availability of connectivity in strategic facilities, such as hospitals, schools and townhalls targeted by the project, which may be used by the GoT as emergency or coordination centers in the aftermath of extreme climate events. The deployment of the national EWS is a key priority action defined in the country's NDC, and this activity will directly contribute to its operationalization and efficient operation in above-mentioned regions. In addition, the roll-out of this infrastructure will be critical for the implementation of the "Response to major climate risks" priority project defined under the "2025 Government Roadmap", by enabling (i) real-time monitoring before, during and after climate events; and (ii) reliable communications for government structures to ensure an efficient and coordinated response. Site-specific climate risk assessments (embedded in tender documents) will be conducted to identify adequate adaptation measures and inform the infrastructure design, ensuring its resiliency. Structural measures[100] will be included in tender documents for the deployment of underground fiber networks to withstand potential damage from climate risks (including floods and intense precipitation as identified using the World Bank Climate and Disaster Risk Screening tool).[101] These measures include the use of weather-resistant materials, waterproof coverings, as well as reinforced and climate-proof ducts. **Mitigation**	50 (20 percent for energy-efficient equipment and 80 percent for fiber optic cables)

[98] World Bank. 2024. Togo CCDR. As highlighted by CCDR, gaps in the mobile network coverage in the regions of Savanes, Kara, Centrale, Plateaux, and Maritimes, means that critical early warning messages can fail to reach those most at risk, leading to low preparedness and higher vulnerability during climate disasters. For instance, during the 2020 floods in the Maritime and Kara regions, the lack of a robust EWS, exacerbated by inadequate digital infrastructure, resulted in delayed evacuations and higher casualties and property losses.

[99] Novissi, financed under the World Bank-financed Togo Social Assistance Transformation for Resilience Program (P178835), is a fully digital social intervention program established by the GoT to support poor and vulnerable individuals with cash transfers. It targets climate-vulnerable populations and covers districts affected by climate shocks, as it aims to increase the coverage of safety nets and strengthen delivery systems, particularly focusing on vulnerable groups who are often the most affected by climate-related events such as floods and droughts. The program's design includes mechanisms to ensure that social assistance reaches those in climate-affected areas, thereby enhancing their resilience to such shocks.

[100] Such as adequate bandwidth to handle demand surges, swift restoration of services after accidents, improved network congestion management, and a robust contingency strategy to maintain service during severe weather events. This entails enhancing network redundancy and reducing the risk of failure from extreme climate events by protecting critical infrastructure such as cable ducts and equipment shelters.

[101] As part of implementing green standards for new digital infrastructures, the upcoming Togo CCDR (2024) recommends the use of underground ducts to deploy cables to prevent cuts and increase resilience to climate-related events.

The project activities will facilitate substantial upgrades from existing higher energy-intensive connectivity technologies based on microwave links[102] to more energy-efficient fiber optic technology while the remaining investment will be used to expand existing fiber optic backhaul (middle mile) and access networks. The planned fiber-based infrastructure provides the best performances in terms of energy consumption, with gains between 21 percent to 54 percent compared to microwave technology in macro- and microcell scenarios.[103] Without the project, the country would continue to rely heavily on energy-intensive microwave technology in the middle mile and fixed wireless spectrum technology for the last mile, leading to higher energy consumption and increased operational costs for service providers. Under this activity, all financing will be dedicated to the deployment of fiber optic technology, for both backhaul and last-mile connectivity. Togo's National Energy Efficiency Action Plan[104] sets standards for different devices, such as lighting devices; however, IT and telecommunications (telecom) equipment are not specifically targeted and there are no standards or labeling schemes for energy efficiency of telecom equipment in the country. For telecom equipment under Component 1, and more generally for all project activities (including the tech hub, innovation and education pods, and hybrid digital academy) necessitating the purchase of IT equipment, all procurements will be conducted in accordance with international energy efficiency and energy performance best practices and standards. These standards include (i) the European Commission's Joint Research Centre report on *Best Environmental Management Practices in the telecommunications and ICT sector*[105]*;* (ii) *ITU Green ICT standards*[106] and more specifically *ITU-T L.1310 on the energy efficiency metrics and measurement methods for telecommunication equipment*; and (iii) *IEEE 802.3az on energy efficient ethernet*[107]. To lower the carbon-footprint of the digital infrastructure deployed under the project, legacy equipment, such as diesel generators, that are currently used to power existing microwave links will be decommissioned. In remote areas that are off-grid, or areas where the electricity supply is vulnerable to climate events, active equipment will be powered by solar energy (with specifications integrated into tender documents). In the absence of specific and mandatory national standards on IT equipment energy efficiency in Togo, equipment will be required to have an Energy Star certification or equivalent[108], surpassing the current practice in the country. These measures will ensure the planned digital infrastructure meets the best international standards for energy efficiency and contributes to substantial reduction in GHG emissions in the country.	
Component 2 – Boosting Digital Skills and Entrepreneurship Ecosystem	**40**
Subcomponent 2.1: Tech Hub	27
2.1.(i) TA to elaborate a detailed business case and master plans for the tech hub ***25 percent of the financing cost for 2.1.(i) is going towards the climate activity described below.***	1

