Project Information Document/
Integrated Safeguards Data Sheet (PID/ISDS)

Concept Stage | Date Prepared/Updated: 23-Jan-2019 | Report No: ISDSC19417

BASIC INFORMATION

A. Basic Project Data

Country	Project ID	Parent Project ID (if any)	Project Name
Tonga	P154943		Tonga Digital Government Support Project (P154943)
Region	Estimated Appraisal Date	Estimated Board Date	Practice Area (Lead)
EAST ASIA AND PACIFIC	Nov 28, 2018	Mar 31, 2019	Digital Development
Financing Instrument	Borrower(s)	Implementing Agency	
Investment Project Financing	Ministry of Finance and National Planning	MEIDECC, Ministry of Justice	

Financing (in USD Million)

Financing Source	Amount
IDA Grant	4.65
	4.65
Total Project Cost	**4.65**

Environmental Assessment Category	Concept Review Decision
C - Not Required	Track II-The review did authorize the preparation to continue

Other Decision (as needed)

Type here to enter text

B. Introduction and Context

Country Context

1.   **Context.** Like many of its Pacific island neighbours, Tonga faces significant challenges of public service delivery due to infrastructure limitations, pressures on institutional capacity, relatively high-cost business processes and long transaction times. However, recent investments in improved connectivity in Tonga—notably broadband Internet access—coupled with global trends in the development of digital technologies, offer an opportunity to rethink the government service delivery model. This Project—to be co-financed with the Asian Development Bank (ADB)—proposes to build the enabling platform and associated institutional capacity to support a new model for digital government, or online public services delivery that could reach households and businesses more efficiently and effectively over the medium term.

2.	**Economic overview and recent developments.** Tonga's small open economy is based largely on external aid and remittances from its expatriate citizens and seasonal migrant workers, plus modest contributions from tourism, agriculture and fisheries. Following a decade of low growth (around 1 percent) economic performance improved over the past year, with growth in FY2016 (year ending June 2016) estimated at 3.1 percent. This follows a recovery in agricultural production, following a severe drought in 2015, plus construction activity in preparation for the South Pacific Games (SPG) which will be hosted by Tonga in 2019. Overall, economic activity and business confidence have been supported by prudent macro-fiscal management as well as a series of growth-supporting reforms. Inflation has been very subdued in recent years, with the annual inflation rate for FY2016 standing at 0.1 percent, and imported food and fuel prices remaining low. The current account deficit is estimated to have narrowed to 3.1 percent of GDP in FY2016 from 7.7 percent in FY2015, and official foreign exchange reserves remain over six months of import cover.

3.	The Government's economic policy has focused on increasing domestic revenue and prioritizing expenditure. Domestic revenues have increased by over 5 percentage points of GDP over the last five years, supported by a series of revenue policy and administration reforms. At the same time, total public expenditure increased from 25.7 percent of GDP in FY2014 to over 29 percent in FY2015 and FY2016, mostly in response to cyclone reconstruction needs and increases in wages for civil servants. The deficit is estimated to have risen to 2 percent of GDP in FY2016, from 1.1 percent in FY2015, with lower grants from development partners also affecting the bottom line. The Government has successfully maintained a stance of avoiding any new non-concessional borrowing, and prudently plans to finance SPG-related costs using non-debt creating sources of finance. Other efficiency gains in the public sector are also being explored, including a shift to online services, where feasible.

4.	Over the next few years, the Government will need to maintain solid fiscal performance, in particular careful management of the public sector wage bill and of the financing of SPG-related construction. With tourist receipts around 10 percent of GDP, Tonga's tourism industry should benefit from the recent redevelopment and reopening of a large luxury hotel, which marks a much-needed increase in high-end accommodation. Tourism plus other traditional sources of growth could potentially be complemented by new activities related to recent investments in ICT infrastructure, including ICT-enabled jobs such as online outsourcing and other components of the digital economy (e-commerce).

5.	**Social development.** Poverty levels are relatively low with 8.2 percent of the population living below the national poverty line of US$3.10 per day, and the prevalence of extreme poverty is 1.1 percent. Regional disparities in service delivery and economic opportunities remain a concern. With regard to human development indicators, the high prevalence of non-communicable diseases, particularly among women, is the most serious long-term challenge. Priorities for education include improving quality and enhancing skills for the changing workplace. Deployment of digital solutions for public service delivery could potentially help to improve human development outcomes and address regional disparities.

