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Project Information Document (PID)

Appraisal Stage | Date Prepared/Updated: 14-Aug-2024 | Report No: PIDIA00456

Public Disclosure Authorized

BASIC INFORMATION

A. Basic Project Data

Project Beneficiary(ies)	Region	Operation ID	Operation Name
Samoa	EAST ASIA AND PACIFIC	P180807	Digitally Connected and Resilient Samoa
Financing Instrument	**Estimated Appraisal Date**	**Estimated Approval Date**	**Practice Area (Lead)**
Investment Project Financing (IPF)	15-Aug-2024	15-Oct-2024	Digital Development
Borrower(s)	**Implementing Agency**		
INDEPENDENT STATE OF SAMOA	Ministry of Communications & Information Technology, Office of the Regulator		

Proposed Development Objective(s)

To increase the use of resilient broadband internet in Samoa and improve the delivery of digitally enabled public services

Components

Component 1. Investments in Digital Connectivity and Digital Government Infrastructure
Component 2. Institutional strengthening for enabling environment for digital economy
Component 3. Project implementation support

PROJECT FINANCING DATA (US$, Millions)

Maximizing Finance for Development

Is this an MFD-Enabling Project (MFD-EP)? No

Is this project Private Capital Enabling (PCE)? No

SUMMARY

Total Operation Cost	**20.05**
Total Financing	**20.05**
of which IBRD/IDA	**20.05**
Financing Gap	**0.00**

DETAILS

World Bank Group Financing

International Development Association (IDA)	20.05
IDA Grant	20.05

Environmental And Social Risk Classification

Moderate

Decision

Other

Other Decision (as needed)

B. Introduction and Context

Country Context

1. **Samoa, a lower-middle income country in south-central Pacific Ocean in the Polynesian region, is largely dependent on tourism, remittances, and fiscal aid.** Tourism accounts for a quarter of Samoa's GDP, a third of the country's total foreign reserves and employs around 15 percent of the workforce.[1] The border closure and restriction on domestic economic activities due to the COVID-19 pandemic affected local businesses with spillover effects into other sectors, resulting in a real GDP decline of 15 percent cumulatively over fiscal years 2020-2022.[2] In 2022, GDP per capita was US$3,743.21, approximately 10 percent lower than that just four years prior, in 2018 (US$4,189.10).[3] In 2018, more than one-fifth of the population lived under the basic-needs poverty line (21.9 percent), approximately 3 percentage points higher than the poverty rate in 2013-14 (18.8 percent).[4]

2. **Samoa's small population and geographic remoteness pose challenges for achieving economic diversification unless barriers to access digital solutions are addressed.** Due to its small population of around 222,382 people (2022), Samoa relies heavily on external trade, foreign investment and fiscal aid for economic growth. This makes

1 Samoa News. 2023. " Samoa's tourism industry provides a big chunk of the country's GDP" February 19. https://www.samoanews.com/regional/samoas-tourism-industry-provides-big-chunk-countrys-gdp

2 IMF Article iv. 2023

3 World Development Indicators. GDP per capita (current US$)

4 Samoa Poverty and Hardship Report 2023

the country more vulnerable to external shocks. High-speed internet, e-commerce, digital payments, and other emerging technologies can foster the growth of the digital sector and help Samoa overcome the tyranny of distance and connect to global value chains. Investing in green technologies to power the digital economy can make Samoa more attractive for foreign direct investments. However, the absence of reliable internet especially in rural areas and weak government capacity to provide public services to citizens and businesses digitally are critical barriers needs to be addressed for full realization of Samoa's growth potential facilitated through digital transformation.

3. **Samoa is also highly vulnerable to climate change and experiences natural disasters once every five years on average.**[5] Resilience is a key priority of the Government of Samoa, with prominence given to ex-ante investments in resilient infrastructure. Enhanced resilience also safeguards sustainable growth and economic diversification. Under a very high emissions scenario Samoa is expected to experience an increase in temperature in the range of 0.5-1.1 ^{o}C by 2030.[6] In addition, rise in sea level is projected to be in the range of 7 percent by 2030, ocean surges will affect low-altitude coastal plains during storms and cyclones.[7] A lack of reliable digital connectivity and secure data centers worsens the situation because in the case of disaster, alerting and helping the citizens become more challenging without digital infrastructure.

