



SUMMARY PROCEDURE

FOR OFFICIAL USE ONLY

R126-15
30 October 2015

Proposed Grant Samoa Submarine Cable Project (Samoa)

1. The Report and Recommendation of the President (RRP: SAM 47320-001) on the proposed grant to Samoa for the Samoa Submarine Cable Project is circulated herewith.
2. This Report and Recommendation should be read with *Country Operations Business Plan: Samoa, 2015–2017*, which was circulated to the Board on 9 October 2014 (DOC.IN.434-14).
3. In the absence of any request for discussion and in the absence of a sufficient number of abstentions or oppositions (which should be communicated to The Secretary by the close of business on 20 November 2015), the recommendation in paragraph 42 of the paper will be deemed to have been approved, to be so recorded in the minutes of a subsequent Board meeting. Any notified abstentions or oppositions will also be recorded in the minutes.

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Report and Recommendation of the President to the Board of Directors

Project Number: 47320-001
October 2015

Proposed Grant Independent State of Samoa: Samoa Submarine Cable Project

Distribution of this document is restricted until it has been approved by the Board of Directors. Following such approval, ADB will disclose the document to the public in accordance with ADB's Public Communications Policy 2011.

Asian Development Bank

CURRENCY EQUIVALENTS

(as of 29 October 2015)

Currency unit	–	tala (ST)
ST1.00	=	\$0.3874
\$1.00	=	ST2.5831

ABBREVIATIONS

ADB	–	Asian Development Bank
Gbps	–	gigabits per second
ICT	–	information and communication technology
MOF	–	Ministry of Finance
MOH	–	Ministry of Health
OOTR	–	Office of the Regulator
PAM	–	project administration manual
SCS	–	submarine cable system
SSCC	–	Samoa Submarine Cable Company

NOTE

In this report, “\$” refers to US dollars.

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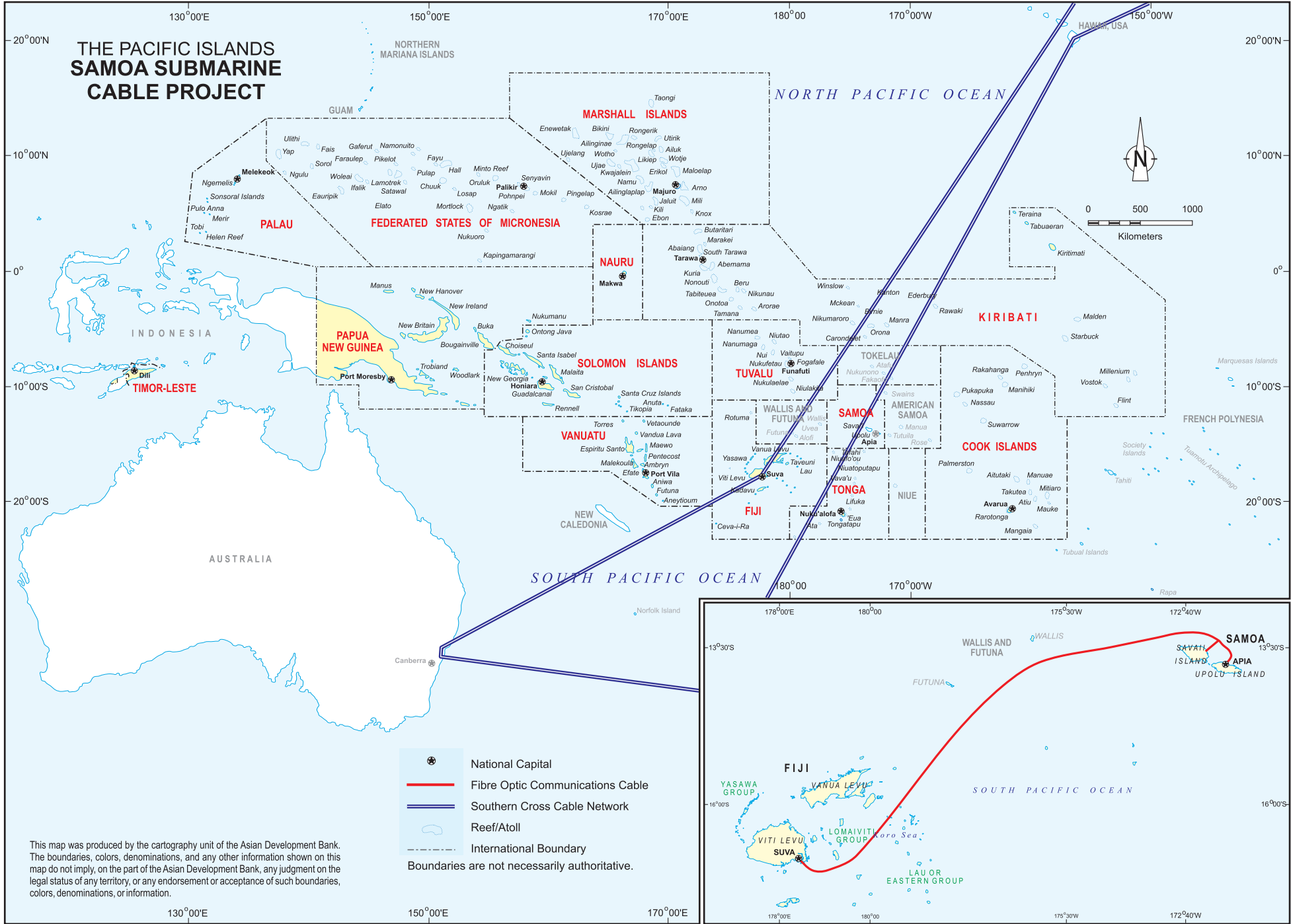
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PROJECT AT A GLANCE

