THE WORLD BANK
IBRD • IDA | WORLD BANK GROUP

FOR OFFICIAL USE ONLY

Report No: PAD4752

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT
ON A
PROPOSED GRANT

IN THE AMOUNT OF SDR8.7 MILLION
(US$12 MILLION EQUIVALENT)

TO THE

REPUBLIC OF KIRIBATI

FOR A

KIRIBATI DIGITAL GOVERNMENT PROJECT

May 3, 2022

Digital Development Global Practice
East Asia And Pacific Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective {Feb 28, 2022})

Currency Unit =	AU$
AU$ 1.39 =	US$1
US$ 1.39486 =	SDR 1

FISCAL YEAR
January 1 - December 31

Regional Vice President:	Manuela V. Ferro
Country Director:	Stephen N. Ndegwa
Regional Director:	Ranjit Lamech
Practice Manager:	Nicole Klingen
Task Team Leader(s):	Natasha Beschorner, Fawah Ngeniform Akwo

ABBREVIATIONS AND ACRONYMS

ANZ	Australia and New Zealand Banking Group Limited
ATH	Amalgamated Telecom Holdings
BNL	BwebwerikiNET Ltd
CCK	Communications Commission of Kiribati
CERT	Cyber-Security Emergency Response Team
CR	Civil registry
DA	Designated Account
DCC	Development Coordination Committee
DGMP	Digital Government Master Plan
DTO	Digital Transformation Office
EMCS	East Micronesia Cable System
ESF	Environmental and Social Framework
ESMP	Environmental and Social Management Plan
ESRS	Environmental and Social Review Summary
FM	Financial Management
GBV	Gender-based Violence
GDP	Gross Domestic Product
GNI	Gross National Income
GRM	Grievance Redress Mechanism
GRS	Grievance Redress Service
HEIS	Hands-on Expanded Implementation Support
HIES	Household Income and Expenditure Survey
ICT	Information and Communications Technology
ID	Identification
ID4D	Identification for Development (World Bank Group initiative)
IDA	International Development Association
IDA19	19th Replenishment of the International Development Association
IFR	Interim Financial Report
IMF	International Monetary Fund
IPF	Investment Project Financing
ITU	International Telecommunication Union
KFSU	Kiribati Fiduciary Services Unit
KNPF	Kiribati National Provident Fund
KOITIIP	Kiribati Outer Islands Transport Infrastructure Investment Project
KPF	Kiribati Provident Fund
KYC	Know Your Customer
LMP	Labor Management Procedures
MFED	Ministry of Finance and Economic Development
MICT	Ministry of Information, Communication and Transport

MOJ	Ministry of Justice
PIU	Project Implementation Unit
POM	Project Operations Manual
PPP	Public-Private Partnership
PPSD	Project Procurement Strategy for Development
QBS	Quality Based Selection
QCBS	Quality and Cost Based Selection
RERF	Revenue Equalization Reserve Fund
SEA/SH	Sexual Exploitation and Abuse/Sexual Harassment
SEP	Stakeholder Engagement Plan
SDR	Special Drawing Rights
SMS	Short message service (text messaging)
STEP	Systematic Tracking and Exchanges in Procurement
TA	Technical Assistance
TSKL	Telecom Services Kiribati Ltd
WB	World Bank
WBG	World Bank Group

TABLE OF CONTENTS

DATASHEET

BASIC INFORMATION

Country(ies)	Project Name	
Kiribati	Kiribati Digital Government Project	
Project ID	**Financing Instrument**	**Environmental and Social Risk Classification**
P176108	Investment Project Financing	Moderate

Financing & Implementation Modalities

[ ] Multiphase Programmatic Approach (MPA)	[ ] Contingent Emergency Response Component (CERC)
[ ] Series of Projects (SOP)	[✓] Fragile State(s)
[ ] Performance-Based Conditions (PBCs)	[✓] Small State(s)
[ ] Financial Intermediaries (FI)	[ ] Fragile within a non-fragile Country
[ ] Project-Based Guarantee	[ ] Conflict
[ ] Deferred Drawdown	[ ] Responding to Natural or Man-made Disaster
[ ] Alternate Procurement Arrangements (APA)	[ ] Hands-on Enhanced Implementation Support (HEIS)

Expected Approval Date	Expected Closing Date
25-May-2022	31-Mar-2027

Bank/IFC Collaboration

No

Proposed Development Objective(s)

To build the foundations and strengthen the Recipient's technical and institutional capacity for digital public service delivery.

Components

Component Name	Cost (US$, millions)

Component 1. Digital Government Enabling Environment	2.00
Component 2. Digital Government Foundational Infrastructure	5.00
Component 3. Digital ID and e-Signatures	2.50
Component 4. Government Services Portal and Priority User-Centric Digital Services	1.50
Component 5. Project Management	1.00

Organizations

Borrower:	Republic of Kiribati
Implementing Agency:	Ministry of Information, Communications and Transport Ministry of Justice

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Project Cost	12.00
Total Financing	12.00
of which IBRD/IDA	12.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Development Association (IDA)	12.00
IDA Grant	12.00

IDA Resources (in US$, Millions)

	Credit Amount	Grant Amount	Guarantee Amount	Total Amount
Kiribati	0.00	12.00	0.00	12.00
National PBA	0.00	12.00	0.00	12.00
Total	**0.00**	**12.00**	**0.00**	**12.00**

Expected Disbursements (in US$, Millions)

WB Fiscal Year	2022	2023	2024	2025	2026	2027
Annual	0.19	1.33	2.05	3.04	3.73	1.66
Cumulative	0.19	1.52	3.57	6.61	10.34	12.00

INSTITUTIONAL DATA

Practice Area (Lead)

Digital Development

Contributing Practice Areas

Education, Finance, Competitiveness and Innovation, Gender, Governance

Climate Change and Disaster Screening

This operation has been screened for short and long-term climate change and disaster risks

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

Risk Category	Rating
1. Political and Governance	Moderate
2. Macroeconomic	Moderate
3. Sector Strategies and Policies	Moderate
4. Technical Design of Project or Program	Substantial
5. Institutional Capacity for Implementation and Sustainability	Substantial
6. Fiduciary	Substantial
7. Environment and Social	Moderate
8. Stakeholders	Low
9. Other	
10. Overall	Substantial

COMPLIANCE

Policy

Does the project depart from the CPF in content or in other significant respects?

[ ] Yes [✓] No

Does the project require any waivers of Bank policies?

[ ] Yes [✓] No

Environmental and Social Standards Relevance Given its Context at the Time of Appraisal

E & S Standards	Relevance
Assessment and Management of Environmental and Social Risks and Impacts	Relevant
Stakeholder Engagement and Information Disclosure	Relevant
Labor and Working Conditions	Relevant
Resource Efficiency and Pollution Prevention and Management	Relevant
Community Health and Safety	Relevant
Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Relevant
Biodiversity Conservation and Sustainable Management of Living Natural Resources	Not Currently Relevant
Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	Not Currently Relevant
Cultural Heritage	Relevant
Financial Intermediaries	Not Currently Relevant

NOTE: For further information regarding the World Bank's due diligence assessment of the Project's potential environmental and social risks and impacts, please refer to the Project's Appraisal Environmental and Social Review Summary (ESRS).

Legal Covenants

Sections and Description

The Recipient shall ensure that the collection, processing and storage (including transfers to third parties) of any Personal Data collected under the Project shall be done in accordance with the best international practice, ensuring legitimate, appropriate, and proportionate treatment of such data in accordance with the details set forth in the POM, until such time as the Association is satisfied that the Recipient's data protection legislation in line with the foregoing is in force, at which time the collection, processing and storage of Personal Data shall be done in accordance with such data protection legislation. [Financing Agreement. Schedule 2. Section I. C. 1]

Sections and Description

The Recipient shall, in manner reflecting international best practices as appropriately applied to the context of the Recipient, within twenty-four (24) months of the Effective Date: (a) submit to its House of Assembly (Maneaba ni Maungatabu), proposed legislation on: (i) data protection and privacy; and (ii) digital identification, including any relevant implementing regulations thereto; and (b) through its responsible ministry adopt such implementing regulations under the Cybercrime Act 2021 and the E-transactions Act 2021 as may be necessary to give effect to such legislation. [Financing Agreement. Schedule 2. Section I. C. 2]

Sections and Description

By not later than three (3) months after the Effective Date the Recipient, through MICT, shall prepare and furnish to the Association, for its review and no-objection, a Project Operations Manual ("POM"), which shall set forth, inter alia, detailed arrangements and procedures for the implementation of the Project. [Financing Agreement. Schedule 2. Section I. B. 1. (a)].

Sections and Description

By not later than three (3) months after the Effective Date (or such other date which the Association has confirmed in writing to the Recipient is reasonable and acceptable under the circumstances, as determined by the Association in its sole discretion), ensure that MICT and MOJ enter into a Memorandum of Understanding ("MOU"), in form and substance satisfactory to the Association, setting forth the cooperation, roles and responsibilities of each party with respect to the implementation of Parts 1.3 and 3 of the Project [Financing Agreement. Schedule 2. Section I. A. 2. (b)].

