

**PROJECT INFORMATION DOCUMENT (PID)  
APPRAISAL STAGE**

Report No.: PIDA21739

<b>Project Name</b>	WS: Pacific Regional Connectivity Program: Phase 3 - Samoa (P128904)
<b>Region</b>	EAST ASIA AND PACIFIC
<b>Country</b>	Samoa
<b>Sector(s)</b>	General information and communications sector (100%)
<b>Theme(s)</b>	Infrastructure services for private sector development (50%), Rural services and infrastructure (40%), Regulation and competition policy (10%)
<b>Lending Instrument</b>	Investment Project Financing
<b>Project ID</b>	P128904
<b>Borrower(s)</b>	Ministry of Finance and Treasury
<b>Implementing Agency</b>	Ministry of Finance and Treasury
<b>Environmental Category</b>	B-Partial Assessment
<b>Date PID Prepared/Updated</b>	22-Apr-2015
<b>Date PID Approved/Disclosed</b>	23-Apr-2015
<b>Estimated Date of Appraisal Completion</b>	22-Apr-2015
<b>Estimated Date of Board Approval</b>	19-Jun-2015
<b>Appraisal Review Decision (from Decision Note)</b>	The Country Director authorized the team to appraise the Project. Subject to in-principle agreement on the draft MOU with ADB and agreement on institutional/implementation arrangements for the submarine cable system--including the role of the private sector--] and associated conditionality for the Project, the team will then seek clearance to commence negotiations of the Project on conclusion of appraisal.

## I. Project Context

### Country Context

1. Samoa is a small and remote Pacific island country that is highly vulnerable to external economic shocks and natural disasters. Samoa is 3,000 kilometers from New Zealand, 4,000 kilometers from Australia, and 10,400 kilometers from China. Its distance from major global markets, underscore the importance of connectivity, particularly in the form of efficient transport systems and information and communication technologies (ICT). Samoa's total population of 190,000 people is distributed across two main and two smaller islands. Upolu, which accounts for roughly 75 percent of the population, is where the capital city of Apia is located. Savai'i is the largest island and accounts for most of the remaining 25 percent of the population. Samoa has a

strong traditional culture, community and family cohesion. Since independence from New Zealand in 1962, Samoa has been a stable democracy. The Human Rights Protection Party has been in power for most of the past 30 years, most recently winning office in March 2011 with a five-year mandate running until 2016.

2. Samoa is a lower middle-income country. GDP per capita (current prices, United States dollar) stood at \$4,165 in 2013. Samoa is rated as a country with "medium human development," ranking at number 96 out of 186 countries in 2012. Life expectancy in Samoa is 73 years, infant mortality stands at 16 per 1,000 and the literacy rate is 99 percent. After the abolition of primary education school fees in 2010, the net enrollment rate increased from 90 percent in 2010 to 94 percent in 2012. The Government is currently planning to eliminate secondary education fees with funding from the New Zealand Government. This should help increase secondary enrollment rates, which currently stand at 78 percent. Poverty levels have been falling steadily (the latest Household Income and Expenditure Survey results are due mid-2015) but access to services and opportunities are still constrained in rural areas and on Savai'i.

3. The country's recent economic performance has been negatively impacted by natural disasters. One of the best performing economies in the Pacific over the past 15 years, Samoa has been hard hit by recent natural disasters. Samoa's GDP growth averaged 4.3 percent annually between 1998 and 2008, but then fell by 5 percent in 2009 as a result of a devastating tsunami combined with food and fuel price shocks and the global slowdown. GDP had still not returned to 2007 levels when Tropical Cyclone Evan hit in December 2012 with growth falling to -1.1 percent in 2013. However, the IMF estimates GDP growth at 2.0 percent in 2014 followed by 2.2 percent in 2015. The main contributions to growth between 2003 and 2013 came from the construction sector (47 percent), commerce (35 percent—driven largely by tourism and remittances) and transportation, and communications (26 percent). Other growing sectors include public administration (14 percent) and banking (24 percent). The contribution of agriculture and fisheries to GDP has consistently declined between 2003 and 2013, going from 13 to 9 percent of GDP as has non-construction industry (including manufacturing and utilities) going from 22 percent to 13 percent. Among those formally employed, 40 percent work for the government and 60 percent for the private sector; and 81 percent of the population is engaged in some form of agricultural activity. Cyclone Evan in 2012 dampened short-term growth prospects, but recovery is underway supported in part by the IDA-financed Samoa Development Policy Operation and IDA-financed investment projects in the transport and agriculture sectors. Medium-term sources of growth include agriculture and sustainable tourism. More innovative, service-based growth opportunities could include IT-enabled services such as global/online outsourcing which require reliable high-speed Internet connectivity and a skilled ICT labor pool, among other factors.