[102] Microwave links are still widely used in Togo, especially in the middle mile, in areas that are not covered by a fiber optic network.

[103] Politico Milano, IoT Lab, Europacable. 2021. Energy efficiency of fiber versus microwave, mmWave, copper, satellite and laser for the transport of the fronthaul and backhaul in 4G and 5G mobile networks. Politecnico-di-Milano-for-Europacable-Energy-efficiency-of-fiber-on-mobile-networks-December-2021-2.pdf

[104] Plan Nation d'Efficacité Energétique du Togo. https://www.se4all-africa.org/fileadmin/uploads/se4all/Documents/Country_PANEE/Togo_Plan_d_Actions_National_d%E2%80%99Efficacite%CC%81_Energe%CC%81tique.pdf

[105] Canfora, P., P. Gaudillat, I. Antonopoulos, and M. Dri., 2020. "Best Environmental Management Practice in the Telecommunications and ICT Services Sector." EUR 30365 EN, Publications Office of the European Union, Luxembourg, 2020, ISBN 978-92-76-21574-5, doi:10.2760/354984, JRC121781

[106] ITU-T, Green ICT Standards and Supplements. https://www.itu.int/net/ITU-T/lists/standards.aspx?Group=5&Domain=28

[107] IEEE 802.3az-2010 Standard for Information technology-- Local and metropolitan area networks-- Specific requirements-- Part 3: CSMA/CD Access Method and Physical Layer Specifications Amendment 5: Media Access Control Parameters, Physical Layers, and Management Parameters for Energy-Efficient Ethernet https://standards.ieee.org/ieee/802.3az/4270/

[108] Energy Star certification is available for office IT equipment such as computers, monitors etc. For other network equipment bidding documents will include the ITU and EU standards on IT equipment energy efficiency (see above).