4. **The Samoan economy is largely dependent on tourism and a substantial portion of its population is engaged in agriculture and fisheries, which are intricately linked to changes in the environment.** Any changes in the natural environment such as coral bleaching, loss in biodiversity, and decline in fish species, will significantly strain sustainable economic growth and well-being of Samoa's citizens. With 70 percent of the population living in low-lying coastal areas, the country's infrastructure is highly vulnerable to natural disasters. Therefore, the physical investment of the Project will include both climate change adaptation measures to increase resilience and reduce vulnerability, and mitigation measures to improve efficiency and reliability of the network.

Sectoral and Institutional Context

5. **Samoa was one of the pioneers in the Pacific region to liberalize the telecoms sector.** New telecommunications legislation (Telecommunications Act 2005), passed in June 2005, liberalized the market, established regulatory components of a competitive market, and instituted the Office of the Regulator (OoTR) to provide regulatory oversight. The Bank provided technical assistance in advancing the regulatory reform through a US$4.48 million development credit.[8] Samoa boasts one of the highest rates of mobile phone coverage in the Pacific region. The Telecommunications sector is highly competitive, with the presence of two regional operators. Digicel Samoa is a private company owned by Telstra (one of the largest telcos in Australia), while Vodafone Samoa is owned by Amalgamated Telecom Holding Limited (Fiji's largest telco).

5 There were incidents of power outages following heavy rainfall, and digital network may be exposed to similar level of risk especially during the high intensity atmospheric events https://samoaglobalnews.com/upolu-power-outage-epc-working-to-restore-electricity-into-homes-as-rain-pours-down/

6 https://www.mnre.gov.ws/wp-content/uploads/2021/03/Samoa-Climate-Change-Policy-2020-2030.pdf

7 According to Samoa Climate Change Policy 2020 there is likely to be an increase in the average maximum wind speed of cyclones by between 2% and 11% and an increase in rainfall intensity of about 20% within 100 km of the cyclone center

8 Telecommunications and Postal Sector Reform Project (P075739). Project closed 02/28/2011 and the outcome was rated as moderately satisfactory

6. **The Government of Samoa (GoS) invested in an undersea cable, Tui-Samoa,** that expanded international bandwidth of the country from 250Mbps to 14,000Mbps over 2015-2022. The new cable proved invaluable during COVID-19-related lockdowns and enabled monthly data download volume to expand by 25 times from 650 Terabytes (TB) to 16,000 TB. The investment was supported by a World Bank US$16 million IDA grant (See WS: Pacific Regional Connectivity Program: Phase 3 – Samoa P128904). The Tui-Samoa submarine cable system is owned and operated by the Samoa Submarine Cable Company Limited (SSCC), established in April 2015. SSCC was created by the GoS and the company's six founding shareholders are Samoa National Provident Fund (SNPF), Unit Trust of Samoa (UToS), Samoa Life Assurance Corporation (SLAC), Bluesky Samoa Ltd (BSL), Computer Services Ltd (CSL) and Digicel Samoa Ltd (DSL).

7. **GoS is strongly committed to further developing the country's Digital Infrastructure to catalyze national digital transformation.** Historically, the GoS has been a major supporter and contributor to the development of the digital infrastructure in Samoa, in particular through investments in enabling and foundational connectivity infrastructure such as the Tui-Samoa submarine cable system, and the development of the Samoa National Broadband Highway (SNBH).[9] GoS remains steadfast in its commitment and has articulated a number of initiatives to position the country for enhanced digital transformation. For example, GoS is planning to introduce a digital ID to improve the delivery of and access to services. Parliament passed the National Digital Identification act in 2024. The Bank is currently supporting GoS through the planned Samoa Finance Sector Resilience (SFSR) (P181456) project, which aims to mitigate correspondent banking challenges, reduce the cost of remittances and increase financial inclusion by expanding access to services outside of Apia.