Sections and Description

The Recipient shall, establish and thereafter maintain throughout the Project implementation period, the Digital Transformation Office within MICT, with a mandate, composition and resources satisfactory to the Association [Financing Agreement. Schedule 2. Section I. A. 6].

Sections and Description

The Recipient shall: (a) by no later than three (3) months after the Effective Date (or such later date which the Association has confirmed in writing is acceptable to the Association in its sole discretion), recruit or appoint the following positions for the PIU: [Financing Agreement. Schedule 2. Section I. A. 7].

Sections and Description

The Recipient shall carry out, jointly with the Association not later than thirty (30) months after the Effective Date, or such other period as may be agreed with the Association, a mid-term review of the Project ("Mid-Term Review") to assess the status of Project implementation, as measured against the indicators acceptable to the Association, and compliance with the legal covenants included or referred to in this Agreement. [Financing Agreement. Schedule 2. Section II. 3].

Conditions

Type	Financing source	Description
Disbursement	IBRD/IDA	Disbursement Table Category (2): No withdrawal until Recipient has provided evidence... that it has enacted and given effect to laws and associated regulations consistent with the Principles on Identification for Sustainable Development and which establish and govern the implementation of the National ID System in a manner which guarantees universal coverage and accessibility; ensures the design is robust, secure, responsive and sustainable; and mandates governance arrangements that build trust by protecting Personal Data, privacy and associated user rights. [Financing Agreement Schedule 2. Section III. B. 1 (b)]

I. STRATEGIC CONTEXT

A. Country Context

1. **Kiribati is one of the world's most remote and geographically dispersed nations**. The country consists of 33 coral atolls spread over approximately 3.5 million square kilometers of ocean with up to 3,700 km between the farthest islands in three main island groups: The Line Islands, Phoenix Islands and Gilbert Islands. Kiribati's total land area is less than 800 square kilometers, almost half of which is Kiritimati (Christmas) Island, at the eastern extremity of the country (about 800 km west of Hawaii). The population of about 119,940 (2020 census, preliminary results) lives on 22 coral atolls and a single volcanic island, with annual growth at 1.5 percent. The capital, South Tarawa, is the most populated island with approximately 63,439 people (2020). The populations of Kiribati's outer islands vary from around 330 (Banaba) to 7,380 (Kiritimati Islands and North Tarawa), with about 45 percent of the country's population living in rural/remote areas. The isolation of Kiribati is compounded by limited and high-cost communications infrastructure, particularly international and inter-island connectivity.

2. **Most of Kiribati's islands are only a few hundred meters wide, no more than two meters above average sea level, and highly exposed to the effects of climate change**. The effects of sea level rise, storm surge, coastal erosion and saltwater intrusion increase Kiribati's vulnerability, in particular the viability of its coastal fisheries and related natural resources. Allocation of government funds to repair damage to public infrastructure also represents a considerable drain on Government finances and diverts resources away from other sectors such as healthcare and education. Furthermore, as water levels rise, the people of Kiribati continue to face the risks of future economic losses, particularly in the Outer Islands. Projections for Kiribati under a high emissions scenario indicate that the annual average air temperature and sea surface temperature will increase by 0.3–1.3°C for the Gilbert Islands, and 0.4–1.2°C for the Phoenix Islands and Line Islands. Sea level is expected to continue to rise in Kiribati in a range of 5-14 cm by 2030. The acidity level of sea waters in the Kiribati region will continue to increase over the 21st century which, together with other stressors, including coral bleaching, storm damage and fishing pressure will likely have a significant impact on fisheries and food security.

3. **Kiribati has a limited economic base dominated by the sale of fishing licenses, remittances, aid flow, and investment income from its sovereign wealth fund—the Revenue Equalization Reserve Fund.**[1] Like other small island economies, it faces obstacles posed by remoteness, lack of scale, and vulnerability to external shocks and environmental stress. Severe infrastructure deficits in utilities, transport and communications compound the constraints imposed by distance and dispersion – especially distance from markets, the nearest large markets being Australia and New Zealand. Fishing license revenues are the main source of public revenue and national income, and the economy is dominated by the public sector, small-scale fishing, and coconut farming. Only around 20 percent of the country's population is formally employed in the cash economy, with 80 percent of jobs provided by the public sector. Temporary labor schemes in Australia and New Zealand still represent some of the best employment opportunities available to I-Kiribati[2] workers. There is a maritime training college that produces seafarers who are employed by international shipping companies.

4. Women play a major role in the fisheries sector (for example, they are responsible for up to 99 percent of the market

[1] Kiribati's RERF was created in 1956 to act as a store of wealth for the country's earnings from phosphate mining, which at one time accounted for 50 percent of government revenue.
[2] People from Kiribati are known as "I-Kiribati"

sales of fish) but remain underrepresented in commercial coastal fisheries and local decision-making bodies. Unemployment among women and female youths is higher than for males. Prevalence rates of gender-based violence (GBV) in Kiribati are high, with 68 percent of women aged 15-49 who have been in a domestic partnership having experienced physical or sexual violence. Food security relies largely on subsistence agriculture and fisheries but increasing sea temperatures are already placing strain on the coastal marine habitats that many I-Kiribati rely on for food and livelihoods. Given Kiribati's limited domestic production ability, it must import nearly all its essential foodstuffs and manufactured items (in value, imports were 10 times exports in 2016).[3] Kiribati uses the Australian dollar for its national currency and only one commercial bank – the Australia and New Zealand Banking Group Limited (ANZ) – operates in its financial sector. Although export diversification is limited, Kiribati is gradually developing its eco-tourism sector and is setting up joint ventures for marine processing as a mechanism to increase value-added for the country.

5. **GNI per capita has grown in recent years, but human development indicators remain low**. GNI per capita has shifted since 2013, with a dramatic increase in government revenue from fishing licenses. GDP per capita was estimated at US$1,630 in 2018, while GNI per capita sat at US$3,190, indicating that Kiribati will soon graduate from UN Least Developed Country status. Prior to the COVID-19 outbreak, Kiribati's economy performed well, with an average annual real GDP growth rate of 4.75 percent in 2015-2019, up from about 1.5 percent during 2000-2014 (IMF 2021). The stronger growth reflected in part higher public spending financed by record-high fishing revenue – about 75 percent of GDP in 2015-19, up from a 25 percent historical average. Despite improvements in revenues in recent years, Kiribati ranks 134th out of 189 on the Human Development Index and 106th out of 157 on the Human Capital Index, both amongst the lowest in the Pacific region. Kiribati remains at high risk of debt distress, with public domestic debt estimated at 2.4 percent of GDP as of end-2015, while gross public external debt was estimated at about 22 percent of GDP. The 2019/20 Household Income and Expenditure Survey (HIES) results are not yet available to shed light on poverty and inequality trends. However according to the last available HIES conducted in 2006, poverty was widespread in Kiribati at about 22 percent.[4]

6. **Geographic isolation and a decisive policy response have prevented severe health impacts from the COVID-19 pandemic.** Kiribati reported its first cases of community transmission of Covid-19 in January 2022. While there has been widespread community transmission with 2,914 confirmed cases and 11 deaths reported,[5] the country has managed to mitigate more severe impacts through the rollout of its vaccination program,[6] implementing restrictions on the movement of people and closing borders. However, the pandemic has highlighted vulnerabilities in the reliance on imports for food security, with border closure having significant economic impacts through contraction in services, including restaurant and hotel services, transportation, delays in supply chain and other business activities. Planned large investment projects were delayed because of restrictions on the movement of personnel and materials. Real GDP is estimated to have declined by 0.5 percent in 2020. With restrictions gradually being lifted, an economic recovery is expected with a projected real GDP growth of 1.8 percent in 2021. A worsening of the COVID-19 pandemic would adversely impact economic activity as the planned resumption of infrastructure projects and activity in the services sector are further delayed. Global financial conditions could also tighten in response to adverse COVID-19 developments and affect the expected return on Kiribati's Revenue Equalization Reserve Fund (RERF) and the Kiribati Provident Fund (KPF), putting pressure on fiscal resources. Improvements in public financial

[3] World Bank World Integrated Trade Solution, Trade Summary for Kiribati, available at: *https://wits.worldbank.org/CountrySnapshot/en/KIR/textview*
[4] Preliminary findings from the 2019 HIES are still pending.
[5] WHO Update: *https://covid19.who.int/region/wpro/country/ki*
[6] 127,916 vaccine doses have been administered as of 18 February 2022: *https://covid19.who.int/region/wpro/country/ki*

management are needed to make public spending more effective in addressing Kiribati's development challenges.

B. Sectoral and Institutional Context

7. **Kiribati has made significant progress over the past decade to create market conditions and roll out new infrastructure necessary to support the digital economy**. The Communications Act (2013, amended 2016) established a framework for liberalizing the ICT sector and enabling an open competitive market. The Act established the Communications Commission of Kiribati (CCK) as the sector regulator. CCK has since developed a comprehensive set of rules and operating procedures, including for operator licensing; type approval rules to set standards for telecommunication devices to be used in Kiribati; radiocommunications licensing; radio frequency spectrum plan; numbering rules (providing for eight-digit based services and number portability); interconnection rules; consumer protection; and universal service. CCK and the Ministry of Information, Communication and Transport (MICT) have also undergone institutional strengthening, and the latter has prepared new policies for the ICT sector, including e-Government.