4. Samoa is a strong performer in the Pacific in regards to gender equality, rated 106 out of 187 on the Gender-related Development Index in 2013. Access to education and achievement in the formal educational system is virtually equal, with women even advancing in several key areas. Health standards for women are above the regional average with major gains having been made in infant and maternal mortality. However, despite much progress being made to women's development over the years there is still scope to close the gender gap in areas such as economic empowerment, gender based violence and natural disasters. Women's participation in the paid labor force remains low compared to men (between 38- 41 percent, compared to 75 percent) with gender-based violence expected to be among the barriers to participation. Forty-six percent of ever-partnered women in Samoa report having experienced physical or sexual violence by a current or

former partner at any point in their lives. Furthermore, despite bearing a disproportionate share of the burden of the immediate adjustment to natural disasters, women may not be adequately included in climate change and disaster risk planning at the community level.

### **Sectoral and institutional Context**

5. Samoa was one of the first countries in the region to liberalize its ICT sector, and enjoys one of the highest rates of mobile phone coverage and access in the Pacific region. The reforms began with the adoption of an ICT policy in 2003 and the enactment of the Telecommunications Act in 2005 which provided for market liberalization and establishment of an independent regulator. The main retail market participants are: BlueSky Samoa, Digicel, and Computer Services Ltd (CSL). As of end-2014 over 95 percent of the population was covered by mobile networks. Mobile penetration had reached 89 percent (though data for end-2014 indicates 237,411 active SIM cards, representing a mobile penetration level of 124 percent). However, Internet access is lagging significantly which impacts the potential for connectivity to external markets. Broadband penetration was estimated at about 1 percent (fixed) and 27 percent (mobile). Precise data on mobile broadband are not available, but this market segment is growing rapidly due to increasingly competitive operator pricing strategies. Affordability of telecommunications services is improving, but prices are still high relative to income levels. The main driver of high retail Internet prices is the high wholesale Internet bandwidth costs. Tariffs have dropped significantly since 2008 when an entry-level fixed broadband (ADSL) subscription was US\$169 per month. In 2014, a monthly 2GB ADSL subscription was US\$43. For prepaid mobile broadband users a 3GB data plan is about US \$40.

6. Consistent with regional and global trends, demand for bandwidth is expected to grow significantly in Samoa in the medium-term, requiring a much more sustainable and low-cost international connectivity solution. Projected demand for Internet services is expected to grow from the current level of about 420 Mbps to 4 Gbps by 2021 and 29 Gbps by 2028. This demand will be driven both by increased household/individual use for high-bandwidth applications such as streaming video and multimedia, and also institutional use, including from government institutions that are connecting through the new “Samoa National Broadband Highway”, a combined fibre and wireless network linking all government offices, schools and hospitals on Upolu and Savai’i. This demand cannot be met by current infrastructure capacity or pricing levels.

7. Samoa’s international bandwidth costs are high and capacity is insufficient to meet growing demand. For its international bandwidth Samoa is currently connected via the Samoa-American Samoa (SAS) cable spur to American Samoa and thence to the American Samoa Hawaii Cable System (ASH) owned by the ASH Cable LLC (ASHC). The ASH cable, a reconditioned system with a remaining useful life of about 5 years, provides a total of 1Gbps capacity. Bluesky, which is partially owned by ASH, is the main user of ASH cable capacity in both Samoa and American Samoa. CSL has leased capacity from Bluesky on the ASH cable under a ten year fixed-price contract. Digicel has purchased a relatively small amount of bandwidth on ASH, but relies primarily on international bandwidth capacity from medium-earth orbit satellite provider O3b Networks. ASTCA, a Government-owned operator in American Samoa also largely relies on O3b for its bandwidth needs. Currently the ASH cable is operating at approximately half capacity viz. approximately 500Mbps month. The wholesale price for international bandwidth for Samoa is very high (approximately US\$1,500 Mbps/month on the ASH cable) which is contributing to limited Internet uptake. Quality of service for consumers is also variable.

8. The Government has developed institutional capacity for ICT policy and regulation. The Ministry of Communications and Information Technology (MCIT) is responsible for ICT sector policy, underpinned by the 2012 National Broadband Policy. The Telecommunications Act of 2005 is the key legislation for the sector, although substantial technological changes have occurred during the intervening 15 years since this legislation was enacted. An independent regulator, the Office of the Regulator (OoTR), was established in 2006 pursuant to the Act and is responsible for regulating telecommunications. The OoTR has responsibilities for licensing telecommunications and broadcasting services, managing and licensing radio spectrum usage, administering the national numbering plan, promoting competition in telecommunications sector, providing consumer protection services, approving equipment types, resolving telecommunications disputes, and promoting consumer awareness. Since 2013 OoTR has been functioning as a multi-sector regulator which includes responsibility for regulating electricity services.