8. **Limited fixed fiber network remains a barrier for innovation of broadband services and creates a bottleneck for the ICT industry**. Fixed broadband connection is generally faster and more reliable than mobile broadband connections and is a critical enabler for the digital economy, particularly for data-intensive use cases in health and education. In stark contrast to the significant improvement of mobile broadband services[10] in Samoa, fixed broadband infrastructure and uptake lags considerably behind. Fixed broadband household subscriptions currently stand at 6.1 percent which is significantly lower than the regional average[11] (27.72 percent) and the average in GDP per capita decile (47.8 percent). The limited fixed fiber infrastructure outside of Apia in Upolu and in Savai'i also presents considerable challenges to the network operators in limiting their potential to improve broadband services and expand coverage. At present only 30 percent of the cell towers are connected by fiber, mostly located around the central Apia area, the remaining sites being linked through microwave links. The areas serviced through microwave link remain susceptible to poor service and variable end-user experience. The limited fixed fiber network has also impeded GoS's plans to increase accessibility of ICT services to the rural areas of Samoa. As such the GoS has prioritized its plan to help further develop Samoa's digital infrastructure through catalyzing investment in fixed fiber.

9. **This Project seeks to address the remaining challenges for Samoa to fully reap the benefits of the digital economy:**

9 Samoa National Broadband Highway is the Government's private intranet network connecting critical Government agencies

10 According to GoS, around 98 percent of the population have 4G mobile broadband coverage; Telegeography figures show that the population penetration for mobile subscriptions stands at 49.7%, which is less than the regional average of 74.15%.

11 Same as above. Regional average is the average of PIC-9 excluding Nauru, Marshall Islands and the Federated States of Micronesia.

(a) **The cost of investing in infrastructure to improve services to remote villages is commercially unviable** given the significant fixed costs of maintaining services in a market characterized by a sparse population spread over a relatively wide geographical area. The low average revenue per user in remote villages further compounds the challenge of connectivity, serving as a disincentive for telecom operators to invest in these areas. As a result, there are still 47 districts identified by OoTR as unserved and underserved areas in which more than 60 percent of the population live.[12] Connecting remote villages and improving the performance of existing networks will allow Samoan citizens to access not only essential government services and information but also telehealth and online educational resources. Broadband access can further enhance market access, enabling residents of remote villages to sell produce through e-commerce and seek other economic opportunities.

(b) **The SNBH, which serves as the GoS's intranet and is used by around 27 government ministries, and agencies, schools and hospitals, is obsolete and needs to be replaced with a modern, future-proofed network. The government datacenter has reached end-of-life and need to be replaced.** Since launching in 2014[13], SNBH has been serving as a critical infrastructure enabling the various agencies of government to connect to a central, "closed"[14] network. However, the SNBH equipment is at its end of life and needs to be replaced. The government has made clear its plans to continue to own and operate its own dedicated intranet network. and the new national fiber network will not only support the government intranet but will also allow service providers to buy capacity, increasing competition[15] and lowering prices. Existing government data is fragmented across multiple data centers which suffer from frequent electricity outages, capacity and security constraints and needs to be replaced with a solution that is fit for purpose to support the growing need of the ICT sector, is scalable, maintainable, and sustainable for future use.

10. **Cybersecurity and online safety are a growing concern with Samoa's increasing reliance on digital technologies, and a growing number of internet users, necessitating further investments and capacity building to strengthen the country's resilience.** Despite the scarcity of cyber-related data in Samoa, the rise of cyberattacks in the country corresponds with regional trends. GoS's data networks and storage solutions also require increased cybersecurity measures. In the first quarter of 2023, globally, the education/research sector was hit the hardest with the highest number of attacks, followed by government/military sector and healthcare[16], which all fall within priority sectors of GoS. Globally, the cost of cybercrime incidents is expected to climb from US$11.50 trillion to more than US$23 trillion between 2023 and 2027.[17] Samoa has enhanced its security posture through the development of the nation's first National Cybersecurity Strategy in 2016 and the inauguration of the nation's first National Computer Emergency Response Team (SamCERT) in 2021. SamCERT's prime role is to promote and raise awareness of the importance of cybersecurity and online safety, and it currently provides only basic cybersecurity services.

12 Based on 2021 census data on population by location from the Samoa Bureau of Statistics and MCIT's list provided to the WB task team on underserved and/or unserved areas.

13 Financed by US$20m loan from the Export-Import Bank of China. SNBH is a 6km fiber ring, and a wireless transmission network.

14 SNBH does not provide internet to its users.

15 The use of a shared infrastructure (accessible on an established pricing by the regulator) such as the SNBH will keep the capital costs of expansion lower for the operators, allowing for the funds to be diverted to innovating better products for customers

16 Check Point Software Technologies Ltd. (2023). "Global Cyberattacks Continue to Rise with Africa and APAC Suffering Most." April 27. https://blog.checkpoint.com/research/global-cyberattacks-continue-to-rise/

17 Fleck, Anna. 2022. "Cybercrime Expected to Skyrocket in Coming Years". December 2. https://www.statista.com/chart/28878/expected-cost-of-cybercrime-until-2027/

SamCERT is also working towards enhancing the resilience of critical infrastructure and digital platforms, though this work is still in its early stages.