1. Basic Data		Project Number: 47320-001	
Project Name	Samoa Submarine Cable Project	Department /Division	PARD/PAUS
Country	Samoa	Executing Agency	Ministry of Finance
Borrower	Government of the Independent State of Samoa		
2. Sector	Subsector(s)	ADB Financing (\$ million)	
Information and communication technology	ICT infrastructure		18.50
Health	Health system development		6.50
		Total	25.00
3. Strategic Agenda	Subcomponents	Climate Change Information	
Inclusive economic growth (IEG)	Pillar 1: Economic opportunities, including jobs, created and expanded	Climate Change impact on the Project	Low
Environmentally sustainable growth (ESG)	Urban environmental improvement		
Regional integration (RCI)	Pillar 1: Cross-border infrastructure		
	Pillar 2: Trade and investment		
4. Drivers of Change	Components	Gender Equity and Mainstreaming	
Partnerships (PAR)	International finance institutions (IFI)	Some gender elements (SGE)	
	Official cofinancing		
	Private Sector		
Private sector development (PSD)	Promotion of private sector investment		
	Public sector goods and services essential for private sector development		
5. Poverty Targeting		Location Impact	
Project directly targets poverty	No	Nation-wide	High
6. Risk Categorization:	Low		
7. Safeguard Categorization	Environment: B Involuntary Resettlement: C Indigenous Peoples: C		
8. Financing			
Modality and Sources		Amount (\$ million)	
ADB		25.00	
Sovereign Grant projects: Asian Development Fund		25.00	
Cofinancing		17.50	
Australian Grant		1.50	
World Bank		16.00	
Counterpart		14.91	
Government		6.73	
Others		8.18	
Total		57.41	
9. Effective Development Cooperation			
Use of country procurement systems		No	
Use of country public financial management systems		No	



I. THE PROPOSAL

1. I submit for your approval the following report and recommendation on a proposed grant to the Independent State of Samoa for the Samoa Submarine Cable Project.¹

2. Under the proposed project, the Asian Development Bank (ADB), the World Bank, and the Government of Australia will support the development and operation of a submarine fiber-optic cable system (SCS) linking Samoa to Fiji, where an existing international submarine cable network will provide cost-effective access to the rest of the world. The project will also support reforms to strengthen the regulatory and legal environment for the information and communication technology (ICT) sector and facilitate e-health investment.

II. THE PROJECT

A. Rationale

3. Samoa was one of the first Pacific countries to open telecommunications up to competition through the Telecommunications Act 2005.² Following market liberalization, total customers for fixed and mobile lines increased from 12,500 in 2002 to 152,800 in 2008. As of the end of 2014, over 95% of the population was covered by mobile networks, while mobile penetration had reached 89% of the network-covered population. However, internet access is lagging significantly because access costs are high relative to income levels. Broadband penetration was estimated at about 1% fixed and 27% mobile. Projected demand, if prices are lowered, is expected to grow from about 420 megabits per second now to 6 gigabits per second (Gbps) by 2021, and to 30 Gbps by 2028.

4. Internet prices are driven by the high wholesale internet bandwidth costs. Samoa relies on a submarine cable and satellite service for its international internet connectivity. Samoa is connected to the American Samoa–Hawaii cable system via the Samoa–American Samoa cable, which has a remaining useful life of 5 years. The current system capacity of 1 Gbps is above Samoa's current bandwidth demand, but is below projected demand. The proposed SCS, with a minimum capacity of 1 terabit per second and a regulated bandwidth price below current price levels, will enable broader internet access and meet Samoa's growing demand. The current ICT service providers are interested in investing in the SCS as a long-term solution to their capacity needs. However, given the significant project cost, private sector interest is insufficient to invest in such a cable. Therefore, the government is supporting the investment to bridge the gap between the economic and financial viability of the project. ADB has supported similar projects in Tonga (also financed with the World Bank) and Solomon Islands.³

5. The Office of the Regulator (OOTR) was established in 2006 to regulate telecommunications but has functioned as a multisector regulator, including electricity services, since 2013. The SCS aims to improve access to international connectivity; hence, the government requires support to strengthen the legal and regulatory environment, as well as the capacity of the OOTR to regulate international connectivity services to protect the long-term interests of consumers. The OOTR, through its price control role, will ensure that any price subsidies received by the Samoa Submarine Cable Company (SSCC) will be passed on to

¹ The design and monitoring framework is in Appendix 1.

² Government of Samoa. 2005. *Telecommunications Act 2005*. Apia.

³ ADB. 2011. *Report and Recommendation of the President to the Board of Directors: Proposed Grant to the Kingdom of Tonga for the Tonga–Fiji Submarine Cable Project*. Manila; and ADB. 2012. *Report and Recommendation of the President to the Board of Directors: Proposed Loan and Grant to Solomon Islands for the Broadband Development Project*. Manila.

consumers. Strong and robust regulation is essential to ensure that the SSCC does not engage in monopoly pricing or other anticompetitive behavior.

