Report and Recommendation of the President to the Board of Directors

Project Number: 47358-002
August 2019

Proposed Grant
Independent State of Samoa: Enhancing Safety, Security, and Sustainability of Apia Port Project

Asian Development Bank

CURRENCY EQUIVALENTS
(as of 6 August 2019)

Currency unit	–	tala (ST)
ST1.00	=	$0.377
$1.00	=	ST2.649

ABBREVIATIONS

ADB	–	Asian Development Bank
DRR	–	disaster risk reduction
IPR	–	independent peer reviewer
GPI	–	green port initiative
GPP	–	green port policy
MFR	–	Ministry for Revenue
MHDPP	–	multihazard disaster preparedness plan
MOF	–	Ministry of Finance
PAM	–	project administration manual
PMU	–	project management unit
SPA	–	Samoa Ports Authority
TEU	–	twenty-foot equivalent unit

NOTE

In this report, “$” refers to United States dollars.

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CONTENTS

PROJECT AT A GLANCE

1. Basic Data

Project Number: 47358-002

Project Name	Enhancing Safety, Security, and Sustainability of Apia Port Project
Country	Samoa
Borrower	Ministry of Finance
Country Economic Indicators	https://www.adb.org/Documents/LinkedDocs/?id=47358-002-CEI
Portfolio at a Glance	https://www.adb.org/Documents/LinkedDocs/?id=47358-002-PortAtaGlance
Department /Division	PARD/PATC
Executing Agency	Ministry of Finance

2. Sector

	Sector	Subsector(s)	ADB Financing ($ million)
✓	**Transport**	Water transport (non-urban)	62.26
		Total	**62.26**

3. Operational Priorities

- ✓ Addressing remaining poverty and reducing inequalities
- ✓ Accelerating progress in gender equality
- ✓ Tackling climate change, building climate and disaster resilience, and enhancing environmental sustainability
- ✓ Strengthening governance and institutional capacity
- ✓ Fostering regional cooperation and integration

Climate Change Information

Climate Change impact on the Project	Medium

ADB Financing

Adaptation ($ million)	22.80

Sustainable Development Goals

SDG 9.1
SDG 13.a
SDG 14.1

Gender Equity and Mainstreaming

Some gender elements (SGE) ✓

Poverty Targeting

Geographic Targeting ✓

4. Risk Categorization: Complex

5. Safeguard Categorization

Environment: B **Involuntary Resettlement:** C **Indigenous Peoples:** C

6. Financing

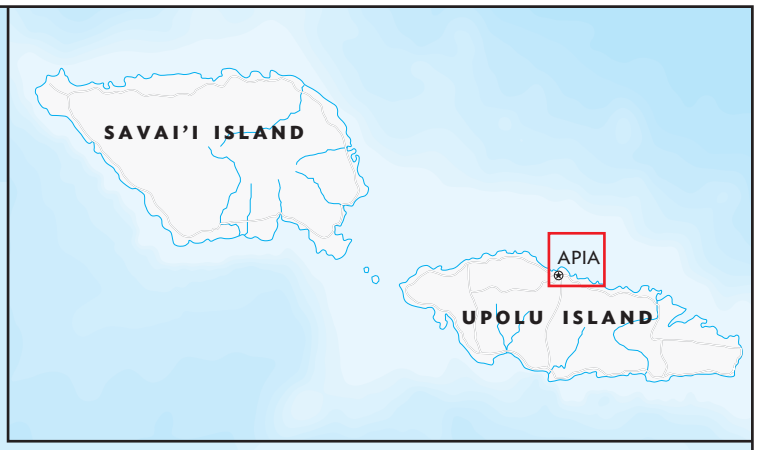
Modality and Sources	Amount ($ million)
ADB	**62.26**
Sovereign Project grant: Asian Development Fund	62.26
Cofinancing	**0.00**
None	0.00
Counterpart	**12.77**
Government	12.77
Total	**75.03**

Currency of ADB Financing: US Dollar

Source: Asian Development Bank

SAMOA

ENHANCING SAFETY, SECURITY, AND SUSTAINABILITY OF APIA PORT PROJECT



Apia Bay

East Reef

Palolo Deep Marine Reserve

PROJECT AREA

Apia Harbor

Marina

Sogi

Savalalo

Saleufi

Togafuafua

APIA

Matautu

Vaiala

Vaipuna

Leone

N

0 0.25 0.50

Kilometers

Project Area

Existing Breakwater Footprint

Reconstructed Breakwater Footprint

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 Enhancing Safety, Security, and Sustainability of Apia Port Project.

2. The project will improve the efficiency, safety, and environmental sustainability of the seaport in Apia, Samoa. It will upgrade terminal infrastructure to enhance safety and capacity, strengthen existing breakwater to enhance resilience to climate change and severe storms, and construct a customs facility with a new container x-ray scanner to enable effective border management. The project will also support gender-sensitive green port initiatives (GPIs) to promote clean and sustainable port operations and management.