11. **Samoa has embarked on an ambitious journey to help realize the nation's aspiration of taking its digital transformation to the next level**. They have made the necessary interventions, including through strategic partnership with the World Bank, to liberalize the sector and introduce competition to ensure greater value propositions for its citizens. The bank's partnership with GoS has further helped strengthen their international connectivity (with increased resilience and redundancy) to the outside world through the investments made in the Tui Samoa cable system. With enabling regulatory reforms and international connectivity challenges already being addressed to a large extent, it is only natural that GoS now makes strategic and focused investments into improving their middle mile fixed fiber infrastructure that would lay the platform through which the telecommunication companies and Government agencies alike will be able to deliver access to better and more reliable digital services to citizens and businesses, particularly in rural areas. This project is not the last step, but one that takes the GoS closer to the realization of its end goal and objectives. After this operation, the remaining challenges for Samoa will largely relate to utilizing the high speed SNBH to deliver a wide range of online government services and applications to citizens in their own homes and communities, enhancing further the capabilities of SamCERT to respond to online security challenges in ensuring a safe online experience for Samoans, and ensuring the continuity of the modernization of the MCIT and OoTR to improve sector oversight and compliance.

C. Proposed Development Objective(s)

PDO Statement

Development Objective(s) (From PAD)

To increase the use of resilient broadband internet in Samoa and improve the delivery of digitally enabled public services

Key Results

a) Increase resilient and inclusive access to broadband
   - Villages passed with resilient FTTP infrastructure (number)
   - People using broadband internet (number) (new use and enhanced)
   - People living in under- or unserved communities (as defined by OoTR) in the areas exposed to climate and environmental risks provided with access to Internet and to early warning notifications (number) (disaggregated by gender)

b) Enhance the capacity of the Government of Samoa to deliver digitally enabled public services
   - Government services offered online (number)

- People using digitally enabled services (number) (disaggregated by gender)

D. Project Description

12. **Component 1: Investments in Digital Connectivity and Digital Government Infrastructure (US$15.45).** This component is designed to support the development of climate and disaster-resilient[18] national digital connectivity infrastructure in both Upolu and Savai'I (i) to maximize the benefits of digital connectivity for public institutions**,** businesses, and citizens of Samoa, and (ii) to introduce channels for national-level atmospheric hazards and other disasters early warning notification. The component activities aim to strengthen resilience of citizens and firms in Samoa by enabling universal access to the National Government Portal and government services online, and demonstrating the value of broadband connectivity through pilot projects.

13. ***Subcomponent 1.1: National fiber network to improve service delivery into underserved areas (US$9.2 million).*** This subcomponent will finance the deployment of a Fiber to the Premises (FTTP) network to unserved or underserved (including commercially unviable) communities in Upolu and Savai'i, using green technologies. Specifically, the subcomponent will finance the deployment of new fiber infrastructure, decommissioning of obsolete and energy inefficient copper infrastructure, and incorporate appropriate resilience and redundancy features in the network design to ensure robust and secure communications. The updated infrastructure will contribute to bridging the digital divide and will increase the resilience of remote communities during emergencies, e.g. pandemics and climate-related natural disasters. The FTTP network will include an open access standard, allowing competing service providers to use the underlying infrastructure. This can support shared fiber technologies, such as gigabit-capable passive optical networks (GPON), as well as point-to-point technologies for high-capacity applications, including cellular backhaul or connecting Government offices and key businesses to 10G or 100Gbps connectivity. A private sector contribution may be available to the project, encompassing both capital injections and in-kind contributions. The specific nature of this contribution will be determined after the Government completes the necessary assessments in the first year of implementation.