6. The ICT sector is recognized as an enabler of economic growth and development. Reliable and affordable ICT helps create new business opportunities and with it employment. The project will cater to increased demand for high bandwidth applications by businesses, households, and individuals. In 2014, the government launched the Samoa National Broadband Highway, an internet-ready fiber network linking all government offices, schools, and hospitals. With affordable international connectivity, the SCS will boost the domestic network's delivery of better public services.

7. The government has already adopted elements of e-education with the support of development partners,⁴ and ADB also provided support for an online secured transaction registry and an online company registration.⁵ The government has now selected the health sector for implementation of an e-strategy to improve service delivery and reduce the reliance on overseas medical care. The Ministry of Health (MOH) is planning and designing investments to effectively implement its 5-year health information strategy and has undertaken an initial needs appraisal that found a patient information system to be a priority. The project will help the government implement an e-health patient information solution, and explore e-health initiatives via better ICT accessibility, domestically through the national broadband highway and internationally through the SCS.

8. The project is consistent with ADB's Interim Pacific Approach 2015⁶ and country operations business plan, for Samoa 2015–2017.⁷ It also aligns with a key outcome of the Strategy for the Development of Samoa 2012–2016, i.e., to facilitate universal access to reliable and affordable ICT services.⁸

B. Impact and Outcome

9. The impact will be aligned with the Strategy for the Development of Samoa 2012–2016, which aims at universal access to reliable and affordable ICT services. The outcome will be quality broadband services available at an affordable price and used for enhancing e-health.

C. Outputs

10. Output 1 is the establishment of the SSCC, a special-purpose vehicle to procure, own, and operate the cable system; and it will be the sole wholesaler of the cable capacity to the retail service providers. The SSCC will be a limited liability company, with local shareholding comprising existing ICT service providers and three state-owned enterprises: the Samoa National Provident Fund, the Unit Trust of Samoa, and the Samoa Life Assurance Corporation. The Government of Samoa will onlend the grants from the financiers to the SSCC. The government will retain strategic control of the asset through covenants in the subsidiary agreement relating to dividend and capacity pricing policies as well as its consent to any major decisions that may impact the availability and affordability of capacity.

⁴ ADB. 2005. *Report and Recommendation of the President to the Board of Directors: Proposed Loan and Technical Assistance Grant to Samoa for the Education Sector Project II*. Manila; and ADB. 2007. *Report and Recommendation of the President to the Board of Directors: Proposed Grant to Samoa for the SchoolNet and Community Access Project*. Manila.

⁵ ADB. 2013. *Private Sector Development Initiative (Phase 3)*. Manila.

⁶ ADB. 2015. *Interim Pacific Approach 2015*. Manila. This extends the Pacific Approach 2010–2014, which serves as the country partnership strategy for Samoa.

⁷ ADB. 2014. *Country Operations Business Plan: Samoa, 2015–2017*. Manila.

⁸ Government of Samoa. 2012. *Strategy for the Development of Samoa 2012–2016*. Apia.

11. Output 2 is the construction and efficient operation of the SCS. This will comprise the (i) design, supply, and installation of the SCS to connect Samoa to Fiji; and (ii) construction of landing stations, terrestrial cable placement, and ancillary equipment in Upolu and Savai'i, and system connections in Suva. In Fiji, the cable will use an existing landing station where the Samoa cable is connected to the Southern Cross Cable Network.

12. Output 3 is an improved legal and regulatory environment for ICT. The proposed activities will deepen the regulatory capacity of the OOTR by (i) reviewing and developing effective regulation for the ICT sector with a focus on the wholesale market; (ii) establishing wholesale tariffs, including price and nonprice terms for access to all international fiber-optic bandwidth services; (iii) procuring spectrum management monitoring equipment; (iv) training the OOTR staff; and (v) conducting a nationwide consumer survey on the benefits of ICT and examining possible differences across demographic groups, including gender.

13. Output 4 supports investments in e-health solutions through a health information system. Activities include (i) validating the needs of the health sector and clearly defining the requirements for the system; (ii) conducting technical and financial due diligence; (iii) procuring the integrated health information system components; (iv) installing and configuring the system's hardware and software components; (v) connecting to all users; (vi) migrating data sets from existing systems and other sources; (vii) ensuring effective operations through comprehensive testing; and (viii) conducting training for users and system administrators.

D. Investment and Financing Plans

14. The project is estimated to cost \$57.41 million (Table 1). Detailed cost estimates, by expenditure category and by financier, are in the project administration manual (PAM).⁹

Table 1: Project Investment Plan
(\$ million)

Item	Amount ^a
A. Base Cost^b	
1. Output 1: Establishment of special purpose vehicle – SSCC	0.75
2. Output 2: Establishment and efficient operation of the SCS	38.25
3. Output 3: Improved legal and regulatory environment	1.25
4. Output 4: Investments in e-health solutions	5.91
Subtotal (A)	46.16
B. Contingencies^c	3.77
C. Project management and administration	0.75
D. Taxes and Duties	6.73
Total (A+B+C+D)	57.41

SSCC = Samoa Submarine Cable Company, SCS = submarine cable system

^a Includes taxes and duties of \$6.73 million to be paid as cash contribution from government resources.

^b In mid-2015 prices.

^c Physical contingencies computed at 11% for the SCS (\$1.2 million World Bank) and 10% for e-health solutions. Sources: Asian Development Bank and World Bank estimates.