II. THE PROJECT

A. Rationale

3. **Regional context and maritime transport challenges**. Samoa lies south of the equator, about halfway between Hawaii and New Zealand, in the Polynesian region of the Pacific Ocean. It has a population of about 200,000, an estimated nominal domestic product of $835.8 million in 2018, and a land area of 2,820 square kilometers, which consists of the two large islands of Upolu and Savai'i as well as eight small islets.[1] The main island of Upolu is home to nearly three-quarters of Samoa's population, and to the capital city, Apia. Given the geographical isolation from major international markets, maritime connectivity is critical to the economy, which heavily depends on agricultural exports, and imports of basic commodities.

4. The port is the country's only international maritime gateway. It was first constructed with New Zealand grant aid in 1966. Between 1988 and 2015, the Government of Japan provided assistance for various port improvements, such as construction of the original breakwater in 1988, rehabilitation after cyclone damage in 1992, and wharf extension to accommodate cruise liners in 2015. In 2018, the port handled 37,091 twenty-foot equivalent units (TEUs) of containers, including 4,470 TEUs for transshipment and 15 cruise liners. By 2035, the container demand is projected to increase to 51,534 TEUs, including 5,153 TEUs for transshipment and 20 cruise liners. Although the port has sufficient berth capacity, the capacity of its terminal is inadequate, one tugboat is past its design life, and the breakwater is so damaged that it is inadequate to withstand climate change impacts and natural disasters. Trade facilitation is suboptimal because the customs processing system is inefficient. Moreover, coordinated efforts at the port to tackle environmental issues for long-term sustainability are lacking. The proposed project will complement earlier donor efforts in four main areas.

5. **Safety and capacity.** Technical assessments estimated that 1.9 hectares of gross container terminal area are required to meet projected container demand by 2035. The current effective gross container terminal area is only 1.4 hectares because of leases to non-port activities, the container-handling flow is inefficient because of damaged areas within the port terminal, and the location of utilities is suboptimal. The project will repair the damaged areas of the wharf deck, upgrade the lighting, provide suitable pavement and additional reefer container capacity, and reconfigure the layout of the container terminal for greater efficiency.

6. Currently, the vessels calling at the port are served by two tugboats (Tafola and Atafa) that are insufficiently powered to meet even current requirements. Tafola is past its design life (30 years) and poses navigational safety concerns. Atafa has up to 5 years left in its design life,

[1] Samoa Bureau of Statistics. 2019. http://www.sbs.gov.ws

after which a replacement would be needed. Ideally, two higher-powered tugboats should replace both vessels. However, due to funding constraints, a phased approach will be taken to first replace Tafola under the project.[2]

7. Port operations are also constrained by seasonal waves entering the harbor basin during the wet season (November–April), which makes berthing unsafe.[3] The project will implement a wave-monitoring system and develop an early-warning system to enhance navigation safety at the port.

8. **Resilience to climate change and natural disasters.** Samoa has historically suffered from disasters triggered by cyclones, earthquakes, and associated tsunamis. The breakwater at the port is currently damaged, and wave modeling revealed that it will suffer severe damage during a 100-year storm event.[4] It is essential to enhance the resilience of the breakwater to protect the port and enable it to operate in the aftermath of disasters to receive vessels carrying aid and emergency supplies. The project will rehabilitate and upgrade the existing breakwater to withstand the 100-year design storm condition and a 50-year sea level rise. It will also implement non-structural measures, such as formulating a multihazard disaster preparedness plan (MHDPP), to mitigate disruption of port operations in the aftermath of a disaster event.

9. **Border security and trade facilitation.** Currently, customs examination at the port involves manual inspection of containers in an open area with limited space. Smuggling of illicit drugs and weapons through sophisticated concealment is a growing concern. Catering to increasing trade through the port would require enhanced border security and trade facilitation.[5] Samoa's Customs Legislation requires introduction of a non-intrusive inspection equipment as a tool to streamline and strengthen border security. The project will provide a new container x-ray scanner and related facilities. The Government of New Zealand is currently providing long-term support to the Ministry for Revenue (MFR) to develop capacity-building programs on border control. Once the new container x-ray scanner is in place, the Government of New Zealand would support MFR in implementing a modern risk-based, intelligent customs management system as part of its ongoing capacity development program.

10. **Gender-sensitive green port.** At present, there is a lack of coordinated effort at the port to manage the environment and optimize operational and energy efficiency. This undermines the long-term sustainability of port operations. The project will develop a green port policy (GPP) and pilot GPIs to promote more environmentally sustainable practices at Samoa Ports Authority (SPA). This will be developed based on an audit of SPA's performance against green port indicators from international best practice and maritime conventions (footnote 3). It will also include gender analyses to ensure that the GPP and GPIs address any particular impacts of port operations on women communities. Further, the project will promote greater participation of women employees in SPA's technical management roles to operationalize the GPP and GPIs, by providing training opportunities on state-of-the-art environmental management practices. Collectively, this is well aligned with the government's vision in the Samoa Transport Sector Plan (2014–2019) of delivering sustainable transport networks that support Samoa's economic and social development and enhance the quality of life for all Samoans.