Sectoral and Institutional Context

6.   **Connectivity is improving.** Tonga is significantly more connected than it was five years ago, through there is still scope to expand broadband Internet access to take more advantage of rapid advances in digital services. Mobile phone penetration exceeds 95% of the population. Internet access has increased significantly since the Tonga-Fiji submarine cable was deployed in August 2013. The cable connects the main island of Tongatapu to Suva, Fiji. An additional domestic optical fibre link to the islands of Vava'u and Ha'apai has been contracted, and will likely be ready for service in the first half of 2018. Mobile broadband was launched in 2013, and more than 50 percent of the population is now able to access 3G services, prospectively 4G. It will likely continue to increase in line with global and regional trends provided that affordability improves. Fixed broadband access, primarily through ADSL (existing copper networks), is relatively low, at around 1.5 percent penetration. Wireless LAN connectivity is widely available in Nuku'alofa. While one of the service providers has built an optical fibre backbone on Tongatapu island, business and residential deployment of optical fibre has so far been limited.

7.   **ICT market reforms are ongoing**. Tonga liberalized its telecommunications sector in 2002 with the passage of the first Communications Act. The market now comprises two full-service operators: the state-owned Tonga Communications Corporation (TCC) and privately-owned Digicel Tonga. A small number of internet services providers (ISPs) also entered the market, but TCC and Digicel remain the leading operators. The updated Communications Act (2016) establishes a new regulatory framework that takes into account technological changes and institutional implications; and the Communications Commission Act (2016) will establish a new regulator with powers to enforce a more pro-competitive regulatory framework.

8.   **Identification and universal civil registration is a pre-requisite for inclusion, a goal reflected in target 16.9 of the Sustainable Development Goals (SDGs) to "provide legal identity for all, including birth registration" by 2030.** Strong identification systems are also essential to countries' economic development, security, governance, and efficient delivery of services. However, effective identification systems remain elusive in much of the world, including in Tonga. People without an effective means to prove their identity face significant barriers accessing education, financial services, healthcare, social welfare benefits, and participating in economic development and civic engagement. As such, identification serves as a key enabler for eradicating poverty and achieving a broad range of development outcomes.

9.   **Initial work has started on digital government.** With improving connectivity, Tonga has the potential to leverage digital technologies to support economic diversification, reduce transaction costs and improve its business climate, and also to introduce digital government (also referred to as e-government/online services). All ministries in Nuku'alofa are now connected to the Internet. Each ministry makes its own arrangement with an ISP. Some are using wireless, some ADSL and some are connected by fiber optic cable, so quality of service varies. Most ministries have a web site, but without a common standard.

10.   The Cabinet has recently approved a decision to upgrade Government connectivity by commissioning a dedicated network and data centre solution from a locally-based service provider, partnering with an international vendor, on a build-operate-transfer basis. This will need to be complemented by instituting standard software and data protocols, and introducing digital government applications aimed at the public and businesses. The Government has also established a Computer Emergency Response Team (CERT), under MEIDECC, located at Tonga Cable Ltd, and is developing partnerships with counterpart institutions in the region. The detailed scope of current and planned infrastructure investments and their implications will need to be reviewed as part of the overall Project design process.

11.   Some work has been undertaken to digitize internal government document flows, but there is no single/standard document management system or email. Some online services have been developed, for example for business registration, customs and tax payments. However, some systems are in early stages of development/early versions, and there are issues with online payments and reporting/data generation capability, for example. The majority of government transactional services, for example obtaining birth/marriage/death certificates, are not available online, and many are still paper-based, including the civil register. At the ministry/agency level, the development of information systems has so far been fragmented. They have typically made independent arrangements for procurement of hardware, software and connectivity, financed through different sources (budget, development partners).

12.   A few online services have been developed by the private sector. For example, mobile alerts from Tonga Power Limited and Air New Zealand advise customers of power outages, overdue bills and flight information. Some utility payments can be made using mobile money or mobile banking applications. Commercial banks use mobile networks to provide information for merchants (sales, tax calculation, etc.). There may be scope in the future for private public partnership (PPP) arrangements to deliver online services for Government.