15. The government has requested a grant¹⁰ not exceeding \$25.0 million from ADB's Special Funds resources to help finance part of the project. The World Bank will provide parallel

⁹ Project Administration Manual (accessible from the list of linked documents in Appendix 2).

¹⁰ A country's eligibility for Asian Development Fund grants under the revised grant framework is determined by its risk of debt distress. The latest debt sustainability analysis determined that Samoa had changed from high to moderate risk of debt distress. Samoa is therefore eligible to receive 100% of its Asian Development Fund allocation as grants until 31 December 2015.

grant financing of \$16.0 million from International Development Association resources. The Government of Australia's parallel grant financing of \$1.5 million will be disbursed through a designated trust fund, to be managed by the World Bank.

16. The government will make the proceeds of the grants from the cofinanciers available to the SSCC through an onlending arrangement. The terms and conditions, which are subject to ADB endorsement, are (i) 1.0% interest; and (ii) 30-year payback period, including a grace period of 7 years.¹¹ A review after the 7-year grace period will assess whether the SSCC can sustain principal repayments while maintaining low wholesale prices for capacity, in line with the project's objectives. If not sustainable, the SSCC can apply for a price subsidy through the annual budget.¹² The SSCC, through local investors, will provide equity financing equivalent to \$8.18 million. The government of Samoa will bear taxes and duties of \$6.73 million. The financing plan is in Table 2.

Table 2: Financing Plan

Source	Amount (\$ million)	Share of Total (%)
Asian Development Bank ^a		
Special Funds resources (grant)	25.00	43.0
World Bank	16.00	28.0
Government of Australia ^b	1.50	3.0
Samoa Submarine Cable Company (equity)	8.18	14.0
Government of Samoa ^c	6.73	12.0
Total	57.41	100.0

^a Asian Development Bank grant may finance local transportation and insurance costs.

^b The Government of Australia will provide parallel financing, to be managed by the World Bank.

^c Taxes and duties will be borne by the Government of Samoa.

Source: Asian Development Bank estimates.

17. Project preparatory activities for the SCS were divided between ADB, the World Bank, and the government's project technical team.¹³ The World Health Organization supported the preparation of the e-health solutions (output 4). ADB prepared the economic, social, and safeguard assessments through regional technical assistance and staff consultant inputs.¹⁴

E. Implementation Arrangements

18. The Ministry of Finance (MOF) will be the executing agency for the project. MOF will also be the implementing agency for output 1, and for output 2 until the SSCC is established. Once the SSCC is operational, with a board of directors and a chief executive officer, it will be the implementing agency for output 2, and will sign the contract for the construction of the SCS. Once the SSCC is set up, it will enter into a project agreement with ADB. The OOTR will be the implementing agency for output 3, and MOH will implement output 4.

¹¹ On 16 September 2015, the cabinet (F.K.(15)31), approved the onlending arrangement, to be formalized in a subsidiary agreement between the MOF and the SSCC. The 1% interest payment to the government will go toward financing activities to strengthen ICT sector development and regulation. The Financial Analysis and Economic Analysis (accessible from the list of linked documents in Appendix 2) assumes that principal repayments will be paid back to the SSCC as price subsidy after the 7-year grace period to maintain a low wholesale price of capacity.

¹² The government considers a price subsidy essential to facilitate greater uptake of broadband access, including by small and medium-sized enterprises and the wider population, thus ensuring that its benefits are more broadly spread. It is estimated that the subsidy will provide for a 25% reduction on the nonsubsidized wholesale bandwidth price. The OOTR will ensure that the price subsidy is passed on to consumers through low retail prices.

¹³ The government, with assistance from the Government of Australia, engaged a project technical team to provide technical and legal support to the government during project preparation.

¹⁴ ADB. 2013. *Pacific Information and Communications Technology Investment Planning and Capacity Development Facility*. Manila.

19. The government established a project steering committee to oversee project preparation and implementation of outputs 1–3, while the e-health project committee will oversee implementation of output 4.¹⁵ The World Bank will finance a project management unit, to provide administrative support to the executing and implementing agencies during implementation. ADB is financing technical support to MOH to implement output 4.

20. The implementation arrangements are summarized in Table 3 and described in detail in the PAM (footnote 9).

Table 3: Implementation Arrangements

Aspects		Arrangements	
Implementation period		November 2015–December 2019	
Estimated completion date		31 December 2019	
Management			
(i)	Project steering committee ^a	Minister of Telecommunications (chair). Members: MOF, MCIT, Attorney General's Office, Office of the Regulator, Bluesky Samoa, Digicel Samoa, and Computer Services Limited. E-health project working committee: Minister of Health (chair). Members: MOH, MOF, National Health Services, Attorney General's Office, MCIT, the General Practitioner's Association, and National Kidney Foundation.	
(ii)	Executing agency	MOF	
(iii)	Key implementing agencies	MOF (output 1, and output 2 prior to the establishment of SSCC) SSCC (output 2) Office of the Regulator (output 3) MOH (output 4)	
(iv)	Implementation unit	Project management unit: MOF (administrative); SSCC, MOH (implementation)	
Procurement	Limited international bidding	1 contract	\$18.5 million
	International competitive bidding	1 contract	\$6.0 million
Consulting services	International firm, quality- and cost-based selection	1 contract	\$500,000
Retroactive financing and advance contracting		The government requested advance contracting for the submarine cable system. No retroactive financing is envisaged.	
Disbursement		The grant proceeds will be disbursed in accordance with ADB's <i>Loan Disbursement Handbook</i> (2015, as amended from time to time) and detailed arrangements agreed upon between the government and ADB.	