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[2] Atafa will be considered for replacement as soon as other funds are identified.

[3] A feasibility study was conducted, and a preliminary green port concept developed, under Asian Development Bank (ADB). 2015. *Technical Assistance to the Independent States of Samoa for Ports Development Master Plan*. Manila.

[4] A project design advance grant is funding detailed design consultants and an independent peer reviewer (IPR) to prepare the detailed design for the project. Storm events also include cyclones.

[5] Government of Samoa, MFR. *Compliance Improvement Plan, 2016–2018*. Apia.

11. **Lessons from past projects**. Maritime transport projects in the Pacific often face start-up delays and cost overruns, or issues with the detailed design and procurement. To improve project readiness and reduce the risk of cost overrun, the detailed design and the preparation of the main civil works package are currently underway and expected to be completed by the fourth quarter of 2019. An independent peer reviewer (IPR) was engaged to review and ensure the robustness of the design.[6] The cost estimates allow for an adequate level of physical contingency. Construction was assumed to take place over two seasons to account for possible interruptions during the wet season.

12. **Sustainable Infrastructure and ADB's Strategy 2030.** The GPIs to be piloted under the project are aligned with ADB's commitment to support the protection and restoration of marine ecosystems and improve the sustainability of port infrastructure development (para. 10). It can serve as demonstration project, to be replicated for greater benefits to other developing countries in the Pacific. The project also fully supports ADB's Strategy 2030 (Table 1),[7] its Action Plan for Healthy Oceans and Sustainable Blue Economies, and the Pacific Approach 2016–2020 by improving competitiveness of the port and by managing risks from natural disasters and climate change.[8] It is included in ADB's country operations business plan, 2017–2019 for Samoa and in the Regional Operations Business Plan, 2017–2019.

Table 1: Alignment with ADB's Strategy 2030

Strategy 2030 operational priority	How priority is achieved
Fostering regional cooperation and integration	Enhanced resilience will enable Apia Port to continue playing its essential role as a subregional hub port, i.e., distributing essential goods to Niue, Tonga, Tokelau, and Tuvalu.
Tackling climate change, building climate and disaster resilience, and enhancing environmental sustainability	The existing breakwater will be reconstructed to withstand a 50-year sea level rise and 100-year extreme storm conditions.
Improving sustainability in port and coastal infrastructure development	A green port policy will be developed, and priority green port initiatives piloted under the project, to reduce the impact of port operations on the local and global marine environment.

Source: Asian Development Bank.

B. Impacts and Outcome

13. The project is aligned with the following impacts: improved safety, security, and competitiveness of trade and maritime services; and an environmentally sustainable, energy-efficient, and socially responsible transport sector.[9] The project will have the following outcome: efficiency, safety, and environmental sustainability of Apia International Port improved.[10]

C. Outputs

14. **Output 1: Safety and capacity of port infrastructure enhanced.** The project will upgrade the port terminal to enhance capacity and bring it to safe operating standards. A new tugboat will be procured, replacing the existing life-expired tugboat. A wave-monitoring system will be implemented, and an early warning system developed to enhance port navigation safety.

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[6] The IPR is funded under ADB. 2018. *Project Design Advance to the Independent State of Samoa for the Port Development Project.* Manila.

[7] Asian Development Bank, 2018. *Strategy 2030: Achieving a Prosperous, Inclusive, Resilient, and Sustainable Asia and the Pacific.* Manila.

[8] ADB. 2016. *Pacific Approach 2016–2020*. Manila.

[9] Government of Samoa, Ministry of Works, Transport and Infrastructure. 2014. *Transport Sector Plan, 2014–2019*. Apia; Government of Samoa, MFR. *Compliance Improvement Plan 2016–2018.* Apia; and Samoa Ports Authority. *Corporate Plan 2017–2020.* Apia.

[10] The design and monitoring framework is in Appendix 1.

15. **Output 2: Preparedness and resilience of port operations to climate change and natural hazards enhanced.** The project will reconstruct the damaged breakwater by reshaping the existing core, replacing the quarry layer and rock underfill, and replacing the existing units with larger, 48-ton units. This will increase the breakwater height by 2.5 meters and the width by 32 meters. An MHDPP for Apia Port will be delivered, covering seismic and extreme storm events.

16. **Output 3: Border security and trade facilitation capacity enhanced.** The project will procure a new container x-ray scanner. It will also construct a new customs examination facility, which will accommodate the new container x-ray scanner.

17. **Output 4: Gender-sensitive green port initiatives piloted.** The project will deliver a gender-sensitive GPP and will pilot at least three gender-sensitive GPIs. Green port practices will be mainstreamed into the SPA operations (para. 10).