8. **For international connectivity, the Government is working with partners on a new submarine cable to connect Tarawa**. Separately, the easternmost island of Kiritimati has already completed its connection to the Southern Cross NEXT cable system in December 2021 and is expected to be ready for service by July 2022. In 2017, the Government established BwebwerikiNET Ltd (BNL), a new company tasked with operating the yet to be built submarine fiber optic cables system connecting to Tarawa and enhancing telecommunication infrastructure on the outer islands. Outer islands will continue to rely on satellite backhaul for both national and international connectivity. The availability of international bandwidth continues to be an important area for policy and investment, increasingly so during the pandemic given the rising demand for data-intensive applications and accessing digital services. Overall, the international bandwidth of 1,500 Mbps available to Kiribati, which averages to less than 5Mbps per fixed line internet user compares poorly to the other countries in the region such as Samoa (10Mbps), Vanuatu (12Mbps), as well as Fiji (40Mbps)—the regional benchmark. Limited available international bandwidth is a barrier for investments essential to supporting digital transformation. The new submarine cable system in Tarawa will also allow for resilient connectivity during adverse weather conditions and natural disasters during which satellite communications to the island may be impacted. A robust communication link considerably improves response time to emergency situations and allows for better and improved coordination with development partners in response to disaster situations.

9. **Increasing the availability and capacity of high-speed internet remains a challenge, particularly for the Outer Islands.** Demand for mobile Internet services is increasing, with over 55,000 mobile subscribers – about 90-95 percent of whom are 3G or 4G users. Internet access in Kiribati is almost entirely wireless. As of 2021, basic mobile phone penetration is very high, with mobile networks covering about 83.5 percent of the population (3G/4G geographical coverage) in 17 of the 22 inhabited islands. However, most of these locations have limited capacity for backhaul which severely restricts the capacity of the data network, resulting in slow data transmission. Wi-Fi connectivity with good backhaul is available on two of the islands lacking 3G coverage (Banaba and Kuria), and a general trading company is providing public Wi-Fi services in conjunction with its core business to sites in Tabiteuea North, Nonouti, and Beru. Mobile users are generally migrating to smartphones – more than 90 percent of all devices on the mobile networks are smartphones - and 2G users account for about 5 percent of users. Communications to the Outer Islands through voice and internet is also critical during and after periods of adverse weather conditions, as it enables Government officials to complete damage assessments quickly and deploy supplies to affected areas. Resilient communications also ensure that people in affected areas can reach out to their families in Tarawa to keep them informed of their safety and wellbeing. The Government's investment in climate-resilient infrastructure will allow

maintaining basic phone services when other networks are down during climate disasters[7]. Internet use is increasing, with Facebook for example claiming that it can reach 48,000 users – 58 percent of the population over 13 years, more than half of whom are female.[8]

Figure 1 – Digital Adoption Index, regional differences

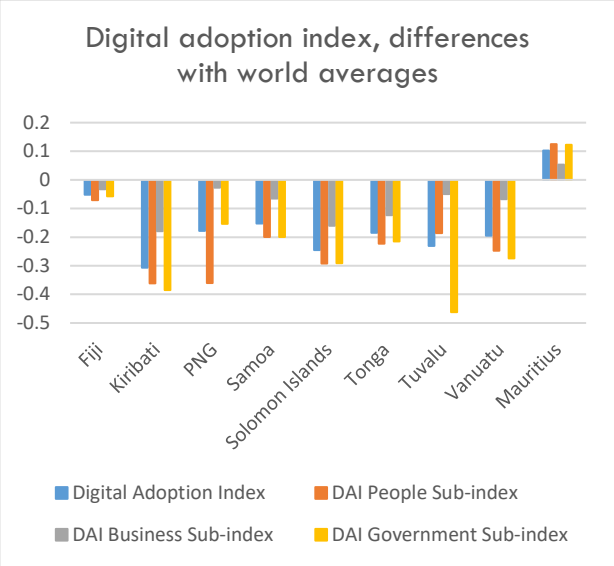
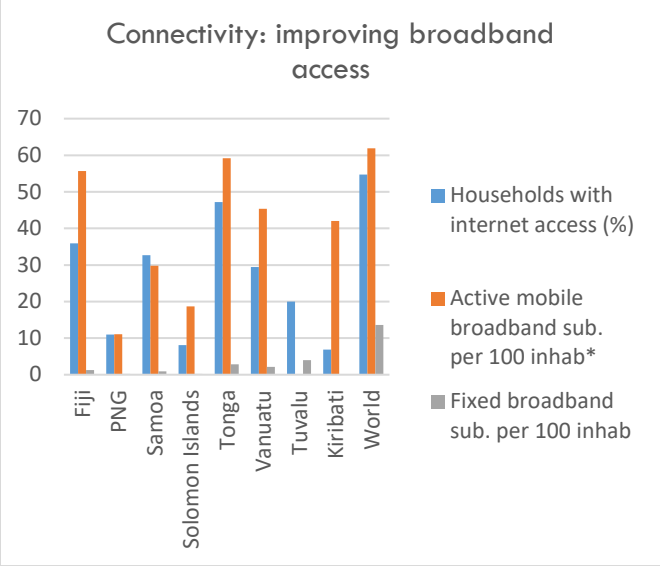


Figure 2 – Broadband connectivity, regional comparison



10. **Mobile broadband service affordability is at about 5.2 percent of monthly GNI per capita, with indicative costs of bandwidth at US$3.0 per GB**. Globally, in developing/emerging markets, mobile broadband services typically cost between US$1 and US$5 per GB. While Kiribati performs reasonably well in regional comparison on affordability of data services, the affordability target for entry-level broadband services in developing countries is less than 2 percent of monthly GNI per capita.[9] Current mobile broadband prices in Kiribati owe to reforms carried out by Government in the ICT sector and through the introduction of competition, however, there needs to be further reduction in these prices to encourage uptake by the masses and create demand for further deployment of digital services. The retail price of data (best price) services has decreased from US$8/GB in 2016 to around US$2.70/GB, with short term subscriptions (e.g., 1-7 days) very popular and permitting consumers to purchase connectivity as and when needed. Consumption of data has increased significantly from around 27TB per month in 2017 to around 220TB per month in August 2021. About 87 percent of households, mostly in Tarawa, belonging to the highest wealth quintile have internet access compared to only 14 percent of households from the lowest wealth quintile. According to the Kiribati Social Development Indicator Survey (2018-19), 7 in 10 households own mobile phones although this proportion is expected to be higher in 2021. Two in every five households have radio and Internet at home, and 31 percent have computers.

Figure 3 – Mobile Technology Deployment, regional comparison

[7] https://drj.com/journal_main/the-power-of-restoring-reliable-high-quality-connectivity-when-disaster-strikes/
[8] Facebook reports that its advertising reach is increasing at 6.7 percent (3,000 users) each quarter.
[9] ITU – United Nations Educational, Scientific and Cultural Organization/UNESCO Broadband Commission

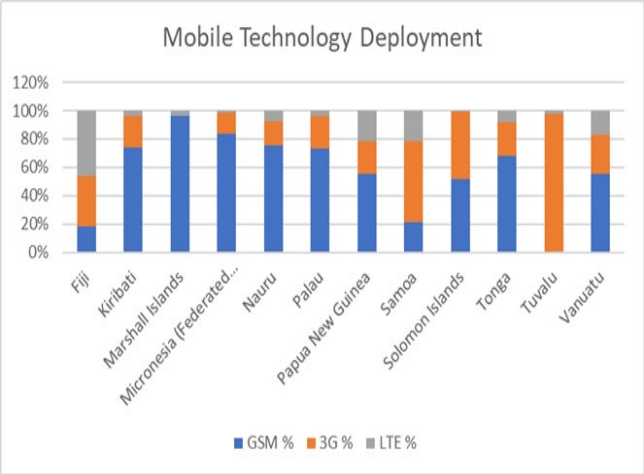


Figure 4 – Sub-regional ICT rankings

	Kiribati	Samoa	Tonga	Solomon Islands
ICT Penetration- 2019	47	72	100	72
Affordability (%GNI/capita) 2019	5	5.7	2.5	16
ICT Price Basket Analysis Ranking 2016	183rd	148th	70th	190th
ICT Price Basket Analysis Ranking 2017	170th	112th	131st	175th
Improvement in Ranking over year	13	36	-61	15
		source: https://www.itu.int/net4/ITU-D/ipb/		

11. **Kiribati ranks among the lowest for the region in the GovTech Maturity Index (GTMI) and the UN e-Government assessments.** Government has made efforts to reduce the digital divide and introduce limited digital services, Kiribati's current low ranking in the above assessments emphasize the need for significant acceleration of efforts. GTMI is an index that measures key aspects in the four focus areas of digital transformation in the public sector, notably: core government systems, public service delivery, citizen engagement, and GovTech enablers. As of 2021, Kiribati is categorized as "Low – with minimal focus on GovTech" on the GTMI.[10] On the UN e-Government survey (2020), the country ranks 145 out of 193 countries worldwide. Direct comparisons with Pacific states however do favorably reflect on the good foundational work undertaken by Kiribati to date and demonstrate the potential to further improve the Governments capability to provide effective, accountable, and inclusive digital services. Government will need to enhance digital public service delivery via: (a) improved interconnectivity and interoperability of systems and portals, and introducing technologies such as government cloud, service bus, and application programming interfaces (APIs) as cost-effective shared platforms ; (b) provision of transactional services to citizens and businesses to reduce costs and improve the quality of services; (c) improved accountability, and building of public trust in government; and (d) enabling further investments in digital skills development and innovation in the public sector.