This TA will create a robust framework with detailed master plans (including a detailed business case and construction plan) that will ensure the operational sustainability of the hub, which will also host climate-focused programs.	
2.1. (ii)a. Financing of incubation and acceleration programs for digital entrepreneurs, startups, and MSMEs ***30 percent of the financing cost for 2.1(ii)a is going towards climate activity described below.*** **Adaptation/Mtitigation** This activity will nurture a new generation of Togolese innovators in the climate-tech field and support the development of digital tools and technologies that can be leveraged to directly contribute to climate resilience and GHG emissions reduction. Focused support programs will target businesses developing climate-smart and green technologies and solutions for productive, resilient, and sustainable sectors that tend to be big GHG emitters (e.g., agriculture and transport). Startups to be selected for this program will be required to demonstrate how their innovative solutions will (i) strengthen the adaptation capability of vulnerable communities, the GoT and/or private actors; and (ii) respond to region-specific natural disasters and climate change vulnerabilities (e.g., through agricultural and evidence-based climate advisory services, early warning systems, e-vouchers for drought-resistant seeds etc.).	7
2.1.(ii)b. Financing of a hybrid digital academy ***30 percent of the financing cost for 2.1(ii)b is going towards climate activity described below.*** **Adaptation** This academy will offer in-person and virtual trainings, including climate-oriented content on leveraging digital tools and services as an adaptation mechanism in the event of climate shocks. Training programs will include content related to climate change awareness and essential adaptation measures. This academy will deliver digital skills trainings in the use of drones, AI, and GIS for collection and use of geospatial and weather/health data available in the public domains, including with the focus on how to use digital tools and data for climate change preparedness. This academy will provide trainees with necessary skills needed to interpret geospatial and weather data to make informed decisions about agricultural practices and water management.	4
2.1.(ii)c. Financing of the renovation costs and equipment provision to improve and/or expand existing facilities owned by the GoT and accorded to MENTD, which will host the above programs ***100 percent of the financing cost for 2.1.(ii)c is going towards the activity described below. The share of financing (out of US$10m) for renovations that include mitigation and adaptation measures is 60 percent. The share of financing for energy-efficient electrical and IT equipment is 40 percent.*** **Adaptation** A climate risk screening of selected facility will be conducted to: (i) identify existing and projected climate and geological hazards in the targeted location; (ii) assess their impact on structural stability and building envelope; and (iii) inform the rehabilitation works of selected buildings and include the needed climate adaptation measures accordingly. **Mitigation** Specific measures will be embedded in the tender documents to ensure that the newly rehabilitated facility is energy efficient. These include: (i) proper thermal insulation to reduce cooling energy consumption; (ii) energy-efficient lighting; and (iii) “Energy star” certification requirements for all equipment and appliances, such as heating, ventilation, and air conditioning systems. Moreover, all rehabilitated buildings will be required to obtain an EDGE green building certification or equivalent, which exceed the current efficiency levels included in Togo National Energy Efficiency Plan.	10

All IT equipment procured for the local area network of the tech hub will be required to have an Energy Star[109] certification or equivalent and to comply with the following abovementionned standards on Energy Efficiency (see more information under Component 1). The tech hub will leverage the use of energy efficient technologies and measures to support energy conservation and reduce GHG emissions, such as by using equipment with automatic switch-off mechanisms and those that conserve power when not in use. These measures combined will ensure that the building will suparss the current energy efficiency standards included in Togo's National Energy Efficiency Plan.	
2.1.(ii)d. Financing of the design, assembly and deployment of six pilot education and innovation pods ***100 percent of the financing cost for 2.1.(ii)d is going towards the climate activity described below.*** **Adaptation** These education and innovation pods will be deployed in areas newly connected under Component 1 and will offer educational courses on the usage of the EWS developed under the Climate Risk and Early Warning System (CREWS)[110] project to (i) increase the coverage of the EWS; (ii) create an enabling environment for beneficiaries to develop and experiment new adaptation techniques based on digital technologies; and (iii) serve as a communication center in case climate emergency. These pods will be designed using climate-resilient materials that can withstand extreme weather conditions. This includes using materials that provide natural light and ventilation, thermal insulation in walls and roofs, and efficient lighting systems. Their mobile nature will allow them to be relocated to areas less prone to climate-related disruptions, such as floods. This flexibility ensures that educational services remain accessible to vulnerable populations, regardless of changing environmental conditions. By providing a space for community activities and support services, the pods can foster stronger community bonds and collective resilience, while can serving as hubs for disaster-related information dissemination, training, and support during and after climate-related events. **Mitigation** The objective is to have these pods be fully solar energy powered,[111] with specific requirements included in their technical specifications (built into tender documents). Similarly to Component 1 and Activity 2.1.(ii)c, appliances and IT equipment will be required to be Energy Star certified. In addition, Office IT Equipment will be required to be Energy Star certified and IT Network equipment will be required to comply with the above-mentioned standards (IEEE 802.3az and ITU-T Recommendation L.1310.88.) – *See more information on the energy efficiency of IT equipment under Component 1.*	5
Subcomponent 2.2: Knowledge Network	13
2.2(ii) Development and deployment of a national open-source digital learning platform ***100 percent of the financing cost for 2.2(ii) is going towards the climate activity described below.*** **Adaptation** This platform will ensure inclusive access to learning content for the entire population, including underserved groups such as women, PWD, ethnic minorities, and populations with low literacy and skill levels. An embedded AI tutor and statistical management system will ensure a personalized and relevant learning experience and increase resilience to climate events by providing continuous access to education and information, even during disruptions caused by extreme weather. By fostering digital literacy, the platform will empower individuals to	1