D. Summary Cost Estimates and Financing Plan

18. The project is estimated to cost $75.03 million (Table 2). Detailed cost estimates by expenditure category and by financier are in the project administration manual (PAM).[11] The civil works for the ports represent the major expenditure under the project.

Table 2: Summary Cost Estimates
($ million)

Item			Cost
A.	**Base Cost**[a]		
	1.	Safety and capacity of port infrastructure enhanced	25.68
	2.	Preparedness and resilience and preparedness of port operations to climate change and natural hazard enhanced	27.08
	3.	Border security and trade facilitation capacity enhanced	7.62
	4.	Gender-sensitive green port initiatives piloted	0.90
		Subtotal (A)	**61.28**
B.	**Contingencies**[b]		**13.75**
		Total (A+B)	**75.03**

[a] Includes taxes and duties of $10.76 million, to be financed by the government. Such amount does not represent an excessive share of the project cost. The government will finance taxes and duties (VAGST) from its own resources and administer VAGST provisions in accordance with its regulations. In mid-2019 prices as of June 2019.

[b] Physical contingencies computed at 18.2% and price contingencies at an average of 1.56% for foreign exchange costs and 1.64% for local currency costs; includes provision for potential exchange rate fluctuations under the assumption of purchasing power parity exchange rate.

Source: Asian Development Bank estimates.

19. The government has requested a grant not exceeding $62.26 million from ADB's Special Funds resources (Asian Development Fund) to help finance the project. The summary financing plan is in Table 3. ADB will finance the expenditures in relation to civil works, equipment, consulting services for construction supervision and GPIs, and individual consultants to support the project management unit (PMU). The government will finance recurrent costs of the x-ray scanner and tugboat, taxes and duties, and contingencies. The government has given assurances that it will mobilize funding resources should there be any shortfall in ADB financing.

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

Table 3: Summary Financing Plan

Source	Amount ($ million)	Share of Total (%)
Asian Development Bank		
Special Funds resources (ADF grant)	14.79	19.7
Special Funds resources (ADF DRR financing)	7.47	10.0
Special Funds resources (Concessional Resources Regional Pool)	40.0	53.3
Government of Samoa	12.77	17.0
Total	**75.03**	**100.0**

ADF = Asian Development Fund, DRR = disaster risk reduction.
Source: Asian Development Bank estimates.

20. The costs of disaster risk reduction (DRR) measures to enhance the disaster resilience of the breakwater are estimated at $22.8 million. Since the DRR activities address climate-related disaster risks and considered the impacts of climate change on extreme weather events, the DRR actions also contribute wholly to climate change adaptation, of which 100% is funded by ADB.[12]

E. Implementation Arrangements

21. The Ministry of Finance (MOF) will be the executing agency, and the implementing agencies will be SPA and the MFR. MOF will provide overall oversight and coordination through its project steering committee. SPA will lead the PMU in day-to-day project management in line with ADB's guidelines and in coordination with the project steering committee. SPA will procure the civil works and consulting contracts, and SPA and the MFR will procure the equipment, in accordance with ADB's Procurement Guidelines (2015, as amended from time to time) and Guidelines for the Use of Consultants (2013, as amended from time to time). Disbursement under the grant will follow ADB's *Loan and Disbursement Handbook* (2017, as amended from time to time). SPA and the MFR will ensure compliance in timely submission of audited project financial statements to ADB.

22. Subject to satisfactory performance, availability of suitably qualified and experienced staff, and receipt of an acceptable proposal, the executing agency will directly contract, via single-source selection, Beca International Consultants Ltd to provide construction supervision services for the project, as further described in the PAM.[13]

23. The implementation arrangements are summarized in Table 4 and described in detail in the PAM.

Table 4: Implementation Arrangements

Aspect	Arrangements		
Implementation period	October 2019–September 2023		
Estimated completion date	30 September 2023		
Estimated grant closing date	31 March 2024		
Management			
(i) Oversight body	Project steering committee Chief Executive Officer, MOF (chair) SPA, MFR, MWTI, MPE, MFAT, MNRE, MOP, SSC, ADB		
(ii) Executing agency	MOF		
(iii) Key implementing agencies	SPA and MFR		
Procurement	International competitive bidding	3 contracts	$53.5 million

[12] The incremental DRR cost is derived from the total cost of reconstructing the breakwater to higher climate and disaster resilience standards, less the estimated cost of basic repairs to the existing standard. Given that the DRR actions also contribute to climate change adaptation, the adaptation cost is also estimated at $22.8 million.

[13] Rationale for single source selection of Beca provided in Section VI of the Project Administration Manual.

Aspect	Arrangements		
Consulting services	Quality- and cost-based selection	15 person-months (1 contract)	$0.84 million
	Individual consultant selection	29 person-months (3 contracts)	$1.03 million
	Single-source selection	203 person-months (1 contract)	$3.5 million
Advance contracting	Main civil works, goods, and consulting services packages		
Disbursement	The grant proceeds will be disbursed following ADB's *Loan Disbursement Handbook* (2017, as amended from time to time) and detailed arrangements agreed between the government and ADB.		