ADB = Asian Development Bank, MCIT = Ministry of Communications and Information Technology, MOF = Ministry of Finance, MOH = Ministry of Health, SSCC = Samoa Submarine Cable Company.

^a The project steering committee will provide oversight for outputs 1–3. An e-health project working committee will provide oversight for output 4.

Source: Asian Development Bank.

21. An SCS is an integrated system of plant, materials, equipment, civil works, and services. For technical reasons, consideration of economy and efficiency, management risks, and in view of the limited number of suppliers, the SCS is best procured as one contract. The contract will be financed by ADB and the World Bank, using limited international bidding. The borrower will undertake, in its financing agreement with ADB, to conduct all procurement in accordance with ADB's Procurement Guidelines (2015, as amended from time to time). ADB and the World Bank will enter into a memorandum of understanding that sets out detailed collaboration and

¹⁵ Government of Samoa. 2014. *F.K.(14)11 Atinae mo se Laina Fou o Fesootaiga i lalo o le Sami (New Submarine Cable) mo Samoa*. Apia; and Government of Samoa. 2012. *F.K.(14)40 Poloketi mo le Atinae o Auaunaga ma Fesootaiga Faasoifua Maloloina a Samoa e Faaaoga ai Auala Tekonolosi o Fesootaiga Faaonaponei mo le Soifua Maloloina Aoao o Samoa (Samoa E-Health Project)*. Apia.

coordination arrangements in relation to this procurement, and the project more generally. Similar to the Tonga cable project (footnote 3), where the World Bank is the project originator and which is jointly financed with ADB, the World Bank will be the coordinating cofinancier. Pursuant to the memorandum of understanding, the World Bank's guidelines and standard bidding documents will be used, but all procurement decisions will be taken by mutual agreement. The World Bank's and ADB's procurement guidelines are largely harmonized, except for references to debarment lists. The final bidding documents will be agreed between ADB, the World Bank, and the government. ADB will be involved throughout the review process and exercise procurement oversight in accordance with its usual procurement procedures and practices to ensure that the procurement is also undertaken in accordance with ADB's Procurement Guidelines, and that no company on ADB's sanction list participated in the bidding process and is awarded the contract. The World Bank and ADB will use their best efforts to give effect to the other's eligibility requirements and debarment lists. Furthermore, contracts between the bidder and the borrower will contain a provision permitting the World Bank and/or ADB to inspect the project and to inspect and audit all records and accounts of any bidders, contractors, suppliers, or service providers as they relate to the project in accordance with their respective policies and procedures.

22. If no mutually agreed decision can be reached on any procurement matter, and given that the World Bank is the coordinating and lead financier, the World Bank's decision will prevail. ADB will have the right to take such actions as it reasonably considers necessary to (i) ensure compliance with its procurement and anticorruption policies and related procedures, the terms and conditions of its agreement(s) with the borrower; and (ii) realize the intended development objectives of the project.

23. A blanket waiver by ADB's Board of Directors of member country procurement eligibility restrictions for operations funded by the Asian Development Fund applies to the procurement of the SCS, thereby permitting participation of bidders from non-ADB members and/or procurement of goods and services from non-ADB members.

24. The integrated health information system will include hardware, software, installation costs, testing, and training. The system will be procured as one contract. A consulting firm will be engaged to provide project management support to MOH to implement output 4. Both contracts will be fully financed by ADB, and procurement will be carried out in accordance with ADB's Procurement Guidelines, (2015, as amended from time to time) and the firm will be engaged in accordance with ADB's Guidelines for the Use of Consultants (2013, as amended from time to time).

III. DUE DILIGENCE

25. The project is expected to benefit the people of Samoa, through low-cost and high-quality broadband internet services. It will contribute to the economy's efficiency and bring new business opportunities. It will also enhance the provision of health services and demonstrate the role ICT can play in improved service delivery across this and other sectors. Due diligence was based on detailed technical, regulatory, environmental, and social assessments, and stakeholder consultations.

A. Technical

26. Various options for improved internet services were examined from technical, economic, and strategic perspectives. These included cable connections via Tonga to Fiji, to New Zealand,

to planned regional cable projects, and geostationary and medium-earth orbit satellite. Two options warranted further evaluation, as summarized in Table 4. Considering the lifespan, capacity, and capital and operational expenditure, a new cable to Suva, Fiji was selected as the most feasible and least-cost option, providing access to direct internet protocol transit services from Fiji suppliers, or cable extension capacity via Southern Cross to Australia, Hawaii, and the west coast of the United States.

Table 4: Options for Samoa Submarine Cable

Point of Connection	Type of Cable	Capital Expenditure (\$ million)	Operational Expenditure (\$ million)	Lifespan (years)	Capacity (Tbps)	Backhaul Costs (\$)
New Zealand	PRE upgrade (recovered cable)	44.8	2.1	25	3.2	0
Fiji	New cable	30.3	1.3	25	3.2	0

PRE = PacRim East cable, Tbps = terabit per second.

Source: Government of Samoa project technical team.

27. The two alternatives (recovered or new cable) are both sound from a technical engineering viewpoint since they offer similar risk profile, capacity, warranties, and delivery time. However, for bidding purposes, the primary option is for a new cable, mainly because of the otherwise limited scope for competition with only two known suppliers dealing in both recovered and new cable. Instead, bids for recovered cables will be considered as alternatives.