13.   **Registries and single source data sets are needed.** Globally, many governments have established or are in process of developing core registries/databases to underpin online services, typically for citizen identification, business and land registration. Unique identification of individuals in particular is essential for effective authentication and efficient data flows. In Tonga, current legal and regulatory frameworks for this are weak or outdated and do not provide for privacy, data protection, system standards and interoperability, or rules for authentication and data matching. Governance systems are fragmented, particularly between civil registration and national identification, creating duplication, errors, fraud and delays. The mixture of paper-based and digital registries prevents sustainable quality record keeping. This encourages expensive, one-off registration campaigns, such as for elections or household surveys. High costs and administrative inefficiencies not only impact government budgets and hinder effective service delivery, but also raise access barriers for poor and marginalized groups. Service delivery is further impacted by multiple *ad hoc* identification-based solutions. Reliable proof of identity is required in order to identify voters for elections, issue a visa for travel abroad, deliver social welfare programs, manage civil servants benefits, identify customers for mobile banking, and to manage official documents such as land titles, passports or driver licenses.

14.   The Government has initiated work on registries, particularly for businesses and land, and to some extent, population. Business registration, led by the Ministry of Commerce, Tourism and Labour with support from the ADB, is online and the business registry is hosted by a private firm in New Zealand.[1] All processes for registering a business including name, certificate of incorporation, business license and registration with the tax authority have been integrated into a single online window. However, online payment functionality has ceased following the change of banking service provider. The Ministry of Lands is currently developing a new land registration and administration system, supported by the Food and Agricultural Organization (FAO). These services however cannot move online effectively until individuals can identify themselves securely and authentication of individual credentials can be processed digitally.
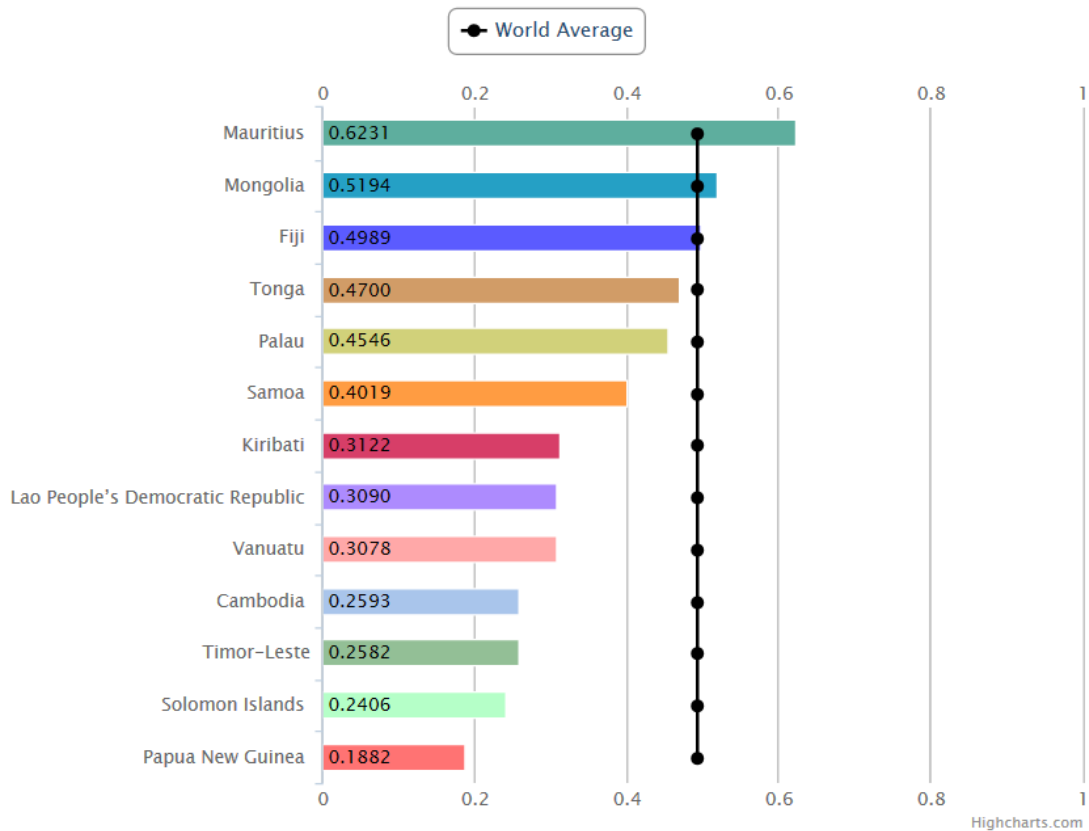
15.   **The next step will be to develop a fully integrated back end Government digital platform to facilitate consolidation of multiple independent systems, plus a front line Government portal to enable transactional services.** The legal and regulatory framework for e-government including the legal enabling environment core registers, the interface between core and functional registers, identity management, privacy, data management and exchange, etc. for this will need to be developed, as will the Government ICT architecture to support more widespread and systematic rollout of digital services. Such architecture would provide common enablers needed by most electronic and mobile services such as citizen authentication, business authentication, electronic ID integration, content management, electronic payment services, data services, notification services etc. Using such enabling tools, Government ministries could potentially save 30-40 percent of the time needed for online service implementation and could reduce their overall ICT cost by 20-30 percent, based on experiences in other countries.