ADB = Asian Development Bank; MFAT = Ministry of Foreign Affairs and Trade; MFR = Ministry for Revenue; MNRE = Ministry of Natural Resources and Environment; MOF = Ministry of Finance; MOP = Ministry of Police; MPE = Ministry for Public Enterprises; MWTI = Ministry of Works, Transport and Infrastructure; SSC = Samoa Shipping Corporation; SPA = Samoa Ports Authority.
Source: Asian Development Bank estimates.

24. The project will provide additional consultants to supplement the PMU throughout the construction period. This includes a project implementation consultant, project manager, and a social safeguards and gender expert.

III. DUE DILIGENCE

A. Technical

25. The design to rehabilitate the damaged breakwater is the most cost-effective, is supported by the IPR, and takes into consideration a 50-year sea level rise (0.4 meter) and the 100-year extreme storm event. The reconstruction of the breakwater will take place in at least two phases to avoid the wet season. The risk of damage to the breakwater under extreme seismic events was assessed. Both the detailed design consultant and the IPR concluded that it would be uneconomical and impractical to fully mitigate the seismic risks using structural measures.[14] The project team will develop alternative nonstructural measures, such as an MHDPP. On the landside, repairs will be done to various damaged sections of the wharf deck, the fuel line, and electrical duct lids. The lighting will be upgraded to provide safe operating standards. New reefer facilities will be provided to meet the forecast requirements. The design also includes new stormwater drainage and three classes of heavy-duty pavement to ensure cost-effectiveness while maintaining operational flexibility. The container terminal layout will be reconfigured with new fencing, to enhance safety and efficiency. For efficiency, the port component and the small civil works to construct the customs examination facility will be packaged as a single civil works package.

26. For the trade facilitation component, the project will finance the procurement of a container x-ray scanner that meets the minimum regulatory standards set by the World Customs Organization. The supply contract for the container x-ray scanner will include a 2-year warranty period and the provision of training, and the government will finance a 5-year maintenance contract with the supplier after the end of the warranty. To avoid potential damage from outdoor operations, a new customs examination facility will be constructed to house the new scanner operations.

27. The level of project readiness is high, since the detailed designs of the breakwater, port terminal, and the new customs examination facility are at an advanced stage, funded by the project design advance facility. The bidding documents for the equipment and civil works are expected to be ready in the early fourth quarter of 2019.

[14] The IPR was engaged under the project design advance facility.

28. The 30-year old tugboat (Tafola) has exceeded its operational lifespan and needs to be replaced as soon as possible. Currently, it is operating on only one of its two engines, and steel corrosion is evident throughout the vessel. Any repairs would be costly and provide limited extension to its service life. The tugboat supply contract will include a 2-year warranty period and the provision of training, and the government will finance a 5-year maintenance contract with the supplier after the end of the warranty.

B. Economic and Financial

29. The project will allow SPA and the MFR to ensure that basic operating needs are met and that the movement of people and goods across Samoa's border is safe and secure. Improved maritime infrastructure will ensure that the port is resilient to climate change and can remain operational in the aftermath of disasters triggered by natural hazards such as cyclones.

30. To assess the project's economic viability, standard cost–benefit analysis is inapplicable because of the basic-needs nature of the components. Significant benefits arise from safety, security, and resilience to climate change and natural hazards, which cannot be fully quantified for comparison with investment costs since substantial damage is expected if the breakwater were to be damaged. The potential damages would severely impact shipping lines and the economy since Apia Port is the primary international gateway and serves as economic lifeline to Samoa. The potential breach of safety if vessel navigation took place without operational tugboats could result in devastating impacts on passenger and cargo vessels. For the customs component, it is necessary to bring Samoa's customs in line with minimum international standards by strengthening border security.

31. A basic-needs perspective or one of basic public goods and services provision is more applicable since it considers that the without-project scenario would negatively impact livelihoods if the population were unable to import basic goods. The detailed scope of port components was verified and confirmed by the IPR as being the cost-effective. A cost-effectiveness analysis was applied to evaluate the project following ADB guidelines.[15] The assessment confirms the need for (i) reconstruction of the breakwater instead of patch repair; (ii) essential deck and yard repairs and strengthening of pavements, including lighting, renewal of the electrical supply network, and provision of sufficient standby generation; (iii) provision of the container x-ray scanner; and (iv) immediate replacement of the tugboat that is past its design life.