Figure 5 – UN E-Government Rankings (Pacific Region) out of 193 countries

Country	Rankings		
	2016	2018	2020
Australia	2	2	5
New Zealand	8	8	8
Fiji	96	102	90
Tonga	105	109	108
Palau	111	111	125
Vanuatu	149	137	142
Kiribati	*145*	*153*	*145*
Samoa	121	128	149
Marshall Islands	156	149	156

Source: UN E-Government Surveys 2016, 2018, 2020

12. **The Government of Kiribati has demonstrated continued commitment to ICT sector reform and development.** The assets of state-owned monopoly incumbent, Telecom Services Kiribati Ltd (TSKL) were sold in May 2015 and,

[10] *https://openknowledge.worldbank.org/handle/10986/36233*

following a competitive process, Government licensed two new mobile operators plus other Internet and gateway providers. The purchaser of TSKL's assets, Amalgamated Telecom Holdings Kiribati Ltd (now Vodafone), owned by the Amalgamated Telecom Holdings (ATH) group in Fiji, is now well established and growing the local market. Under the earlier IDA-funded Kiribati Telecommunications and ICT Development Project (P126324), operators were invited to bid for provision of basic call and 3G data service to four outer islands. This has worked well in increasing coverage of 3G services to those islands. The Government has now adopted the same model for expansion of services to other outer islands and both Vodafone and Ocean Link (the second licensed mobile operator in Kiribati) have expressed interest in participating in expansion programs. At present, only five of the outer islands remain without 3G service, and three of these have CCK funded public Wi-Fi (not counting Kanton Island, population 20).

13. **Government recognizes the importance of digital government[11] and is undertaking to lay its necessary foundations out in Kiribati.** Government recognizes ICT as a vital part of the country's development in its 20-year vision for Kiribati (KV20), the Government Manifesto, and National ICT Policy (2019), and is committed to transforming the delivery of public services and using digital solutions to enhance good governance and government internal efficiency. The KV20 already alludes to the Government's ongoing efforts to reducing vulnerability to the impact of climate change though investments in sufficient technical capacity and human resources to successfully mainstreaming climate change adaptation and mitigation measures to enhance the effective implementation of climate change related adaptation measures. The ability to digitalize government services will play a crucial role in that regard. Kiribati's Nationally Determined Contribution (NDC) further states that strengthening digital government foundations and establishing a portal will help the country disseminate reliable emergency information to the citizens in case of extreme weather events. The government's initiative on investing in technical capacity and human resources will also help the government recruit data analytics professionals, who can analyze climate data, monitor GHG emissions, and help the government make informed policy decisions[12]. While certain elements of the enabling legal and regulatory environment for digital government and digital economy have been adopted in 2021 (laws on e-transactions and cybercrime), other foundational legislation is still not in place, particularly data protection and privacy, and consumer protection. Additionally, supporting the effective implementation of enablers, such as e-signatures and digital ID for online public service delivery, will require amending or adopting new ID-enabling legislation, adopting implementing regulations for the e-transactions and Cybercrime Acts, clarifying institutional arrangements, and building the capacity of implementation and enforcement entities. The recently approved Kiribati Development Plan 2020 – 2023 also supports digital transformation (e-Government) and the need to have governments services online.[13]

14. **Transactional digital government services are not available in Kiribati and there is no digital payment platform for government services, though legislation on digital payments is underway**. A basic government web portal has been established but is not fully operational. Ministries currently operate different back-office systems addressing specific functional requirements, but there is no interoperability, and the development of information systems has so far been highly fragmented. Few strides have been made in digitizing internal government documents or information and data flows. There is no standard document management system nor standard government e-mail.

15. **Digital skills in government and the population are limited.** Government employees will need to know how to

[11] The OECD defines digital government as "the use of digital technologies, as an integrated part of governments' modernization strategies, to create public value. It relies on a digital government ecosystem comprised of government actors, non-governmental organizations, businesses, citizens' associations, and individuals which supports the production of and access to data, services, and content through interactions with the government" (OECD 2014).
[12] https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Kiribati%20First/INDC_KIRIBATI.pdf
[13] *https://www.mfed.gov.ki/sites/default/files/KDP%202020%20-%202023.pdf*

properly use digital technology, handle large volumes of information, and act with flexibility and creativity, and continuously update their skills both through on the job and, where feasible, formal training. Moreover, digital technologies will help government employees perform routine tasks more quickly and in less costly ways. On the user side, digital skills, particularly in the older population, are also limited in Kiribati and Government will need to work with communities in providing training to increase uptake of digital services when they are offered. According to the Kiribati Social Development Indicator Survey (2018-19), mobile phone usage among women is higher compared to men (60 percent for women and 53 percent for men). 50 percent of women use the Internet when compared to 40 percent of men. 30 percent of men versus 24 percent of women have specific ICT skills in at least one of nine activities, including sending e-mail attachments and using copy/paste.

16. **Significant efforts will be needed to establish critical foundations and platforms to deliver prioritized digital services to businesses, citizens and residents**. Most government transactional services, such as birth, marriage, and death registration, registering a business, or paying taxes, are still manual and paper based. Kiribati's Digital Government Master Plan (2021),[14] supported through the WB-financed Kiribati Connectivity Project (P159632), lays out basic foundations and potential quick-wins for digital government. The Master Plan envisages a high-level digital transformation process beginning with digitalization of business processes in government agencies, data sharing between government agencies following the single data collection ("once-only") principle,[15] building e-services for citizens and optimizing digital government processes. The Plan identifies the main enablers of an integrated digital government, which include digital services to citizens, interoperability and secure data exchange, digital identity and trust infrastructure, base registers, and metadata management of government systems. A "whole of government" approach is proposed to establish common standards and provide access to shared services across all arms of government.

17. **The introduction of a national digital ID system will also be a critical component of the country's digital transformation.** A national digital ID system that provides secure authentication and electronic signature capabilities is an opportunity to strengthen the integrity of face-to-face services and to shift public and private sector services online, thereby reducing the need for people and businesses to travel to physical offices and to sign physical documents. Such capabilities would also be immensely beneficial to the public during periods of adverse weather conditions, where disruptions to accessing critical government services during periods of adverse weather conditions would be minimized, as citizens will no longer need to physically access government offices to access services. For Kiribati, this can reduce geographic and cost barriers for accessing these services. Furthermore, it can improve the integrity and efficiency of services. Consultations with Government agencies and the private sector as part of project preparation revealed that identity fraud is a challenge, including for government-to-person (G2P) payments. A national digital ID system following international standards could also unlock cross-border transactions, which would promote trade and access to services in other countries. Digital ID systems can also work as a registry for emergency social protection systems in case of climate disasters by providing government subsidy to population in affected areas.

18. **With some enhancements, the existing national ID card system and civil registry offer a good basis on which a national digital ID system could be built.** The national ID card system was established in 2018 with the passage of the *National Identity Registration Act.* Managed by the Ministry of Justice (MOJ), it covers around 80 percent of the target population (aged 18 years old and over), with gender parity in coverage. The main components of this system

[14] *https://www.micttd.gov.ki/publications/digital-government-master-plan*
[15] Whereby information is supplied to information consumers only once from the source responsible for handling the information and there is no other information source for the same information.

are a database that was developed within the MOJ and a smartcard personalization system. Information provided during registration is cross-checked against birth and marriage records in the well-established civil registry, which is also managed by MOJ and records around 90 percent of births but less than 20 percent of deaths. Some of the key limitations of the current legal framework and system are: (a) neither the national ID database nor civil registry fully support digital service delivery: the national ID system only covers adults and thus is not useful for supporting services that are relevant for children such as healthcare and education, and the civil registry – as is its function – records *events* and not *people*; (b) there are no verification and data sharing capabilities available to service providers, which has been highlighted as a constraint by government and financial service providers; (c) by law, the current smartcard expires every three years, creating a significant transaction and financial cost for re-issuance; (d) the smartcard's integrated chip is currently not used, adding further unnecessary cost to government and the public; (e) while the current data fields provided for in the Act are relatively limited, the wording of the law leaves open the possibility of adding new data fields;[16] (f) manual processes create scope for data quality issues and entry errors; (g) data access modalities within MOJ and by line ministries would benefit from being codified and systematized to support accountability; and (h) the unique identity number assigned at birth registration has some logic and is not randomized, which creates data protection and identity security risks, as well as potential risks of discrimination.