16.   **Institutional and Policy environment.** The Ministry of Meteorology, Environment, Information, Disaster Management, Climate Change and Communications (MEIDECC) is responsible for ICT Policy and E-Government. Until the establishment of the new Communications Commission, MEIDECC is also responsible for telecoms regulation. MEIDECC has established an informational website for the Government as a whole http://www.gov.to/, an E-Government Unit to consolidate Government ICT technical staff. It has undertaken an initial e-government planning/scoping needs assessment and high-level plan, including with support from the Government of Korea. Tonga's ranking in the UN's global E-Government Development Index (2016) is summarized in Figure 1. This ranking is based on an assessment of various factors including ICT infrastructure, digital literacy, and availability of online services.

---

[1] "Tonga's Innovative Online Business Registry Goes Live – ADB." *News from Country Offices*. 2 December 2014. http://www.adb.org/news/tonga-s-innovative-online-business-registry-goes-live-adb. Instructions for registering a company online are here: http://www.businessregistries.gov.to/how-to-use-online-services/

2016 E-Government Development Index

- World Average

Country	Index
Mauritius	0.6231
Mongolia	0.5194
Fiji	0.4989
Tonga	0.4700
Palau	0.4546
Samoa	0.4019
Kiribati	0.3122
Lao People's Democratic Republic	0.3090
Vanuatu	0.3078
Cambodia	0.2593
Timor-Leste	0.2582
Solomon Islands	0.2406
Papua New Guinea	0.1882

Highcharts.com

17.   With the support of the ongoing Tonga-Fiji Connectivity Project (P113184)—Regulatory TA component-- the Government has prepared draft legislation to support electronic transactions, privacy and data protection, and cybersecurity. These laws have not yet been enacted, however, and would need to be a prerequisite for effective digital development in Tonga including core registries.

18.   **New digital opportunities.** The program to be supported by the Project would therefore leverage Tonga's improving connectivity and other foundational elements, and seek to develop a robust and sustainable Government digital platform. It would enhance Government ICT infrastructure, information systems and web presence. It would support the Government's efforts to consolidate these initiatives and move towards an integrated Government Digital Platform that will help to provide greater efficiency, (electronic) communication and resource-sharing within Government, and a more service-oriented approach to individual and business users.

Relationship to CPF

The Project reflects the findings of the SCD-8 and supports the following CPF objectives: improving service delivery (1), and generating opportunities through greater global and regional integration (2). The Project builds on the improvements in Internet access supported by the Pacific Regional Connectivity Program: Phase 1-Tonga-Fiji

Connectivity Project, which financed the cable to Nuku'alofa, and is currently financing the cable extension to Vava'u and Ha'pai. The Project also leverages ongoing analytical/advisory work on civil registration and civil identity in the Pacific (P161926) which is financed by the Government of Korea under the Korea World Bank Trust Fund.

19.   Through the strategic development of digital technologies, the Project will support more efficient and effective management of government institutions which would contribute to improved development outcomes in multiple sectors and programs supported under the CPF. The Project also supports Tonga's development vision as articulated in the Strategic Development Framework, 2015-2025, in particular National Outcome 4 related to responsive and good governance.

C. Proposed Development Objective(s)

The project development objective is to improve the Government's capacity for digital public service delivery.