32. A financial analysis and financial capacity assessment was undertaken following ADB guidelines.[16] Although the port components was found to be financially unviable, and hence unattractive for private sector investment, the financial sustainability analysis confirms that the income from overall port operations would be sufficient to cover recurring expenses for the maintenance of the new infrastructure. However, the pre-mitigated financial sustainability risk was *substantial* because of the risk of inadequate spending on asset maintenance by SPA, and the MFR's reliance on government funding for maintenance of the new x-ray scanner, leading to possible degradation of the assets. Therefore, SPA and MFR have agreed to the following mitigating measures: (i) assurances designed to require SPA to establish a separate reserve fund earmarked for maintenance of the assets provided under the project and (ii) assurances requiring the MFR to implement cost recovery charges to cover the recurring maintenance requirements of the new x-ray scanner and customs facilities.

[15] ADB. 2017. *Guidelines for the Economic Analysis of Projects*. Manila.
[16] ADB. 2014. Financial Management, Cost Estimates, Financial Analysis, and Financial Performance Indicators. *Operations Manual*. OMG2/BP. Manila.

C. Governance

33. The assessment of state-owned enterprise governance concluded that SPA's governance is largely consistent with international best practice. Areas of strength include the overall governance framework, board independence, strategy setting, and the role of the chief executive officer. Since many of the reforms are recent, SPA and the government need to show sustained commitment to implementing them effectively. The biggest challenge to SPA's governance comes from the overlapping oversight by two ministries and the cabinet, and the ambiguities this creates. Separate technical assistance will be provided to support the legal reforms needed to solve this, and to develop a policy that better insures SPA against disasters triggered by natural hazards.[17]

34. The financial management assessment concluded that SPA has adequate capacity to undertake the financial management of ADB-financed projects. Although this would be ADB's first investment project in the ports and customs subsectors of Samoa, SPA has completed its fourth port project financed by the Government of Japan since the 1990s. The pre-mitigated financial management risk was assessed as *substantial*, mainly because of the lack of experience with ADB-funded projects. The risk to financial management is mitigated by the fact that SPA has in-house staff with experience in ADB procedures. Also, the newly established PMU comprises permanent staff from both SPA and the MFR. The project will provide additional support from consultants experienced in project implementation and safeguards. MOF, the executing agency, is experienced in handling several ongoing ADB and other donor-funded projects. MOF, SPA, and the MFR also received training on ADB's financial management requirements in the first quarter of 2019.

35. The project procurement risk assessment concluded that both SPA and the MFR have limited resources and experience to support the preparation, procurement, and contract supervision of development-partner-financed infrastructure projects. This risk is being mitigated by the ongoing project design advance, and will be further mitigated during project implementation (Table 4). Procurement and engagement of consulting services will be conducted in accordance with ADB's Procurement Guidelines (2015, as amended from time to time) and the Guidelines for the Use of Consultants (2013, as amended from time to time).

36. Integrity due diligence on SPA identified no significant integrity risks. ADB's Anticorruption Policy (1998, as amended to date) was explained to and discussed with the government, MOF, SPA, and the MFR. The specific policy requirements and supplementary measures are described in the PAM.

D. Poverty, Social, and Gender

37. Climate and disaster resilience of the lifeline port, and efficiencies delivered by customs reform will boost the competitiveness of trade, particularly Samoan exports. This will stimulate the economy, generate local employment, and increase domestic and international trade. The tourism and construction industries would benefit as well and create more domestic jobs for both skilled and nonskilled labor.

38. The project is classified *some gender elements*. Proactive gender design features focus primarily on upskilling and employment for women through (i) a gender audit of SPA to ensure more gender-sensitive and responsive ways of working, and to encourage more women into the workplace, particularly in technical and management positions; (ii) gender analysis and actions in

[17] ADB. 2019. *Technical Assistance for Strengthening State-Owned Enterprise Accountability and Performance.* Manila.

the GPP and MHDPP, and training opportunities for women;[18] (iii) training on tugboat maintenance and new border control measures;[19] and (iv) gender training for contractors (i.e., on HIV/AIDs, gender, sexual exploitation and abuse, and trafficking).

E. Safeguards

39. In compliance with ADB's Safeguard Policy Statement (2009), the project's safeguard categories are as follows.[20]

40. **Environment (category B).** The environmental assessment identifies the impact from breakwater reconstruction as loss of about 10,000 square meters of highly modified benthic habitat of low ecological value; such impacts are considered minor. Impacts on the western reef or on the movement of turtles are not anticipated. Risks associated with the x-ray scanner will be mitigated by installing the equipment in a specially designed building with screens, and by training staff. Provided the measures included in the environmental monitoring plan are implemented, the project impacts are considered to be minor. The PAM details the institutional arrangements proposed to ensure the implementation of environmental safeguards during the project.

41. **Involuntary resettlement (category C).** No physical or economic displacement will result from the project. The project will be implemented within the existing port area, which belongs to SPA. Two existing private lessees in the port area will be affected due to termination and non-renewal of their expired lease. SPA negotiated with the lessees in accordance with their existing contract and the lessees will not experience significant impacts. The due diligence also confirmed that no legacy issues exist that would require corrective actions on the site. All key stakeholders were consulted and will continue to be consulted during implementation.