14. ***Subcomponent 1.2: Enhancement of the capacity and coverage of the Government's Intranet (US$2.50 million)***. This subcomponent will leverage on the fiber infrastructure deployed under component 1.1 to support connecting more government agencies to the new Government intranet network, as well as to secure cross-government data and information exchange at the national level. At present, about 90 percent of agencies outside of Apia utilize a copper backbone to connect to the Government network, which is often impacted by bad weather and it can result in significant downtime[19]. In Apia, the SNBH network has reached its end of life and requires replacement. The new national fiber network, powered by green technologies and with backup functions and recovery plans, will serve as a critical infrastructure and an essential communication platform for all government agencies during

18 The Samoa Meteorological Services website provides climate and weather data, crucial for vulnerable groups and local governments in digitally disconnected areas. These groups require consistent access to digital platforms and information channels to utilize government services and receive timely warnings about potential climate and environmental crises. Despite Samoa's high risk for natural disasters and the varying public perception of this risk—often tied to education levels (https://link.springer.com/article/10.1007/s10113-023-02065-8)—many do not see the urgency in acting. Considering Samoa's small size and high environmental risk exposure, coupled with the low capacity of digitally isolated communities, a national digital infrastructure is vital for disseminating early warnings and enhancing the resilience of the population and public sector against climate threats. This project aims to establish a climate and disaster-resilient national digital connectivity infrastructure to bridge this gap.

19 Downtime of 10% estimated by MICT, as confirmed in interview in April 2024.

emergencies. It will allow government agencies to exchange and cross-reference data for the newly established digital ID system, to be financed by a parallel Bank project, the Samoa Finance Sector Resilience (P181456). This subcomponent, through investments in robust and climate resilient technology, is expected to minimize network downtime (which outside of Apia is significantly high at 10 percent), eliminate single points of failure (SPOF), and mitigate power cuts that negatively affect business continuity of government agencies, schools, and hospitals. Furthermore, this subcomponent will support SamCERT (i) to secure the cyber resilience of the Government network, and (ii) to ensure that business continuity strategies are in place for critical infrastructure (e.g. utilities and telecommunications) to ensure Government services remain functional in the event of any cyber breaches. It will also support the use of public Wi-Fi hotspots to improve and expand accessibility of ICT services to citizens in rural areas.

15. ***Subcomponent 1.3: Upgrade and establishment of secure and resilient government data center and support the rollout of broadband pilot(s) (US$3.75 million).*** The subcomponent will finance the establishment of a consolidated Government data center for critical data, while assessing options of using cloud computing, including a private Government cloud that could be used for storage of critical Government information online. For critical data to be stored in the upgraded government data center, the team will explore the use of redundant backup for electricity with usage of renewable energies, (i) to minimize network downtime, (ii) eliminate SPOF risks, and (iii) reduce the carbon footprint. The inclusion of cloud computing options will enhance the overall resilience and security of GoS IT systems and reduce the risk of SPOF, especially during national emergencies and climate-related natural disasters,[20] while minimizing the maintenance cost. This subcomponent will also support creating an Internet Exchange Point (IXP) within the datacenter to keep local traffic local, which would significantly improve performance and provide faster connections between networks. This feature would further enable high-speed data transfer, reduce latency, increase bandwidth, and fault tolerance. In addition to incorporating best practices governing the access, management and use of the datacenter, complementary activities executed under component 2.2 will help ensure the security and cyber resiliency of the data center, which will be EDGE certified. This subcomponent will also pilot broadband use cases to support: (i) state-owned broadcaster National Radio 2AP for emergency and resilient communications (to support timely dissemination of early warnings for adverse climate related events) through modernizing and expanding the transmission footprint; (ii) access to the National Government Portal in 10 Fono Faavae (District Development Centers) for residents without devices to receive alerts and access information on government services (including disaster related data platform and the online submission of damage assessment by the authorities to enable the flow of relief funds to the communities, and gender-based violence reporting in communities); (iii) digitizing 3 rural medical facilities to support timely access to Patient Information Systems for remote healthcare services (telehealth) as well as clinical services (telemedicine); and (iv) supporting 3 schools in rural communities to access remote-learning and digital pedagogical tools. If successful uptake by communities is achieved, the pilots could be mainstreamed into Government programs and rollout scaled up in the future. Although not explicitly supported under this project,

20 During atmospheric and climate-related hazards/emergencies in Samoa, flooding, intense rainfall, and strong wind are known to cause structural damages to the elements of critical infrastructure, including the damage of phone and electricity lines, cables, partial inundation of buildings, flooding and damage of built structures and roads - caused by floods and falling trees. (For example: https://www.aljazeera.com/news/2012/12/14/tropical-cyclone-evan-hits-samoa) Therefore, the government data centers, and digital infrastructure used by the government needs to be upgraded to higher levels of resilience and security, including migration of data to a cloud.

the investments under the project will directly impact the viability of the use cases for Digital ID, as developed under the Samoa Finance for Growth (P181456).