Key Results (From PCN)

20.   Progress towards the achievement of the PDO would be measures using the following results indicators (the proposed indicators will be further developed during Project preparation):

a.   Key government digital platform components in place: cloud infrastructure, enterprise architecture and interoperability framework (yes/no)
b.   Number of government databases available on the government digital platform (number)
c.   Population registration database established (yes, no)
d.   Cost savings in Government cross-agency ICT expenditure (%)
e.   Development of a unique ID numbers with biometrics (Y/N) linked to Civil Registration
f.   Cybersecurity monitoring and response system adopted (yes/no)

21.   Intermediate outcomes would be monitored on the basis of the following indicators:
a.   E-Government Masterplan adopted (yes/no)
b.   Number of Government agencies adopting the enterprise architecture and interoperability framework (number)
c.   National government portal designed and launched (yes/no)
d.   Cybersecurity monitoring and response system designed (yes/no)
e.   Citizen engagement 1: feedback mechanism incorporated in national government portal design (yes/no)

D. Concept Description

22.   The overall program, budgeted at US$22.05 million equivalent, will finance investments in a Government Digital Platform, including the policy and the enabling legal and regulatory framework, ICT infrastructure, information systems architecture, registry development, ID systems development and integration, information systems architecture, registry development, priority applications, plus associated capacity-building and project management. The program will be cofinanced by the Government, World Bank and ADB, as summarized in Table 1.

Table 1: Overall Project Scope, Indicative Costs and Funding Sources (US$m)

Scope	Inputs	Total Costs	ADB	WB	Recipient
1.Enabling/Governance Environment (WB) -Detailed Master Plan & Implementation Roadmap -Government Digital Platform design -Legislation & regulations preparation	Consultant services, Capacity-Building	0.75	0.00	0.75	0.00
2. Digital Platform and Portal Development (WB and ADB) -ICT Infrastructure (network, data centre)-Govt & ADB -Government cloud, enterprise architecture, cybersecurity, Government Portal and payment gateway-WB -Government Enterprise Architecture-WB -Software (operating systems, email, document and workflow management, monitoring, HR management)-ADB -Organization (technical support)-ADB -ICT Literacy for Civil Service ADB	Consultant services, Goods, Software, Capacity-Building	15.9	6.00	1.9	8.00
3. **Population Registry and ID (WB)** -Population (civil registration and civil identification, e.g., birth certification, identity credentials, authentication-(WB)) [Business registration is already supported through an ongoing ADB-financed project; Land registration is supported through and FAO-financed project. Upgrade/modification may be considered at a later stage.	Consultant Services, Software, Capacity-Building	1.5	0.00	1.5	0.00
4. **Priority Applications (ADB)** -Passports, School Registration, Driving License renewals, Health Information System	Consultant Services, Software, Capacity-Building	3.00	3.00	0.00	0.00
5. **Project Management (WB and ADB)** -Procurement, financial management, audit, communications	Consultant services, incremental operating costs	0.90	0.40	0.50	0.00

23.   Within this framework, the World Bank-financed Project will support the following components, with a total investment of US$4.65 million.

(a)   Component 1. Enabling/Governance Environment for Digital Government (US$0.75 million). This will finance the following:

 (i) consultant services for MEIDECC to support preparation of a detailed E-Government Masterplan and Implementation Roadmap for digital government in Tonga;

(ii) technical design (including review of existing/planned investments) for: government backbone network, data centre/disaster recovery, government cloud, government enterprise architecture and interoperability framework, policies and standards, service and support, and potential for automation of functions; and

(iii) advisory assistance for developing the legal and regulatory framework for civil registration, eID and digital Government, including institutional and governance arrangements, data security, data protection, authentication protocols and processes, privacy, transparency, non-discrimination and support for digital transactions.[2]

(b)   Component 2. Digital Platform and Government Portal Development (US$1.9 million). This component will be supported by both the World Bank and ADB; both financiers will support different, interrelated subcomponents. The World Bank will support the following:

(i) Government private cloud (infrastructure/platform as a service) to be managed by MEIDECC. This will "virtualize" the Government's data centre resources that it is currently planning to build. This arrangement will enable other ministries and agencies in Tonga will continue to own and manage their own databases and applications, to be hosted on a single Government cloud platform. Business continuity/disaster recovery functions will also need to be supported—possibly through a secure public cloud backup solution. Partnerships with qualified cloud services providers will be explored to the extent possible;

(ii) Government enterprise architecture, plus key cybersecurity interventions (e.g. computer emergency response team/CERT, protection for critical infrastructure, monitoring centre). Detailed functional and technical design will be completed under Component 1;

(iii) Design and development of Government Portal (public-facing website) to enable transactions with the Government.