[109] Energy Star certification is available for office IT equipment such as computers, monitors etc. For other network equipment bidding documents will include the ITU and EU standards on IT equipment energy efficiency (see above).
[110] More information available at: https://crews-initiative.org/project/togo-support-strengthening-of-national-capacity-deliver-climate-hydrometeorological-and/
[111] Through on-site solar production, with pods having solar panels and a battery pack built-in for an easy way to capture and use renewable solar energy.

access critical information and resources during climate emergencies, enhancing their ability to respond and recover effectively. **Mitigation** The platform will reduce the need for physical infrastructure and travel associated with traditional education. It lowers carbon emissions related to commuting and the operation of educational facilities by offering a digital alternative, it. Additionally, the use of AI and data analytics will optimize resource allocation and energy use, further minimizing the platform's carbon footprint.	
Component 3: Strengthening Legal, Regulatory, and Institutional Environment for Digital Economy	5
Subcomponent 3.1: Strengthening Enabling Environment for Digital Economy	4
3.1(vi) Financing of a TA to (a) assess climate risks of broadband connectivity infrastructure and support defining and implementing standards for climate resilience[112], (b) develop a national strategy on climate-smart digital infrastructure; and (c) capacity-building support for the effective implementation of the e-waste recycling or safe disposal ***100 percent of the financing cost for 3.1(vi) is going towards the climate activity described below.*** **Adaptation/Mtitigation** This activity will support defining and implementing national standards for climate change and natural disaster resilience, assessing climate risks of telecom infrastructure, and ensuring compliance with climate-resilient standards to withstand extreme weather events in Togo. It will develop climate-informed standards to enhance energy efficiency in the ICT sector, track environmental and carbon footprints to reduce GHG emissions, and establish a national climate-smart strategy with a capacity-building program for public servants. Moreover, this strategy will establish (i) an Extended Producer Responsibility (EPR) program to reduce the digital sector's carbon and environmental footprint through e-waste collection, dismantling, refurbishing, and recycling[113]; and (ii) define a roadmap to lower the digital sector's carbon footprint and provide the Government with the technical skills to implement new e-waste management standards in line with the Africa Environmental Health and Pollution Management Program.[114]	0.5
Subcomponent 3.2: Capacity-building of Public Officials	1
3.2(ii) Financing of a TA to incorporate climate mitigation and adaptation measures and standards for broadband deployment and public sector digitalization (training on standards and new technologies to 'green' the economy as well as using data analytics for disaster risk management and early warning practices) ***100 percent of the financing cost for 3.2.(ii) is going towards the climate activity described below.*** **Adaptation/Mtitigation** This activity will strengthen the capability of public servants to implement climate-related standards (developed under the subcomponent 3.1) for low-carbon and climate-resilient digital infrastructures and digital public services. The capacity program will include specific training on using data analytics for disaster risk management and early warning practices. Specific content will be developed on service continuity and data backup to (i) prevent disruptions and data loss in the event of climate disasters; and (ii) ensure the continuity of the country's digital public services in the event of a climate shock, when access to physical facilities is limited.	0.2

[112] These could comprise the following: (i) plans for ensuring business continuity in case of climate-related disruptions to the digital connectivity network; (ii) adding system robustness and building the system capacity to quickly repair and restore service for business continuity; (iii) integrating improved technical design standards or more resilient materials to reduce the vulnerability to manage the risk and embed appropriate measures to manage those risks; (iv) elaborating data standards for data recovery and backup to prevent data loss in the event of natural disasters (including climate-related disasters); (v) developing specific measures to withstand extreme heat and high temperatures; etc.