28. The project is rated *low risk* according to the preliminary climate risk screening. The cable is not likely to be affected by changes in climate conditions, and it is resilient to earthquake risk and other disasters caused by natural hazards given its embedded location on the seabed. The landing stations will be constructed in accordance with proper building guidelines to mitigate the potential impacts of disasters caused by natural hazards.

29. The World Health Organization has conducted an analysis of alternatives for a health information system and developed high-level technical use cases and requirements for the envisioned solution. Building on this work, the project will validate the identified health sector needs, and help clearly define and detail the health information system to best meet needs. Once this technical due diligence is completed, ADB will support investment in the most appropriate system.

B. Economic and Financial

30. **Economic analysis.** Economic analysis was conducted using a resilient and conservative modeling basis to quantify benefits, which were assumed proportional to internet users' willingness to pay. Given existing, though costly, broadband services in Samoa, a differentiation between existing users and future users has been considered for benefits and consumer surplus estimations. For both the economic and financial evaluation, a top-down methodology is used for broadband capacity demand projections by benchmarking other broadband connectivity projects in the region. All project outputs, including activities not directly related to the SCS, such as support to the OOTR and the e-health system, have been considered in the analysis as essential for achieving maximum project benefits. Similarly, broadband-related costs outside the project's scope, such as incremental costs to telecommunication providers, were included. Total benefits per year were reasonably capped at 2% of gross domestic product. Overall, the analysis shows that the project is economically viable with a net present value of \$41.2 million and an economic internal rate of return at 21.2%,

comfortably exceeding the default social discount rate of 12.0%. The project remains viable under scenarios of 25% lower benefits, 10% higher capital costs, or 10% higher operating costs.

31. **Financial analysis.** The financial analysis concluded that SSCC has sufficient capacity to cover ongoing operations and maintenance costs and debt servicing. The financial benefits were estimated from the revenue accruing to the SSCC, which is calculated based on demand for international bandwidth multiplied by the SSCC's proposed wholesale tariffs. The pricing structure is set at a level that covers fixed costs for cable maintenance contracts, landing station operations and general operations of SSCC as well as variable cost provisions for unplanned repairs and demand driven internet transit costs. A price subsidy, equivalent to the principal repayments of the debt to the government, will be paid to the SSCC annually to maintain the assumed minimum wholesale prices. Such reduced wholesale price benefits the project's objective to increase affordable access to broadband services. SSCC will maintain a positive net free cash flow and cash balance after incorporating the price subsidy, while net earnings turn positive in year 18. Return on equity is capped at a maximum of 10% based on respective equity contributions. Dividend is declared by the board, which ensures that payouts are not detrimental to the long-term sustainability of the SSCC.

C. Governance

32. **Financial management.** The World Bank undertook the financial management assessment for the project and ADB will rely on its findings.¹⁶ The World Bank rated the overall inherent risk as *substantial*, and overall control and financial management risk as *moderate*. The key risk relates to the SSCC's capacity, as a start-up company, to meet the financial management requirements of ADB-financed projects. To mitigate this, MOF—familiar with ADB financial management requirements given its role as executing agency in all ADB projects—will be responsible for the overall financial management of the project. A full-time qualified project accountant will be recruited to the project management unit to monitor all project-related financial activities. MOF will submit an independent appraisal of the proposed structure of the SSCC. Once the SSCC is fully operational, the World Bank will conduct a fiduciary assessment (financial management and procurement) prior to signing the project agreement with the SSCC. ADB will rely on this assessment.

33. **Procurement.** The overall procurement-related risk is rated *high*. While the government has considerable experience in implementing ADB-financed projects, the SSCC and MOH have no such experience. To manage the risk for procurement of the SCS, MOF, supported by the project technical team, is facilitating advance contracting, while project implementation support will be provided to the SSCC and MOH.

34. **Anticorruption policy.** ADB's Anticorruption Policy (1998, as amended to date) was explained to and discussed with the government and MOF. The specific policy requirements and supplementary measures are described in the PAM (footnote 9).

D. Poverty and Social

35. The project will indirectly reduce poverty by lowering the cost of communication and boosting access to information and services essential for socioeconomic development. It will help improve the efficiency and effectiveness of private sector activities as well as public services. The project will impact tourism related-services, health, and education, and will build

¹⁶ World Bank. 2015. *Proposed Grant to the Independent State of Samoa in Support of the Pacific Regional Connectivity Program Samoa Connectivity Project*. Washington, DC.

on ongoing ICT initiatives like SchoolNet¹⁷ and the Feso'otai Center projects.¹⁸ It will create new business opportunities, like business process outsourcing, and web-based services, thus creating employment. The project will bolster regional integration and cooperation through an expanded communication network, enabling increased traffic volume. This improves communications with expatriate Samoans, encourages international trade in goods and services, and improves market access for micro businesses. A spur to the less-populated island of Savai'i aims to promote social equity in terms of access.

36. The project is classified as “some gender elements.” A basic gender equality issue in ICT is limited access to reliable communication services. With improved telecommunications, increased availability of access points in communities, and more affordable communications, women will have better access to education and health services, among others. Currently, women are less likely to go off-island to continue their studies, being tightly embedded within their families and communities. Women have expressed a strong desire to attain higher levels of education, and improved international connectivity will allow them access to online educational opportunities. Under the project, a nationwide consumer survey on the benefits of ICT (under output 3) will enable the exploration of possible differences in the use and benefits of ICT services across different demographic groups, particularly between men and women, and develop targeted outreach activities based on the results. Gender benefits will accrue from stronger health information management, i.e., it improves sex-disaggregated data collection and analysis, which in turn provides evidence for the planning of health services for women.