(c)   Component 3. Population Registry and ID (US$1.5 million). This component will be implemented in two phases:

---

[2] Through a World Bank executed Trust Fund, the World Bank is financing upfront analytical work on the legal/regulatory environment for civil registration/civil identity, and technical design options.
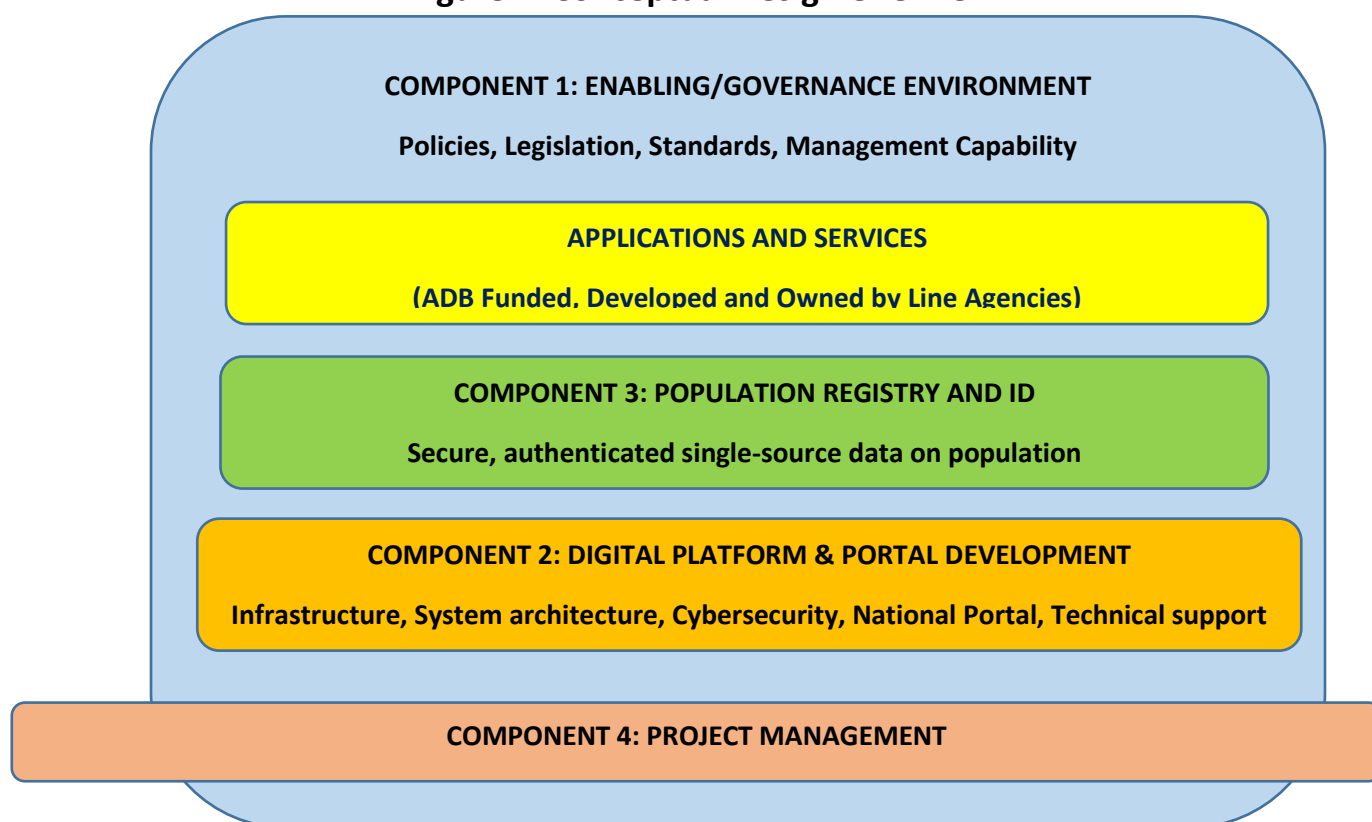
(i) Detailed technical design of an integrated civil registration and civil identification system, based on unique electronic ID and associated verification and authentication systems and protocols. The proposed system will supersede existing databases; and

(ii) System implementation and integration, including database development, data migration, registration and biometric authentication of individuals, and issuance of unique identifiers.