19. **Increasing access to digital ID and online public services is an opportunity to promote women's economic empowerment, one of five priorities of Kiribati's National Policy on Gender Equality and Women's Development 2019-2022**. While there are no apparent gender disparities in the coverage of the national ID system, the Policy cites a finding from the 2018 Women's Economic Empowerment Study that the time women spend on domestic work, church activities, and fundraising prevents them from participating in other income generating and economic activities,[17] thereby hampering their access to public services. A strengthened national ID system and digital ID system, together with increased availability of online public services, would improve women's access to services. This includes allowing women to directly access government services, such as social protection, obtaining licenses, registering property, and starting a business online from home. Access to centralized services, for all people, but especially women with dependents, the disabled, and the elderly, is further complicated due to increasing weather events and projected risks of travelling from outside of Tarawa due to climate change and related disruptions. Similarly, in terms of financial services, identity verification capabilities will make bank account opening and accessing credit much easier while also de-risking and thus reducing costs of remittances, which is a key source of income for nearly one in five households.

20. **Legal and regulatory reforms are needed to support digital government services and the development of the digital economy.** As noted earlier, Kiribati does not currently have a personal data protection law of general application. It also lacks the implementing regulations under the 2021 e-transactions law to enable e-transactions and e-signatures to be deployed in a trusted manner across the public sector for government operations and online service delivery. The current legal framework for ID, the National Identity Registration Act of 2018, requires amendments to enable the implementation of a robust and trustworthy foundational digital ID system to enable access to services. Data governance is an immediate policy priority.[18] Reforms are needed to accelerate and facilitate digital transformation

[16] While this has to date only been used to update existing data fields with more details (e.g., specifying districts in addresses collected) rather than collect new data, the lack of established limits and procedures for collecting new data may undermine the principle of data minimization.

[17] *https://pacificwomen.org/wp-content/uploads/2019/07/Kiribati-GEWD-Policy.pdf*

[18] The World Development Report (2021) on Data for Better Lives highlights the importance of data governance, offering five high-level recommendations: (a) forge a new social contract for data that (b) increases data use and reuse to realize greater value, (c) creates more equitable access to the benefits of data, (d) fosters trust through safeguards that protect people from the harm of data misuse, and (e)

and put in place data protection, cybersecurity and consumer protection safeguards to prevent the misuse of personal data and regulate cybercrimes to give people in Kiribati the trust and confidence to access digital government services and participate in the digital economy. Once adopted, ensuring the effective enforcement of the enabling legal and regulatory environment will be a priority under the Project, through TA and capacity building efforts. Enabling the effective implementation of the data protection law will require instituting a data protection authority with the independence, resources, and capacity to effectively investigate data breaches, impose fines and support compliance by public and private sector entities. Similarly, supporting the enforcement of the 2021 Cybercrime Act will require adopting implementing regulations on investigative procedures and ensuring the national Cyber-Security Emergency Response Team[19] (CERT) and Cybercrime Unit provided for in the law (located within the Kiribati Police) are operational and equipped to respond to cyber threats in an effective and coordinated manner.

21. **Ensuring cyber safety and regulating harmful digital communications has also been identified as matter of specific community concern in stakeholder consultations**. Analyses conducted across the Pacific Region have shown that women and girls are particularly vulnerable to threats such as online bullying, harassment and abuse.[20] A 2020 study analyzing children's online safety in Kiribati, Papua New Guinea and the Solomon Islands[21] showed that the most identified online threats, among both parents and children, were inappropriate content, cyberbullying, and harmful influences, with social media and entertainment platforms posing a particular risk to children's safety. In the study, most respondents recognized that girls were more vulnerable to online risks, mirroring their heightened vulnerability to violence and abuse offline. This was shown to commonly result in parents' perception that the only way to protect female children is to limit their access to the Internet. Risks related to cybersecurity, cybercrimes and online safety have been identified as concerns by multiple stakeholders in Kiribati, including civil society organizations, representatives of regional non-government organizations and public sector officials.[22] The cybercrime law adopted in 2021 in Kiribati includes several provisions criminalizing several of these activities, including computer related fraud, child sexual abuse and solicitation of children and cyber harassment. Supporting the effective enforcement of the legal framework and engaging in targeted awareness and capacity building activities to bridge knowledge gaps and support digital literacy and cyber resilience at a community level (with specific activities for parents and children), are critical priorities for supporting Kiribati's safe and trusted transition to a digital economy.

C. Relevance to Higher Level Objectives

22. **The proposed Kiribati Digital Government Project is fully aligned with and directly contributes to the World Bank Group's Regional Partnership Framework (RPF) FY17-21 for the Pacific Island Countries (PIC), including Kiribati.[23]**

paves the way for an integrated national data system. *See* World Bank, *World Development Report: Data for Better Lives (2021),* available at: *https://www.worldbank.org/en/publication/wdr2021*

[19] Cyber-Security Emergency Response Team means a team of ICT professionals who prepare for and respond to cyber incidents. Typically, they are created within an organization to serve its specific cyber-security needs. an organization that: receives cyber incident reports. A Cyber-Security Emergency Response Team tracks cyber security incidents or attacks, and. provides advice and alerts to its users on how to respond and prevent further attacks.

[20] Most recently, a gender assessment conducted as part of the Digital Republic of the Marshall Islands Project (P171517) showed that women, and particularly young women, are at particular risk of online bullying and harassment.

[21] Third, A. et al. 2020. *Online Safety in the Pacific: A report on a Living Lab in Kiribati, Papua New Guinea, and Solomon Islands.* Sydney. Child Fund Australia, Plan International Australia, and Western Sydney University.

[22] MICT and CCK

[23] WB Regional Partnership Framework for the PIC9, Report #120479, extended by the Board of Executive Directors on February 6, 2020 to FY23), see: *https://openknowledge.worldbank.org/handle/10986/28546*. Please note that the current PIC9 Systematic Country Diagnostic (SCD) is ongoing in early stages.

The RPF, which covers nine small Pacific Island Countries (PIC9),[24] identifies four areas of focus for the PIC9: fully exploiting available economic opportunities (Focus Area 1); enhancing access to economic opportunities (Focus Area 2); protecting incomes and livelihoods (Focus Area 3); and strengthening the enablers of growth opportunities (macroeconomic management, infrastructure and addressing knowledge gaps) (Focus Area 4). The proposed Project will specifically support Focus Area 4's objective 4.2, i.e., increase access to basic services and improved connectivity infrastructure – including expanding access to broadband services, and objective 4.3, i.e., addressing knowledge gaps and data issues. Through the strategic enhancement of digital government, the Project will support more efficient and effective management of government institutions, which would in turn contribute to improved development outcomes in multiple sectors and programs also supported under the RPF such as: broadened opportunities for access to labor markets and economic activities (Objective 2.1), addressing education and skills gap (Objective 2.2), addressing gender inequality and Gender Based Violence (Objective 2.3), strengthened preparedness and resilience to natural disasters and climate change (Objective 3.1), and strengthening of health systems and addressing NCD (Objective 3.2).

23. **The proposed Project is in alignment with and is expected to contribute to key IDA19 priorities related to digital development**. Among other key policy commitments, IDA19 aims to support at least 12 IDA countries to adopt universally accessible[25] GovTech solutions,[26] support women's increased access to and usage of digital services,[27] and build capacity in 50 percent of IDA FCS countries to use appropriate digital tools for collection and analysis of geo-tagged data (and apply this technology to enhance project implementation and coordination).[28] The Project will support universally accessible GovTech and capacity-building for the use of digital tools in project coordination through interventions to improve interconnectivity and interoperability of government systems through a shared data center and government cloud (Component 2), provide transactional services to citizens and businesses, as well as improve accountability and build public trust in government (Component 4), and improve digital skills development and innovation in the public sector (Components 1, 3, 5). The project also entails interventions to promote women's increased access to and usage of digital services, including a Gender Diagnostic to take stock of barriers women currently face in accessing such services, tailoring digital public services to the differentiated needs of men and women, and outreach efforts to promote uptake of digital services by women (Components 3-5).

24. **The scope and objective of the proposed Project is also aligned with several key Government development objectives set out in Kiribati's National ICT Policy (2019) and 20-year Vision (KV20).** Pillar 3 of KV20 recognizes improved ICT access and development as critical to supporting growth and enhancing other drivers of growth by facilitating connectivity and accessibility to economic infrastructure. The National ICT Policy, in turn, outlines principles underpinning specific goals and objectives to which the proposed Project is aligned, notably on rolling out e-Government services and enabling legislation, and bridging the digital divide through universal, secure, affordable, reliable, and accessible communications.

25. **The Project is fully aligned with and contributes to the WBG's Gender Strategy (FY16–23).** The WBG Gender Strategy emphasizes measurable results on closing specific gender gaps around four key pillars: improving gaps in human endowments in health and education (Pillar 1); removing constraints for more and better jobs (Pillar 2); removing

[24] Kiribati, Republic of Nauru, Republic of The Marshall Islands, Federated States of Micronesia, Republic of Palau, Independent State of Samoa, Kingdom of Tonga, Tuvalu, and Vanuatu

[25] 'Universally accessible' means that GovTech services are designed so that they can be accessed, understood, and used by all people, regardless of disability, age, use of assistive devices, location or means of Internet access. It applies to hardware and software.