9. Policy commitment from the Government of Samoa in support of new ICT infrastructure is strong. Government has set up a Project Steering Committee including public and private sector members, including representatives from MCIT, MOF, the Attorney General's Office, OoTR, Digicel, CSL and Bluesky. The PSC has retained technical specialists to review possible international connectivity options. Based on detailed technical and financial analysis of these options—including point to point and regional solutions—the PSC has opted for a new submarine cable system to connect Samoa (Upolu and Savai'i islands) to the Southern Cross Cable Network in Suva, Fiji and hence to global communication networks via Australia, and United States (Hawaii). The PSC members, with the support of the Attorney-General's office are now working on the establishment of a special purpose vehicle (SPV), the Samoa Submarine Cable Company (SSCC), to procure and operate the proposed Samoa-Fiji cable. SSCC will be set up as a Limited Liability Company with government and private sector participation.

10. In this context the Government of Samoa has requested the World Bank and other partners to provide financial assistance for the proposed submarine cable system to connect Samoa to Fiji. The Government is also seeking support for further reforms aimed at strengthening the legal and regulatory environment, including the capacity of the OoTR to regulate international connectivity services in a manner which promotes the long term interests of consumers. Strong and robust regulation will be essential in order to ensure that SSCC does not engage in monopoly pricing or other anticompetitive behaviour.

## **II. Proposed Development Objectives**

The Project development objective is to reduce the cost and increase the availability of Internet services in Samoa.

## **III. Project Description**

### **Component Name**

Submarine cable system

### **Comments (optional)**

Component 1 (a) Submarine cable system. The Project will finance the design, supply and installation of a submarine cable system to connect Samoa (Upolu and Savai'i) to Fiji (Suva). This subcomponent includes the marine survey, cable manufacture and cable deployment-marine operations.

Component 1 (b) Landing stations and ancillary equipment. This sub-component will finance onshore equipment and facilities including the landing stations in Savaii and Upolu.

Component 1 (c) Additional costs. The Project scope also includes provision for an Indefeasible Right of Use (IRU) and management costs associated with the operation of the SSCC.

#### **Component Name**

ICT Regulatory Technical Assistance

#### **Comments (optional)**

Component 2 will finance medium-term technical assistance for the OoTR to review, develop and implement effective regulation for the sector with a particular focus on wholesale markets. Such assistance will include provision of legal and regulatory expertise, especially for: competition and market regulation activities; review of existing legal regulatory framework including drafting new instruments and reforms; and training and skills development. The financing will also support advisory assistance on licensing, wholesale tariffs including price and non-price terms for access to all international fiber optic bandwidth services in Samoa. Additionally, funding will be provided for procurement of technical equipment needed to administer and plan effective arrangements for the sector.

#### **Component Name**

Project Administration

#### **Comments (optional)**

Component 3 will finance Project transactional implementation and management support to the MoF. This component will finance: (a) project finance and transactional assistance in connection with the institutional design and operationalization of the SSCC pursuant to PPP arrangements, including independent appraisal of the proposed structure of SSCC; (b) overall Project coordination, financial and contract management, procurement, communications and outreach plus reporting, monitoring & evaluation and audit.

#### **IV. Financing (in USD Million)**

Total Project Cost:	44.18	Total Bank Financing:	16.00
Financing Gap:	0.00		
<b>For Loans/Credits/Others</b>			<b>Amount</b>
BORROWER/RECIPIENT			8.18
IDA Grant			16.00
Asian Development Bank			18.50
Pacific Regional Infrastructure Facility Trust Fund			1.50
Total			44.18

#### **V. Implementation**

11. The Project Steering Committee will provide overall guidance for the Project and review implementation on a regular basis. Its membership includes the MCIT (Chair), Ministry of Finance, Attorney-General's Office, Bluesky, Digicel and CSL.

12. The implementing entity for Component 1 will be the SSCC. SSCC will retain technical advisor(s) as needed to assist with procurement and contract management. MOF will represent the Government of Samoa's interest in SSCC. The implementing entity for Component 2 will be the

Office of the Regulator (OoTR). The implementing entity for Component 3 will be MoF.

13. The direct Project stakeholders are the Government of Samoa, the OoTR, and the private sector operators in Samoa. Other stakeholders include the numerous potential beneficiaries of improved telecommunications/ICT services including Government ministries, nongovernmental organizations, the business community, and development partners. International stakeholders include: the Government and telecommunications sector in American Samoa (United States), and potentially in Wallis and Futuna (France), and Fiji who may potentially access the new cable system.

## VI. Safeguard Policies (including public consultation)

<b>Safeguard Policies Triggered by the Project</b>	<b>Yes</b>	<b>No</b>
Environmental Assessment OP/BP 4.01	<b>x</b>	
Natural Habitats OP/BP 4.04	<b>x</b>	
Forests OP/BP 4.36		<b>x</b>
Pest Management OP 4.09		<b>x</b>
Physical Cultural Resources OP/BP 4.11	<b>x</b>	
Indigenous Peoples OP/BP 4.10		<b>x</b>
Involuntary Resettlement OP/BP 4.12	<b>x</b>	
Safety of Dams OP/BP 4.37		<b>x</b>
Projects on International Waterways OP/BP 7.50		<b>x</b>
Projects in Disputed Areas OP/BP 7.60		<b>x</b>

**Comments (optional)**

## VII. Contact point

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