E. Safeguards

37. The project is classified as category B for environment. During the construction and installation phase, the environmental impacts are expected to be site-specific and limited to the route of the cable to be laid, landing sites, and landward cable routes. The environmental management plan, prepared during project preparation, will be updated during the marine route survey and detailed design. Any data gaps identified during project preparation will be filled at this time. The borrower and, subsequently, the SSCC will have adequate institutional capacity to manage the environmental risk.

38. The project has been classified a category C for both involuntary resettlement and for indigenous peoples. The due diligence confirmed that the cable landing sites and stations will be on government land and the cable route to the cable stations will follow existing road corridors. No impact on livelihoods or physical displacement is expected. The project areas comprise Samoa's mainstream population. The project will not impact any distinct and vulnerable indigenous peoples.

F. Risks and Mitigating Measures

39. Major risks and mitigating measures are summarized in Table 5 and described in detail in the risk assessment and risk management plan.¹⁹ The overall risk assessment is medium, and the integrated benefits and impacts are expected to outweigh the costs.

¹⁷ ADB. 2007. *Report and Recommendation of the President to the Board of Directors: Proposed Asian Development Fund Grant to Samoa for the SchoolNet and Community Access Project*. Manila.

¹⁸ In 2006, the government established 10 Fesootai telecenters in rural parts of Upolu and Savai'i with support from the International Telecommunications Union. The telecenters are operated by women's groups.

¹⁹ Risk Assessment and Risk Management Plan (accessible from the list of linked documents in Appendix 2).

Table 5: Summary of Risks and Mitigating Measures

Risks	Mitigating Measures
Limited capacity of the SSCC, a start-up company, for procurement and financial management	MOF will facilitate advance contracting. Project implementation support for the SSCC and MOH MOF will handle all financial management arrangements relating to the project. The SSCC will outsource its accounting and financial management operations. PMU will provide administrative support to MOF and the SSCC.
Complex governance arrangements for the SSCC because of public-private partnership	The board of directors will have a balanced representation with technical, financial, and management expertise. The financing arrangement with the government will have appropriate covenants to protect national interest.
Lack of broad-based support for ICT legislative reforms, and inability of the OOTR to enforce regulations and legislations	OOTR to develop a good communications strategy and awareness program to sensitize stakeholders on the need for proper reforms. Technical assistance will strengthen the OOTR's ability to enforce regulations and legislations.
Limited expertise of (i) the SSCC to manage and operate the submarine cable system, and (ii) MOH to operate and maintain the health information system	Advertise regionally and internationally to attract experienced candidates. Develop attractive remuneration package. Offer relevant training.

ICT = information and communication technology, MOF = Ministry of Finance, MOH = Ministry of Health, OOTR = Office of the Regulator, PMU = project management unit, SSCC = Samoa Submarine Cable Company.
Source: Asian Development Bank.

IV. ASSURANCES AND CONDITIONS

40. The government has assured ADB that implementation of the project shall conform to all applicable ADB policies, including those concerning anticorruption measures, safeguards, gender, procurement, consulting services, and disbursement as described in detail in the PAM and grant documents.

41. The government has agreed with ADB on certain covenants for the project, which are set forth in the grant agreement, specifically no withdrawal will be made from the grant account for any activities under output 2 until the SSCC has been established, fully operational, and entered into a project agreement with ADB.

V. RECOMMENDATION

42. I am satisfied that the proposed grant would comply with the Articles of Agreement of the Asian Development Bank (ADB) and recommend that the Board approve the grant not exceeding \$25,000,000 to the Independent State of Samoa from ADB's Special Funds resources for the Samoa Submarine Cable Project, on terms and conditions that are substantially in accordance with those set forth in the draft grant agreement presented to the Board.

Takehiko Nakao
President

30 October 2015

DESIGN AND MONITORING FRAMEWORK

Impact the Project is Aligned with

Universal access to reliable and affordable ICT services (Strategy for the Development of Samoa 2012–2016)^a

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
Outcome Quality broadband services available at an affordable price and used for enhancing e-health	By 2021: a. Wholesale internet bandwidth price decreased to \$300 per Mbps per month (2014 baseline: \$1,500 per Mbps per month) b. Retail prices of internet services decrease to \$19 per Mbps per month for residential users and to \$200 per Mbps per month for businesses (2014 baseline: \$43 and \$630 per Mbps per month) c. Health information system provides timely, complete, and patient-centric data.	a. Internet service price list published by internet service providers	Economic shocks reduce the purchasing power of the Samoan public Weaker-than-expected demand for web-based service offerings Market design risks pertaining to having two competing cables
Outputs 1. Special-purpose vehicle—the SSCC—to operate and manage the SCS established	By 2019: 1a. The SSCC is operational with a board of directors and CEO selected.	1a. Relevant documentation (certificate of incorporation, articles of association, shareholders agreement)	Limited pool of expertise to staff the SSCC Complex governance arrangements for SSCC because of public-private partnership The SSCC has limited capacity to manage ADB-financed projects Weak financial management capacity of the SSCC as a start-up company