(d)   Component 4. Project Management (US$0.5 million). This will contribute to the cost of the Project Management Unit (PMU) responsible for procurement, financial management, audit, communications and monitoring/evaluation for all Project-financed activities. This component will be financed jointly by the World Bank and ADB to ensure compliance with fiduciary procedures of the respective institutions. The World Bank will cofinance a technical Project manager with the ADB. All other project management and fiduciary support functions will be financed by the ADB. The PMU is currently expected to be established following ADB Board approval which is anticipated in Q4, 2017.

Figure 1: Overall Project Scope

Figure 1. Conceptual Design Overview

COMPONENT 1: ENABLING/GOVERNANCE ENVIRONMENT

Policies, Legislation, Standards, Management Capability

APPLICATIONS AND SERVICES

(ADB Funded, Developed and Owned by Line Agencies)

COMPONENT 3: POPULATION REGISTRY AND ID

Secure, authenticated single-source data on population

COMPONENT 2: DIGITAL PLATFORM & PORTAL DEVELOPMENT

Infrastructure, System architecture, Cybersecurity, National Portal, Technical support

COMPONENT 4: PROJECT MANAGEMENT

SAFEGUARDS

A. Project location and salient physical characteristics relevant to the safeguard analysis (if known)

The Project will be located entirely in Nuku'alofa and support the development of a digital government platform. It will finance technical assistance and selected investments in software, hardware and technical support services, plus capacity-building.

B. Borrower's Institutional Capacity for Safeguard Policies

The MEIDCC PMU for the Tonga Regional Connectivity Program has recent experience with overseeing the preparation and implementation of safeguards for the installation of submarine fibre optic cable. There is no safeguards specialist in the PMU but the staff have the capacity to recruit and manage consultants. The bank task team have supported the PMU with technical reviews of instruments.

For this project there is no requirement for the Implementing Agency to allocate specific safeguards skills or resources to the PMU, as no policies are triggered there will be no safeguards instrument to implement.

C. Environmental and Social Safeguards Specialists on the Team

Felix Peter Taaffe, Environmental Specialist
Rachelle Therese Marburg, Social Specialist

D. Policies that might apply

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	No	There are no physical investments planned under the project. In addition, the project won't finance studies that may give rise to potential future physical investments. The project will only finance the supply and installation of computer hardware in existing government buildings. Consequently, OP4.01 does not apply, the EA category is set as C and no appraisal stage ISDS will be prepared.
Performance Standards for Private Sector Activities OP/BP 4.03	No	
Natural Habitats OP/BP 4.04	No	
Forests OP/BP 4.36	No	
Pest Management OP 4.09	No	
Physical Cultural Resources OP/BP 4.11	No	

Indigenous Peoples OP/BP 4.10	No	
Involuntary Resettlement OP/BP 4.12	No	
Safety of Dams OP/BP 4.37	No	
Projects on International Waterways OP/BP 7.50	No	
Projects in Disputed Areas OP/BP 7.60	No	

E. Safeguard Preparation Plan

Tentative target date for preparing the Appraisal Stage PID/ISDS

Oct 19, 2017

Time frame for launching and completing the safeguard-related studies that may be needed. The specific studies and their timing should be specified in the Appraisal Stage PID/ISDS

The proposed classification is Category C. No safeguards-related studies are needed.

CONTACT POINT

World Bank

Natasha Beschorner
Senior ICT Policy Specialist

Borrower/Client/Recipient

Ministry of Finance and National Planning
Ms. Balwyn Faotusia
CEO
ceo@finance.gov.to

Implementing Agencies

MEIDECC
Paula Ma'u
CEO
paulm@mic.gov.to

Ministry of Justice
Manakovi Pahulu
Acting CEO

tmapahulu@justice.gov.to

FOR MORE INFORMATION CONTACT

The InfoShop
The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 458-4500
Fax: (202) 522-1500
Web: http://www.worldbank.org/infoshop

APPROVAL

Task Team Leader(s):	Natasha Beschorner

Approved By

Safeguards Advisor:	Peter Leonard	16-Jan-2019
Practice Manager/Manager:	Jane Treadwell	21-Jan-2019
Country Director:	Mona Sur	27-Jan-2019