[113] Efficient recycling of e-waste can greatly reduce the demand for virgin raw materials, thus contributing to limiting GHG emissions.

[114] Program information: https://projects.worldbank.org/en/projects-operations/project-detail/P167788

ANNEX 4: Synergies within the World Bank Portfolio and with Development Partners

Table A4.1. Synergies within the World Bank Portfolio and with Development Partners

Project	Brief Description	Links to the Digital Acceleration Project
World Bank Projects		
Togo West Africa Regional Communications Infrastructure Program - APL2 (P123093) (completed)	Focused on increasing the availability and affordability of high-quality communications infrastructure (e.g. connect Togo to international submarine cables), enhancing the country's bandwidth capacity and reducing the cost of internet access. It also supported regulatory and policy reforms in Togo's telecommunications sector to ensure better oversight and more competitive market conditions.	Forms basis for design of sub-components 1.1 and 3.1 through capitalizing on ICT sector gains and integrating lessons learned.
Togo DE4A Country Diagnostic (P170440) and Private Sector Diagnostic and Jobs Diagnostics (P175453) (completed)	Together, these analyses provided detailed insights into Togo's digital economy and private sector development, highlighting key opportunities and challenges for building a robust and inclusive digital infrastructure. They also identified pathways for private sector growth and job creation, with a focus on sectors that offer significant employment potential.	Serves as the foundation for the design of Components 1, 2, and 3 by incorporating specific recommendations on digital infrastructure, policy and data regulations, digital skills development, and fostering a digital entrepreneurship ecosystem.
West Africa Unique Identification for Regional Integration and Inclusion - Phase 2 (P169594) (active)	Helps facilitate service delivery in various sectors, including social protection, healthcare, and financial services, by leveraging biometric and digital technologies. It also aligns with regional efforts to improve interoperability across countries and foster regional integration.	Sub-component 1.2 can expand the reach of the WURI Togo project, ensuring that even the most remote populations can access digital identification and related services.
Improving Quality and Equity of Basic Education (PAQEEB, P172674) (active)	Focuses on improving educational outcomes, particularly for marginalized and underserved communities, by addressing disparities in access to quality education and ensuring equity in learning opportunities. The project includes the development of remote learning platforms and cyber-physical labs in educational centers.	Collaboration with education sector stakeholders to integrate digital education platforms effectively, especially for Sub-component 2.2 on the Knowledge Network.
Public Sector Strengthening for Service Delivery Program-for Results (P176883) (active)	Aims to enhance the efficiency, transparency, and accountability of Togo's public sector, focusing on critical service areas such as health, education, and social protection. The program modernizes public financial management by introducing digital payment systems and e-signatures for public contracts, improving budgeting and expenditure tracking, and fostering institutional reforms to increase transparency.	Last-mile connectivity under Sub-component 1.2 and capacity-building of public official on digital skills under sub-component 3.2 will support the broad implementation and success of digital governance reforms under the PforR, making public services more accessible, transparent, and efficient across the country.
Social Assistance Transformation for Resilience Program-for-	Aims to enhance social protection systems in Togo to improve resilience among vulnerable populations. The program supports the flagship Novissi+ social protection initiative, which focuses on strengthening	Last-mile connectivity under Sub-component 1.2 and tech hub programs under Sub-component 2.1 (e.g., education and innovation pods) can create an

Results (P178835) (active)	and expanding social assistance programs, particularly through digital means such as mobile payments and digital identification as well as provision of smartphones to vulnerable women for service access.	enabling environment for the Social Assistance Transformation for Resilience Program by enhancing access to services, promoting digital literacy, and fostering innovation, all of which contribute to more effective and inclusive social protection systems.
Inclusive Development through Electricity Access (IDEA) (P176769) (active)	Is designed to increase the availability of affordable and reliable electricity services to rural and peri-urban populations, thereby promoting inclusive economic development and reducing poverty. The project also aims to increase the availability of broadband infrastructure in tandem with electricity expansion in selected areas in line with the requirements of Decree 2020-116.	Alignment on geographical scope with Sub-components 1.1 and 1.2 to ensure comprehensive digital infrastructure deployment.