[26] IDA19 Theme: Governance and Institutions; Area: *Public service delivery*

[27] IDA19 Theme: Gender and Development Theme; Area: *Removing barriers to women's ownership of and control over assets*

[28] IDA19 Theme: Fragility, Conflict & Violence theme.

barriers to women's ownership and control of assets (Pillar 3); and enhancing women's voice and agency (Pillar 4). Digital government can offer transformative opportunities for women to access information and services on health and education (Pillar 1 of the Gender Strategy), jobs and financial services (Pillars 2 and 3), as well as gender-based violence prevention and response services (Pillar 4). The Project also recognizes inclusive and trusted ID systems as critical to creating opportunities for women's economic empowerment and to reduce gaps in women and girls' access to services such as healthcare, social protection, education, asset management, and financial services. Project interventions are designed to assess and take into consideration the differentiated needs of women and girls, particularly by enhancing their access to digital ID and e-services, and by promoting women's safety online. The effectiveness of these efforts on closing the gender gaps will be monitored through relevant indicators.

26. **The Project also fully aligns with the WBG's Climate Change Action Plan.**[29] The proposed project interventions are designed to reduce climate change vulnerability and improve climate resilience. For example, data center and cloud computing options will be analyzed (under Component 2) to comply with energy efficiency certifications, and the strengthened national ID system and new digital ID system (under Component 3) will reduce disruption to services caused by weather-related events, while improved network coverage and enhanced network resiliency will be leveraged to develop and roll out early warning systems to respond to climate-related disasters. The National Government Portal (Component 4) will include information push mechanisms to ensure timely alerts on weather and climate related events.

27. **The proposed Project is aligned with the WBG's Green, Resilient and Inclusive Development (GRID) approach**. The GRID approach recognizes that the challenges of poverty and inequality, and the challenges brought about by COVID-19 and climate change are interrelated, and thus need to be addressed simultaneously and systematically. The project's investments in climate resilient infrastructure to expand coverage of digital public services, particularly to disadvantaged groups like women, the elderly, the disabled, and Outer Island residents, reflect key aspects of GRID. The use of digital services (Components 3 and 4) will promote inclusion through increased access to services and reduce the need to people to travel for services provided on a physical/face-to-face basis and therefore travel-related CO2 and GHG emissions. The Project supports green development by, for example, supporting the development of a government data center and cloud computing platform that complies with energy efficiency certifications and will be leveraged for developing and rolling out early warning systems to mitigate and respond to climate-related disasters (Component 2). The data center and cloud computing platform, with robust provisions for business continuity and disaster recovery, will increase the resilience and efficiency of the Government's IT systems as it reduces the risk of a single point of failure when using dedicated server hardware and operating software. The platform will also enable rapid sharing of critical data (such as pandemic-related data) across ministries and agencies for improved capacity and coordination.

II. PROJECT DESCRIPTION

A. Project Development Objective

PDO Statement

To build the foundations and strengthen the Recipient's technical and institutional capacity for digital public service delivery.

[29] World Bank. 2021. *World Bank Group President's Statement on Climate Change Action Plan.* *https://www.worldbank.org/en/news/statement/2021/04/02/world-bank-group-president-statement-on-climate-change-action-plan*

PDO Level Indicators

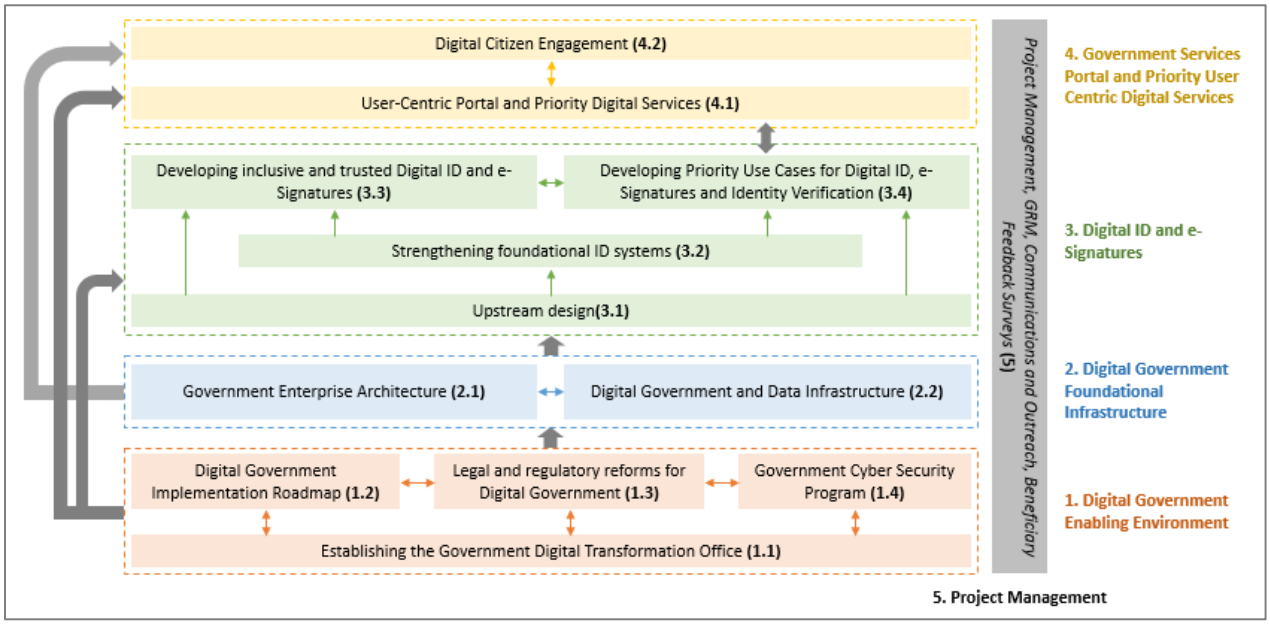
28. Progress will be measured against the following PDO-level results indicators:

- Establishment and operationalization of a Digital Transformation Office (Yes/No)
- Regulatory framework for digital government and digital economy adopted (Yes/No)
- Services using digital identity verification of persons (Number)
- Users reporting satisfaction with select public digital services (Percentage, sex-disaggregated)

B. Project Components

29. The proposed Project will support key focus areas outlined in Kiribati's Digital Government Master Plan (2021), notably on necessary Governance, Technical Infrastructure for digital government, and e-Government Applications. Project components are as follows.

Figure 6 – Illustration of Project components and their relationships and sequencing



30. **Component 1. Digital Government Enabling Environment (US$2 million).** This Component will support key institutional arrangements, enabling policy, legal and regulatory frameworks, and capacity-building—including change management—necessary for establishing the foundations for digital government and accelerating the development of the digital economy in Kiribati. Key activities include:

a. *Subcomponent 1.1. Establishing the Government Digital Transformation Office.* The Project will support the establishment and strengthening of a Digital Transformation Office (DTO), initially under MICT, for sustainable digital government strategic planning, coordination, and implementation to support a whole-of-government approach to digital transformation. The Master Plan recognizes as a prerequisite the existence of a well-

functioning, competent and motivated coordination institution for ICT management of government institutions. The Project will finance technical assistance (TA) for the development of principles, processes, legal frameworks, training, and other capacity-building efforts, as well as the development of a coordination mechanism with line ministries. A particular focus of TA will be on change management, focusing on the "people" and behavioral side of technical changes through strategies and actions that drive adoption, minimize resistance, enhance skills, and maximize return on digital investments. TA will support strengthening the digital skills of government staff including training on how to use digital tools for delivering online government services, and to support business continuity. The TA will also assist the Government with the formulation of a suitable, sustainable multi-year budget for DTO.

b. *Subcomponent 1.2. Digital Government Implementation Roadmap*. This will finance TA for the development and operationalization of a detailed implementation plan, building on the Kiribati Digital Government Masterplan (approved in 2021) and including stakeholder consultations and developing processes for implementation. The roadmap will emphasize the "whole of Government" approach, with enabling arrangements appropriate to ensure the successful development of the ICT sector and promote long-term interests of users. The roadmap will consider climate-related vulnerabilities and emphasize the use of international best practices and adaptation of low-carbon technologies that will be adopted into aspects of the implementation roadmap[30] to further Government's adaptation and mitigation efforts against climate change.[31] As such, the roadmap will incorporate sustainable and renewable technologies including: i) use of renewable energy sources such as solar panels to reduce reliance on diesel generators and reduce GHG emissions; ii) adaptation of a low-carbon data center technology that specifically incorporates low-carbon elements such as direct liquid cooling, close-coupled refrigerant cooling, air and cooling management, passive cooling, free cooling and power supply efficiency to improve the energy efficiency of facility systems; iii) utilizing green certifications, including EDGE into any subsequent design of any infrastructure and or facilities that are to be funded through the project. The roadmap will further spell out the mitigation strategies against the adverse impact of climate change to ensure that investments are being made into climate resilient and robust technologies and infrastructure to ensure maximum uptime and the ability to disseminate critical information, including access to critical weather-related information. These considerations will include climate-resilient designs, weather-resistant materials, wider drains for flood management, early warning systems, among other considerations.