2. SCS established and efficiently operated	2a. The SCS is in place and achieves 99.9% system availability. 2b. 12 months after the SCS is ready for service, the SSCC's fault-handling time measured by mean time to recovery is equal to the industry standard of 1 hour.	2a. Progress report 2b. Operational reporting logs	Cost overruns in the SCS The procurement capacity of SSCC is limited Delays in approval process because of different procurement rules of cofinanciers
3. Legal and regulatory environment improved	3a. Required amendments to ICT regulations and legislations will facilitate the SCS approved. 3b. The OOTR has capacity to regulate and ensure compliance with amended legislations and regulations. 3c. A nationwide consumer survey on ICT benefits is conducted with attention to gender differences.	3a. Parliamentary reporting 3b. OOTR annual reports	Inability of the OOTR to enforce regulations and legislations Lack of broad-based support for ICT legislative reforms Staff turnover at the OOTR
4. Investments in e-health solutions	4a. Health information system is installed and operating. 4b. Improved quality of available patient-centric data and information on medical conditions and patient care disaggregated by sex	4a. Progress report 4b. Operational reports	Limited MOH capacity to operate and maintain the system Reluctance of relevant stakeholders to make information and data available because of lack of faith in privacy regulations

Key Activities with Milestones

1. Special-purpose vehicle—the SSCC—to operate and manage the SCS established

- 1.1 Obtain cabinet approval of structure by October 2015.
- 1.2 Finalize incorporation of the SSCC by November 2015.
- 1.3 Appoint board of directors by November 2015.
- 1.4 Hire CEO and other staff by November 2015.

2. SCS established and efficiently operated

- 2.1 The government to prepare and issue bid documents by October 2015.
- 2.2 The government, the World Bank, and ADB to review bids by December 2015.
- 2.3 Award contracts by February 2016.
- 2.4 Carry out marine survey and complete marine operations for laying cables by August 2016.
- 2.5 Install terminal equipment by end of September 2016.
- 2.6 Equip cable landing systems with necessary cross-connected facilities for their customers by January 2017.

- 2.7 Put in place appropriate cable repair and maintenance agreement before completion of cable lay by March 2017.
- 2.8 Commissioning, provisional acceptance, and ready for service by September 2017
- 2.9 Train SSCC staff on landing facility operation and maintenance, and update skills and knowledge periodically (ongoing to December 2017)
- 2.10 Final acceptance by December 2017
- 2.11 Continue regular monitoring and supervision until December 2019.

3. Legal and regulatory environment improved

- 3.1 Review and develop effective regulation for the sector with particular focus on wholesale markets by December 2016.
- 3.2 Establish wholesale tariffs, including price and nonprice terms for access to all international fiber-optic bandwidth services by December 2016.
- 3.3 Carry out a nationwide consumer survey on the benefits of ICT by December 2016.
- 3.4 Procure spectrum management monitoring equipment by December 2016.
- 3.5 Develop capacity of OOTR staff by December 2016.

4. Investments in e-health solutions

- 4.1 Validate the needs of the health sector and clearly define the requirements for the proposed system by April 2016.
- 4.2 Conduct technical and financial due diligence by July 2016.
- 4.3 Procure selected integrated health information system components by December 2016.
- 4.4 Install and configure the system's hardware and software components by December 2017.
- 4.5 Ensure connection to all users: hospitals, health centers, and clinics by June 2018.
- 4.6 Migrate data sets from existing systems and other sources (ongoing to December 2019).
- 4.7 Ensure proper operations in production stage through comprehensive testing routines by September 2017.
- 4.8 Conduct necessary training for users and system administrators (ongoing to December 2019).
- 4.9 Carry out regular monitoring until December 2019.

Project Management Activities

- Tender, award, and manage contracts until December 2019.
- Provide timely progress reports until December 2019.
- Carry out regular accounting and annual audits until December 2019.
- Follow up safeguards issues and risk management plan in timely manner until December 2016.

Inputs

Grants

ADB: \$25.00 million

Government of Samoa: \$6.73 million

World Bank: \$16.00 million

Government of Australia: \$1.50 million^b

Private sector: \$8.18 million

Assumptions for Partner Financing

Outputs necessary to reach design and monitoring framework outcome, not administered by ADB, include the World Bank Group (50% SCS financing and regulatory technical assistance), the Government of Australia (landing station and ancillary equipment on Savai'i), and private sector (prepurchased capacity and SSCC management costs). Taxes and duties will be borne by the Government of Samoa.

ADB = Asian Development Bank, CEO = chief executive officer, ICT = information and communication technology, Mbps = megabit per second, OOTR = Office of the Regulator, SCS = submarine cable system, SSCC = Samoa Submarine Cable Company.

^a Government of Samoa. 2012. *Strategy for the Development of Samoa 2012–2016*. Apia.

^b The Government of Australia will provide parallel financing to be managed by the World Bank.

Source: Asian Development Bank.

LIST OF LINKED DOCUMENTS

<http://www.adb.org/Documents/RRPs/?id=47320-001-2>

1. Grant Agreement
2. Sector Assessment (Summary): Information and Communication Technology
3. Project Administration Manual
4. Contribution to the ADB Results Framework
5. Development Coordination
6. Financial Analysis
7. Economic Analysis
8. Country Economic Indicators
9. Summary Poverty Reduction and Social Strategy
10. Initial Environmental Examination
11. Risk Assessment and Risk Management Plan

Supplementary Document

12. Project Procurement Risk Assessment