16. **Component 2: Strengthening institutions and enhancing the enabling environment for the digital transformation (US$3.55 million):** This component will support the development and strengthening of the policy, legal and regulatory enabling environment, and the institutional arrangements, needed to underpin the investments in digital government and the digital transformation, including strengthening of GoS cybersecurity initiatives. Activities under this component will seek to leverage the infrastructure investments already made by service providers and other stakeholders (such as the Electric Power Corporation), through a Public Private Partnership (PPP) transaction, to catalyze investments for those parts of the digital connectivity value chain, where significant gaps persist and those that have the largest impact on costs and reliability of internet connectivity. Moreover, emphasis will be placed on directing investments toward green technologies (e.g., high-efficiency fiber optic cables and solar power) and cybersecurity of critical infrastructure. Skill development initiatives will be prioritized as part of the transition to the digital economy, including support to increase participation in the digital economy on a gender informed basis. Additionally, The Bank has mobilized additional trust fund resources to support the government in implementing the listed activities.

17. **Subcomponent 2.1. Transactional, legal and regulatory support for the Public Private Partnership (PPP) ($0.8 million)**. To encourage private sector participation, MCIT supports the use of PPP arrangements to facilitate investment into the sector. This subcomponent will provide technical assistance and capacity building for the preparation, negotiation and implementation of one or more PPP transactions and associated regulatory reforms, including a technical, economic, and financial feasibility study, consultation processes, validation of design, costs, and preparation of transaction documentation. This subcomponent will identify efficient transaction structures and PPP arrangements to implement the FTTP project; ensure risk sharing between the government and private investors; and map the sources of funding for capital and operational expenditures to ensure the national fiber network's long-term sustainability. The private sector is expected to bring in expertise, innovation, and additional financial resources, ensuring efficient implementation and sustainability for the FTTP project. Their participation in the PPP model will help distribute financial risks and responsibilities, fostering a collaborative approach to national digital development.

18. **Subcomponent 2.2: Regulatory support, policy and legal framework for digital government and economy ($2.00 million).** This subcomponent will support OoTR in maintaining and enhancing the regulatory oversight of the telecommunications sector. The focus will be on adopting or amending regulations to promote effective competition, ensuring quality of service and affordability, establishing open access standards to the national fiber network (see subcomponent 1.2 above), and overseeing wholesale prices offered by service providers, including auditing capacity costs on the submarine cable system and assessing wholesale prices for international capacity. This subcomponent will support MCIT through investments in training, such as enhancement of digital literacy and cyber hygiene, and procurement of equipment and tools would be prioritized. Furthermore, **t**his subcomponent will support MCIT in establishing, modernizing, and implementing the policy, legal and regulatory frameworks, as well as institutional and data governance arrangements, to bolster digital government and the digital economy. This includes interventions on data privacy, cybersecurity, Netsafe principles, practices to

regulate harmful digital communications, authentication standards, and data governance improvements. These activities will focus on developing digital skills to minimize gender-based access gaps in Samoa. It will support current telecommunications regulatory priorities, particularly to promote investment, technological innovation, and the long-term interests of users of digital infrastructure and services in Samoa.

19. ***Subcomponent 2.3: Enhancement of Cybersecurity (US$0.75 million)***. The subcomponent will strengthen GoS's technical and institutional capacity in cybersecurity as a critical foundation to safeguard the country's digital infrastructure, in addition to ensuring continued protection of users of the internet and of ICT services in Samoa, including the youth and young women. The subcomponent will support (a) Technical Assistance and capacity building to enhance SamCERT's cybersecurity governance and strengthen incident response capacities and online safety, (b) the establishment of Critical Infrastructure Protection (CIP) Capacities, and (c) the rollout of a Cybersecurity awareness program.

20. **Component 3: Project implementation support ($1.05 million).** This component will finance technical and operational assistance for Project management and implementation. Specifically, it will finance the establishment of a Sector Coordination division within MCIT, which will be led by a Sector Coordinator supported by four project officers responsible for financial management, procurement, safeguards and M&E. The Sector Coordination division will be assisted by experts from the Centralized Technical Services Support Unit (CTSSU), under MOF.