c. *Subcomponent 1.3. Legal and regulatory reforms for Digital Government and Digital Economy*. This includes technical assistance to support the strengthening of the enabling legal and regulatory frameworks for the digital economy and online service delivery. Specific legal reform activities needed to support digital government and the digital economy will include but may not be limited to: i) the development of laws on data protection, privacy, and consumer protection, and revisions to the existing legal framework for the national ID system and civil registry to govern the implementation of a foundational digital ID system, targeted as needed to support the rollout of technical enablers such as digital ID and enable secure authentication of fully transactional e-services and e-commerce while promoting inclusion, non-discrimination, and data protection by design. Digital ID can additionally function as a registry for the Government to target/identify vulnerable populations for tailored assistance and enable social protection program to swiftly send cash transfers in the aftermath of adverse climate

[30] Implementation roadmap refers to the implementation plan that will be used to operationalize the Government's existing Digital Government Master Plan based on earlier high-level digital Government assessment. The implementation plan is expected to describe in the detail the actions, standards, timelines, roles/responsibilities amongst other things to guide digital transformation agenda.
[31] It is expected that the PIU with MICT will work closely with the Kiribati Meteorological Service and the Kiribati National Disaster Management Office on climate resilience and disaster risk management aspects of the roadmap.

events; ii) supporting the implementation of the legal and regulatory framework for e-transactions with respect to the public sector; iii) supporting the implementation of the legal framework for cybercrime in accordance with international good practice;[32] iv) Improved data governance and data protection arrangements, including the development of technical standards, protocols and processes to strengthen data rights (including privacy), protect the security and integrity of data and ICT systems to prevent the misuse of data. Project support will also include clarifying and strengthening institutional arrangements and mandates and developing institutional capabilities for effective implementation and enforcement of the enabling frameworks.

d. *Subcomponent 1.4. Cyber Security Program*. This supports TA and capacity building for the development of operational and administrative standards, assurance, monitoring, audit, and Cyber-Security Emergency Response Team (CERT) capabilities. Engagement of a specialist early in the implementation stage is envisaged to inform the structure and operationalization of the CERT as well as establish a Cyber Security Program to pursue relevant industry certification. The Cyber Security Program will include comprehensive security training and awareness programs for all government users, government IT and security professionals, management, citizens, and private sector stakeholders.

31. **Component 2. Digital Government Foundational Infrastructure (US$5 million).** This will finance a range of interventions and investments focused on technical enablers, infrastructure, and core systems to enable the rollout of digital services including digital ID.

a. *Subcomponent 2.1. Government Enterprise Architecture.* This will finance: (i) the design and implementation of digital governance and decision-making processes encompassing a business process review to ensure timely and quality data, and accessible information for informed decision-making and change management; and (ii) the design and development of Enterprise Architecture,[33] an Interoperability Framework,[34] and associated Interoperability solution for government systems. Enterprise architecture will guide government agencies through the business objectives, information and data requirements, process and workflow mapping, and technology changes necessary to execute their information systems (consultancy, software development/purchase) strategies. The Interoperability framework will define the approach for delivering public services in Kiribati in an interoperable manner, together with basic interoperability guidelines in the form of common principles, models, and recommendations. The Interoperability solution will encompass common data standards and solutions for secure data exchange between systems, together with the establishment of a catalogue of registered information systems and services.

b. *Subcomponent 2.2. Digital Government and Data Infrastructure*. Activities here will support the design and procurement of digital government and data infrastructure to support information systems and applications developed under components 3 and 4. Key priorities include:

(i) *Secure Government Network and Data Center, Disaster Recovery/Business Continuity, Government Cloud*.

[32] This may also require amending or repealing provisions in the Evidence Act 2003 to enable admissibility of e-evidence, as it has not been confirmed whether this has been undertaken yet. The E-Transactions Act and the Cybercrime Act allow for the responsible ministry to adopt the implementing regulations supported under sub-component 1.3.

[33] Enterprise Architecture means the comprehensive framework used to manage and align business processes, information technology software and hardware, local and wide area networks, staff, operations, and projects with the overall strategy of the organization. The intent of enterprise architecture is to determine how an organization can effectively achieve its current and future objectives

[34] Interoperability Framework means the policy and technical structure by which e-government services are developed in order to ensure coherent flow of data and information across different information systems.

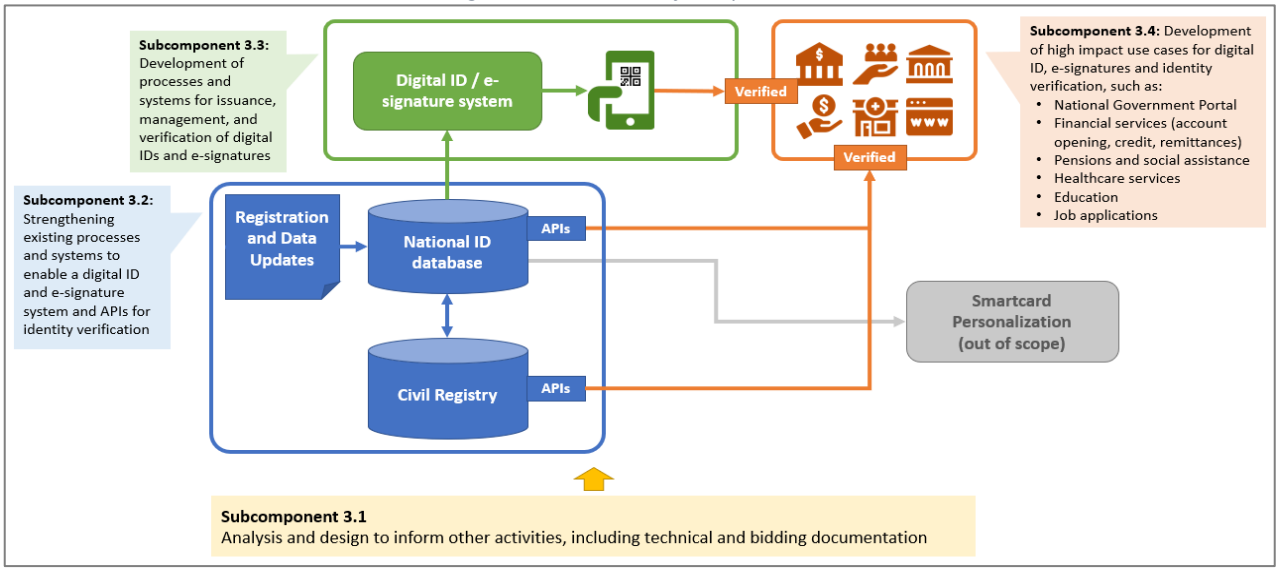
This subcomponent will consider and evaluate alternative data center or cloud computing ownership models, and support the implementation of these, taking into consideration climate change impacts, disaster risks security, resource management, operational and capital cost of operations, continuity of operations, and total cost of ownership. Remote and local data center options will be analyzed, considering areas that are not vulnerable to extreme weather events, and to promote compatibility and interoperability with existing and proposed digital platforms and solutions, as well as compliance with energy efficiency certifications as outlined in the roadmap. Improved network coverage and enhanced network resiliency will be leveraged to develop and roll out early warning systems as part of a range of informational digital services to help mitigate against and to respond to climate-related disasters. The subcomponent will additionally support the development of a business continuity plan encompassing hardware and software-related measures, as well as workflows to ensure that human resources are available and adequately trained to ensure continuity of service provision in the event of an emergency or climate disaster.

(ii) *Government core systems*, such as unified communications (secure email and internet-based communications system), document management systems, and digital services payment gateway. Proprietary and open-source options will be considered. Improved communications across key Government agencies will enable the deployment of disaster risk monitoring tools that will contribute to enhancing preparedness and response to extreme weather events and improve dissemination of early warnings to help mitigate against climate-related risks including floods. The improved communications in the aftermath of a significant weather-related events will also play a key role in collating and sharing of critical damage assessment withing Government agencies as well as relevant development partners and significantly improve response times to provide relief to citizens affected.