42. **Indigenous peoples (category C).** The port development is not expected to have any impacts on indigenous peoples considered as distinct and vulnerable because of their endogeneity.

F. Summary of Risk Assessment and Risk Management Plan

43. Significant risks and mitigating measures are summarized in Table 5 and described in detail in the risk assessment and risk management plan.[21]

Table 5: Summary of Risks and Mitigating Measures

Risks	Mitigation Measures
Governance and financial management	
SPA's internal audit function does not report directly to the audit committee.	As an interim measure, the audit committee will hold meetings with the head of internal audit, without management present, at least once a year.

[18] Examples may include the upskilling of women on state-of-the-art environmental practices in areas such as air and water quality management. The GPP will also address the impact of, for example, marine, air, and noise pollution on women in the communities surrounding the port. Examples of gender aspects in the MHDPP may include increased leadership responsibilities and training opportunities for women; gender-sensitive early-warning systems, and assurance that information related to disasters is gender-sensitive and discussed with women in nearby communities; collection of sex-disaggregated post-disaster data; and training on tackling gender-based violence and trafficking after a disaster.

[19] New Zealand is currently supporting the MFR in developing capacity-building programs on border control; this will extend to building the capacity required for incorporating the x-ray scanner operations into the new risk-based customs management system.

[20] ADB. Safeguard Categories. https://www.adb.org/site/safeguards/safeguard-categories.

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

Risks	Mitigation Measures
Material deficiencies in SPA's accounting and financial reporting system	SPA will adjust the financial statements within the first year of grant approval to rectify the material deficiencies identified in accounting; and procure and operate an integrated financial management information system to reduce off-system spreadsheet use.
Financial sustainability	
Inadequate maintenance leading to degradation of assets	SPA will create a reserve fund to be used for the maintenance of the project facilities. The Ministry of Revenue will implement tariff changes to ensure that the maintenance costs of the new x-ray scanner equipment are recovered.
Procurement	
Implementing agencies do not have experience with major procurement and the administration of major donor-financed contracts.	The detailed design consultant and the PMU will support the procurement of project components. Additional expertise will be engaged to support the PMU during project implementation. ADB and SPA will jointly recruit core consulting services. Complex procurement packages will be subject to prior review by ADB.
Post implementation risks	
Climate change impacts continue to pose berth operability challenges during wet seasons.	A wave monitoring system will be implemented to collect and analyze data on offshore wave activity and develop an early-warning system to enhance port navigation safety.
It is uneconomical and impractical to fully mitigate the seismic risks using structural measures.	The detailed design consultant concluded that the rehabilitated breakwater is expected to experience subsidence resulting in reduced crest height and potential overtopping during future storms. A multihazard disaster preparedness plan for Apia Port will be delivered to mitigate the residual risks that cannot be mitigated with structural measures.
External risks	
Slow implementation because of high turnover of trained staff and unexpected demands on PMU	Such risk is uncertain and outside the project's control.

ADB = Asian Development Bank, PMU = project management unit, SPA = Samoa Ports Authority.
Source: Asian Development Bank.

IV. ASSURANCES AND CONDITIONS

44. The government and MOF have 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.

45. The establishment of the SPA Reserve Fund to finance the maintenance cost of the project facilities, a cabinet resolution to institute a cost recovery charge for the x-ray scanner, and a duly executed lease agreement between SPA and the MFR for the new customs examination facility have been included as conditions of grant disbursement under the grant agreement.

V. RECOMMENDATION

46. 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 $62,260,000 to the Independent State of Samoa from ADB's Special Funds resources (Asian Development Fund) for the Enhancing Safety, Security, and Sustainability of Apia Port Project, on terms and conditions that are substantially in accordance with those set forth in the draft grant and project agreements presented to the Board.

Takehiko Nakao
President

16 August 2019

DESIGN AND MONITORING FRAMEWORK

Impacts the Project is Aligned with Improved safety, security, and competitiveness of trade and maritime services[a] Environmentally sustainable, energy-efficient, and socially responsible transport sector[b]			
Results Chain	**Performance Indicators with Targets and Baselines**	**Data Sources and Reporting Mechanisms**	**Risks**
Outcome Efficiency, safety, and environmental sustainability of Apia International Port improved	By 2023: 1a. Average time for imports to clear customs reduced from 38 hours in 2019 to 12 hours. 1b. Gender-responsive green port policy mainstreamed in port operations manuals	1a. Reports from the MFR's selectivity committee 1b. SPA's operations manuals.	Labor market demand causes high turnover of trained staff in SPA and the MFR.
Outputs 1. Safety and capacity of port infrastructure enhanced	By 2023: 1a. Container throughput capacity at Apia Port increases to 53,700 TEUs (Baseline: 29,000 TEUs). 1b. Wave-monitoring system implemented (2019 baseline: not applicable) 1c. One new tugboat delivered to replace tugboat that is past its design life (Baseline: not applicable) 1d. SPA gender audit and assessment completed with recommendations to increase the number of women in the workplace, particularly in technical and management roles (Baseline: No gender audit).	1a.–b. Progress report by construction supervision consultants 1c.–d. PMU progress report.	
2. Preparedness and resilience and preparedness of port operations to climate change and natural hazards enhanced	By 2023: 2a. 100 meters of existing breakwater reconstructed 2b. Gender-responsive multihazard disaster preparedness plan for Apia port delivered	2a. Progress report by construction supervision consultants 2b. PMU progress report	
3. Border security and trade	By 2023:	3a. Progress report by PMU	