Engagements of Other Development Partners

Thematic / Institution	KfW	World Bank	MCC
Connectivity	- Connectivity of city halls (1 lot) - Digitalization of civil registration	- Connectivity of education institutions - Connectivity of health centers and hospitals - Connectivity of city halls (5 lots)	- Connectivity of households - Connectivity of enterprises
Innovation		- Creation of a tech hub - Establishment of a knowledge network	- Basic digital literacy - Targeted advanced IT skills - Digitalization of MSMEs
Digital Payments			- Promotion of payments interoperability - Trainings on the usage of digital payment solutions

ANNEX 5: Procurement Thresholds, Procurement Methods, and Prior Review

Table A5.1. Procurement Thresholds, Procurement Methods, and Prior Review

No	Expenditure category	Contract Value Threshold [equivalent to US$]	Procurement Method	Contracts Subject to Prior Review [equivalent to US$]
1	Works	C ≥ 10,000,000	Open Competition International Market Approach and Direct Contracting	≥ 10,000,000
		500,000 < C < 10,000,000	Open Competition National Market Approach	None
		C ≤ 500,000	Request for Quotations	None
2	Goods, IT and non-consulting services	C ≥ 1000,000	Open Competition International Market Approach and Direct Contracting	≥ 2,000,000
		500,000 < C < 1000,000	Open Competition National Market Approach	None
		C ≤ 500,000	Request for Quotations	None
3	Consulting services	C < 300,000	National shortlist for selection of consultant firms	None
		C ≥ 300,000	International shortlist for selection of consultant firms	≥ 1000,000
4	Engineering and construction supervision	C < 400,000		None
		C ≥ 400,000		C ≥ 1000,000
5	Individual consultants	All values	All approaches	C ≥ 300,000
6	Direct contracting	All values	---	
7	Training, workshops and study tours	All values	Based on approved annual work plans and budgets	Annual work plans and budgets

**Note: These thresholds are for the purposes of the initial Procurement Plan for the first 18 months. The thresholds will be revised periodically based on reassessment of risks. All contracts not subject to prior review will be post-reviewed.*

ANNEX 6: IFC Start-up Catalyst Program Overview

1. IFC's Start-up Catalyst Program addresses critical funding gaps in nascent and frontier venture capital ecosystems by investing and mobilizing early stage and seed-stage capital in seed funds and investment-backed accelerators to sustain early-stage businesses and entrepreneurs until they become viable investment opportunities for other downstream participants (i.e., Series A and later).

2. As of June 2022, the Startup Catalyst has created a community of 19 seed-stage fund mechanisms that have supported over 1,180 early-stage companies operated by over 2,800 entrepreneurs and has catalyzed over US$4.5 billion in follow on funding (86x total invested by the Platform). The Startup Catalyst's fund managers themselves have raised over US$580 million (representing 9.2x of IFC's investment). Early data for Startup Catalyst demonstrates that around 47 percent of startups successfully secured external follow-on funding valued around 12x of the initial investment by the fund manager.

3. Through Startup Catalyst, IFC has created a global portfolio of early-stage companies that can provide valuable insights about key trends in the regional and global venture capital ecosystem. Data from these companies generate insights to help IFC and its clients better understand key market, sectoral and valuation trends and help IFC track development impact and market creation through its early-stage investment activities more efficiently.

4. IFC collaborates with the IBRD through Upstream to facilitate an enabling environment for VC. These collaborations support the development of digital economies in nascent markets with successful examples including engagements in Georgia, Morocco, Madagascar, etc.

Figure A6.1 IFC Startup Catalyst funds and investees