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

Summary of Screening of Environmental and Social Risks and Impacts

Environmental and social risks associated with the project are considered moderate. The project consists of two typologies: digital infrastructure and technical assistance (TA) activities for two main islands of Upolo and Savai'i. The digital infrastructure component involves the installation of connectivity infrastructure, such as fiber connections, software, and hardware, as well as the rollout of broadband pilot(s) to enhance capacity and throughput. The TA activities support the digital government strategy, the legal and institutional framework for digital government, the upgrade of the government data center, and the strengthening of policies and regulations for digital government and the digital economy. The benefits of increased connectivity are increased access to government services, welfare, education, health; and better connectivity to family, friends and social networks. However, increased connectivity can also result in increased risks for the community including cyber attacks (i.e. phishing, ransomware), cyber bulling and exposure to illicit material and exploitation of youths (particularly females). These risks can be managed through strengthened ICT regulatory environment and cyber awareness campaigns. Privacy and data security risks associated with the digital government platform can be managed through design. There are also risks relating to unequal access to benefits which the project will mitigate by supporting last mile fiber to premises connectivity for unserved and underserved communities as well as pilot initiatives for public sites such as medical facilities, schools and government

offices. Social and land access impacts are expected to be limited and can be managed through stakeholder engagement and project design/choice of technology and siting. Potential environmental and occupational health and safety (OHS) risks are associated with encountering unknown cables and services and improper disposal of waste materials. Potential environmental impacts can be managed through Samoa's environmental permitting and regulatory framework an the project's Environmental Social Commitment Plan (ESCP) which will include additional measures necessary to address Project-related environmental and social risks and impacts. It is important to note that the TA activities (e.g., capacity building and support in legal, regulatory, policy and institutional frameworks and feasibility study for the optimal network design and efficient installation of fiber optic network) do not have direct adverse environmental and social impacts. However, the terms of reference (TORs) and outputs of the TA activities will be reviewed to ensure alignment with paragraphs 14-18 of ESS1.

E. Implementation

Institutional and Implementation Arrangements

21. **MOF will serve as the executing agency providing oversight on fiduciary functions and MCIT and OoTR will be the implementing agencies**. MCIT will coordinate with OoTR on activities regarding regulatory reforms and sector coordination (that relate to both technical and regulatory needs). Both MCIT and OoTR have engaged with the Bank during a previous project (WS: Pacific Regional Connectivity Program: Phase 3 – Samoa P128904) where OoTR was one of the four implementation agencies and MCIT was a beneficiary agency. Depending on the decision on PPP arrangements (if any) there may be a need to include a special purpose vehicle to build, own, maintain, and operate the FTTP investments, considering the recommendations of the technical assessments and the final decision by the GoS on the preferred way forward.

22. **MCIT plans to establish a Sector Coordination division and recruit a Sector Coordinator, solely for the Project, and four technical staff, to be filled prior the project being effective.** The technical staff will be responsible for financial management, procurement, E&S and M&E oversight, and where relevant will be assisted by experts from the Centralized Technical Services Support Unit (CTSSU) under MOF, given their experience and familiarity in the implementation and oversight of Bank-funded projects. Technical support during implementation will also be provided to MCIT by the ICT working group, which comprises of representatives from all Government agencies.

CONTACT POINT

World Bank

Shivnesh Roynendra Prasad
Digital Development Specialist

Ji Eun Choi
Senior Digital Development Specialist

Borrower/Client/Recipient

INDEPENDENT STATE OF SAMOA
Sao'leititi Maeva Betham-Vaai
CEO
Maeva.BethamVaai@mof.gov.ws

Implementing Agencies

Ministry of Communications & Information Technology
Lefaoalii Unutoa Auelua-Fonoti
Chief Executive Officer
u.auelua-fonoti@mcit.gov.ws

Office of the Regulator
Lematua Gisa Fuatai Purcell
CEO and Regulator
regulator@regulator.gov.ws

FOR MORE INFORMATION CONTACT

The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 473-1000
Web: http://www.worldbank.org/projects

APPROVAL

Task Team Leader(s):	Shivnesh Roynendra Prasad, Ji Eun Choi

Approved By

Practice Manager/Manager:	Mahesh Uttamchandani	22-Jul-2024
Country Director:	Naveed Hassan Naqvi	14-Aug-2024