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
facilitation capacity enhanced	3a. One new container x-ray scanner commissioned by 2020 (Baseline: 0). 3b. 100% of MFR staff (38 staff) upskilled to manage effective border control, including the use of an x-ray scanner, with all women staff (6) attending (Baseline: 0 men, 0 women trained).	3b. Post-completion report by trainer	
4. Gender-sensitive GPIs piloted	By 2023: 4a. Gender-responsive green port policy delivered by SPA (2019 baseline: not applicable). 4b. At least three new proposals to promote gender-responsive GPIs completed by SPA (2019 baseline: not applicable).	4a–b. Progress report by PMU	Slow implementation because of unexpected demands on SPA's human resources.

Key Activities with Milestones

1. Safety and capacity of port infrastructure enhanced

1.1 Award construction contract for the following items by Q2 2020.
- 1.1.1 Pavement repairs
- 1.1.2 Reefer facility
- 1.1.3 Lighting upgrade
- 1.1.4 Storm water drainage to mitigate flood
- 1.1.5 Rehabilitation of water supply lines
- 1.1.6 Wharf deck repair
- 1.1.7 X-ray scanner facility, inspection shed, and pavement
- 1.1.8 Replacement of fuel pipeline cover lids
- 1.1.9 Replacement of old wharf deck
- 1.1.10 Navigation channel alignment
- 1.1.11 Aids to navigation
- 1.1.12 Gas berth modifications
- 1.1.13 New fencing and replacement of gates
- 1.1.14 Implementation of wave-monitoring system

1.2 Award contract for the supply of tugboat by Q2 2020.
- 1.2.1 Staff trained on the operation and maintenance of tugboat (Q1 2022–Q1 2024).

1.3 Award construction supervision consultant contract by Q2 2020.
- 1.3.1 Gender audit and assessment of SPA

2. Resilience and preparedness of port operations to climate change and natural hazard enhanced

2.1 Award rehabilitation of breakwater contract by Q2 2020 (same contract as in 1.1).

2.2 Award consulting service contract to deliver multihazard disaster preparedness plan for Apia Port by Q1 2020 (same contract as in 4.1).

3. Border security and trade facilitation capacity enhanced

3.1 Award contract for construction of new custom building by Q2 2020 (same contract as in 1.1).

3.2 Award contract for X-ray scanner, and operationalize the equipment (Q2 2020–Q4 2021).

4. Gender-responsive green port initiatives piloted 4.1 Award consulting service contract by Q1 2020. 4.2 Agree on priority gender-responsive GPIs by Q3 2020. 4.3 Complete implementation of priority gender-responsive GPIs by Q1 2023.
Project Management Activities Award construction supervision consultant contract by Q2 2020. Establish PMU and appoint project manager by Q2 2019 (completed). Mobilize PMU consultants by Q4 2019.
Inputs Asian Development Bank: $62.26 million (grant) Government of Samoa: $12.77 million
Assumptions for Partner Financing The government of New Zealand is currently supporting the MFR in developing capacity-building programs on border control and the project will assist in building the capacity required for integrating the new x-ray scanner as part of risk-based intelligent customs management.

GPI = green port initiative, MFR = Ministry for Revenue, PMU = project management unit, Q = quarter, SPA = Samoa Ports Authority, TEU = twenty-foot equivalent unit.

[a] Government of Samoa, Ministry of Works, Transport and Infrastructure. 2014. *Transport Sector Plan, 2014–2019*. Apia; and Government of Samoa, Ministry for Revenue. *Compliance Improvement Plan 2016–2018.* Apia.

[b] Samoa Ports Authority. 2015. *Corporate Plan 2017–2020.* Apia.

Source: Asian Development Bank.

LIST OF LINKED DOCUMENTS

http://www.adb.org/Documents/RRPs/?id=47358-002-2

1. Grant Agreement
2. Project Agreement
3. Sector Assessment (Summary): Transport (Water Transport [Nonurban])
4. Project Administration Manual
5. Contribution to the ADB Results Framework
6. Development Coordination
7. Financial Analysis
8. Economic Analysis
9. Country Economic Indicators
10. Summary Poverty Reduction and Social Strategy
11. Risk Assessment and Risk Management Plan
12. Climate Change Assessment
13. Initial Environmental Examination

Supplementary Documents

14. Due Diligence Report
15. State-Owned Enterprise Governance Assessment: Samoa Ports Authority