32. **Component 3. Digital ID and e-Signatures (US$2.5 million).** This component will support MOJ to reinforce the existing foundational ID systems (national ID and civil registry) and introduce a digital ID and e-signatures system to facilitate in-person and online service delivery. With these tools, people and businesses can carry out secure digital and online transactions, cutting out paperwork, reducing transaction costs and risks, eliminating barriers to accessing services (e.g., costly/time-intensive travel to physical offices). Implementation of this component will build on legal reforms undertaken through Component 1, as well as the whole-of-government standards, infrastructure, and use cases developed in components 1, 2, and 4. There will be a deliberate emphasis on promoting climate change resilience and women's economic empowerment, [35] alignment with the ten *Principles on Identification for Sustainable Development*.[36]

[36] *https://www.idprinciples.org/*

Figure 7 – Illustration of Component 3 Activities



a. *Subcomponent 3.1. Upstream design.* This will support analytical and design work to enable other Component 3 activities, including comprehensive requirements gathering, review and identification of existing process and system deficits, definition of registration strategies, technical design and architecture documentation (including to ensure alignment with relevant best practices and standards), preparation of bidding documentation and advisory support for bidding processes, and planning assistance. A Gender and Inclusion Diagnostic will be undertaken to identify barriers and constraints women and other vulnerable populations (e.g., climate vulnerable communities, persons with disability, the elderly) might encounter in obtaining IDs and using them to access services.

b. *Subcomponent 3.2. Strengthening foundational ID systems*. This will support the strengthening of the existing national ID system and civil registry as it pertains to enabling subcomponents 3.3 and 3.4. These activities will include improvements to software and hardware, data governance (including to address both databases' respective gaps in covering only adults and recording events rather than people), external interfaces (for verifying and sharing data with service providers, in line with the Interoperability Framework and solution developed under Component 2), data protection (including reducing the amount of data attributes collected and stored and instituting strict data access protocols, in line with legal reforms carried out under Component 1), strengthening information security, resilience and business continuity, business process re-engineering (including to reduce any identified barriers for women, girls, persons with a disability, elderly, and people living in remote areas that are vulnerable to extreme weather events), and automated linkages between the national ID system and civil registry. As part of strengthening the quality of data (including deduplication of records) and introducing secure identity verification – and subject to appropriate analyses carried out by the technical advisors – biometric technologies may be responsibly included, in which case legal and technological safeguards will be put in place to reduce data protection and exclusionary risks. This subcomponent may also support some registration operations and technical reforms to enable the change of the current national ID smartcard to a more cost-efficient alternative (e.g., a new technical design that would make use of barcodes), but it will not fund the new cards themselves, which for sustainability purposes should be funded either through government resources or nominal fees. Strengthening the civil registry and national ID systems, including through digitalization and data backups, will enhance their resilience to impacts of extreme weather events and reinforce their business

continuity, which will enable the usage of these systems to identify and verifying persons affected by such events (e.g., through geographic targeting), especially when receiving emergency financial, healthcare, and other assistance.

c. *Subcomponent 3.3. Developing inclusive and trusted Digital ID and e-Signatures*. Subcomponent 3.3 will support MOJ with the design, development and early functioning of inclusive, secure, and trusted digital ID and e-signatures systems that would enable citizens and residents of Kiribati to securely verify their legal identity and implement e-signatures in ways that are equivalent to wet signatures. The objective is to enable public and private sector services (e.g., applying for government services and carrying out electronic know your customer (e-KYC) for financial services and remittances) to be accessed completely online with high assurance and trust through those service providers' websites and apps. In consultation with stakeholders, the digital ID will likely take the form of a smartphone app that would be voluntary and could also be used for in-person transactions as an alternative to the national ID card. Issuance will be based on information in the national ID database and/or civil registry.[37] Authentication will use context-appropriate technology such as asymmetric cryptography and biometrics. The app could also evolve into a decentralized digital wallet to store, manage, and present verifiable credentials, such as driving licenses and academic qualifications. The system will adhere to standards and protocols, be technology neutral and, where possible, use open-source software, to promote flexibility, sustainability, interoperability, extendibility, and cross-border recognition. Emphasis will be placed on security, data protection, resilience and continuity (e.g. so that people can use the digital ID and e-signatures during and after weather-related events for in-person/offline transactions and, subject to internet availability, for online transactions), designing registration and authentication processes that are inclusive for women and girls, gathering requirements from the widest range of possible relying parties (service providers that will use the digital ID to verify their customers), and building buy-in.

d. *Subcomponent 3.4. Developing Priority Use Cases for Digital ID, e-Signatures and Identity Verification*. The project will support high impact use cases by investing in the ability of service providers to be able to consume digital IDs, e-signatures and identity verification. The intention is to make services more accessible, efficient, effective, and user centered. The investments may include capacity-building, software integration, and business process re-engineering for targeted services. The development of high impact use cases will further assist in laying the foundation for Component 4. Priority will be given to use cases that promote women's economic empowerment and climate change resilience. For example, the civil registry, national ID, or digital ID systems will provide information (e.g., for geographic targeting) and mechanisms to identify and verify persons affected by extreme weather events, which will allow the Government and other actors to provide cash transfers, healthcare, and other in-kind assistance quickly, effectively, and more transparently. The benefits of such emergency response use cases will increase the resilience of vulnerable communities, such as the elderly and women. Other candidates include financial sector electronic know your customer (e-KYC) as current practices performed by ANZ Bank and other parties involved in monetary transactions (e.g., remittances) are predominantly manual and require the presentation of physical identity documents. The ability to digitally verify the identity of a customer will reduce risk in the transaction (and potentially also costs) and remove barriers to access. This will have a particular benefit for women who will have enhanced access to bank accounts, credit, and remittances, and thus greater agency and economic empowerment.

[37] Based on consultations with telecom operators in Kiribati, their users are generally migrating to smartphones – more than 90% of all devices on the mobile networks are smartphones and 2G users account for only about 5% of users. As earlier noted, this supports a smartphone basis for underpinning elements of digital transformation like digital ID and establishes the pre-requisite access to devices through which the population will be able to access services online.

33. **Component 4. Government Services Portal and Priority User-Centric Digital Services (US$ 1.5M).** This component will support the development and scaling up of a national government portal consisting of a single window to facilitate citizen and business access to public information, as well as interactions and transactions with Government ministries and agencies. A single location to access informational and transactional government services will make the lives of people and businesses much simpler. For example, they can apply for licenses and certificates to open a business or apply for training opportunities through one website. By consolidating multiple services into one platform, there is also a higher return on investment in terms of integration with ID systems. Component 4 activities will include the following.

    a. *Subcomponent 4.1. User-Centric Portal and Priority Digital Services*. This subcomponent will support the development of the Kiribati national portal, consisting of both informational services (providing information about how the government works and what services it provides), and transactional services (services executable directly in the portal). Focus will be on identifying and implementing priority citizen-centric public services to be deployed through the portal, based on institutional and technical readiness assessment for digital services, as well as prioritization criteria to be developed in consultation with government stakeholders, citizens, and businesses.[38] The prioritization process will leverage design thinking methodology[39] via workshops with stakeholders to ensure a human-centered approach to digital public services that promotes simplicity/user-friendliness, inclusion, universal access, and uptake particularly for disadvantaged groups including women, persons with disabilities, and Outer Island residents vulnerable to extreme weather events. To provide quick wins and demonstrate early results, an initial range of informational services would be deployed as these are easier to implement, have considerable impact, and encourage uptake by users. Informational services would also be critical in disseminating key government announcements and adverse weather advisories that will enhance response and preparedness to extreme weather events, increasing climate resilience. In this aspect, given the significant climate change vulnerabilities faced by Kiribati, timely dissemination of weather alerts would give citizens an opportunity to mitigate against risks and minimize losses to property and lives. Informational services will also include those that increase awareness of existing GBV prevention and response services.

    Subject to the prioritization criteria and building on integration with the digital ID/e-sign solution supported in Component 3, potentially with linkages to a digital payments system, candidates for high volume transactional services to be digitized include:

        i. *Social Protection* – The provision of social assistance and pensions are pain-points for Kiribati. The ability for I-Kiribati to make an application, check the status of their entitlements, or to access services/payments require citizens to be present at Government offices. The cost of travel, and the time it takes to travel to

[38] This would necessarily include: (i) carrying out service delivery, accessibility, and user journey assessment to identify priority services with consideration for differentiated needs of women and girls; (ii) engineering of selected services following user-centered perspective; (iii) facilitating e-service implementation and diversifying service delivery mechanisms/channels (e.g., voice, text, and USSD solution on top of web-based e-services); (iv) communication and dissemination of e-services by improving the user guidelines and instructions, and with targeted awareness raising for women and vulnerable groups; and (v) advisory support and training to implement associated business and change management processes within relevant ministries and agencies.

[39] Design thinking is a creative process based on building up ideas and thinking outside of the box through "what if?" thinking. It is complementary to analytical thinking and adopts a human-centered design methodology to innovation that is particularly useful when exploring and generating new ideas to creatively solve challenges. Its five stages usually include: Empathizing (with the problem/users), Defining (the problem), Ideating, Prototyping, and Testing. *See* FrontEnd Toolkit, World Bank, 2017, available at https://documents.worldbank.org/en/publication/documents-reports/documentdetail/110931486028590680/frontend-toolkit-a-toolkit-to-transform-ideas-into-intelligent-action). See, also, https://dschool.stanford.edu/executive-education/dbootcamp

centralized offices may create barriers and further disadvantage citizens at a time when they are most vulnerable. Similarly, a digital platform will enable a medium through which the Government could disseminate welfare payments in the aftermath of an adverse weather event using mobile money wallets verified by the Digital ID and e-signatures (to minimize instances of fraud) supported in Component 3.

ii. *Healthcare and Crisis Response Services (incl. GBV)* – Access to healthcare services is hampered through the inability to verify identification at hospitals and clinics. The format of a citizen's name may differ from their birth certificate/national ID card and the naming convention of their health record. The ability to access digital services and to verify identity will remove substantial barriers for many I-Kiribati. In addition, the ability for appointment bookings to be made and verified online will improve access to services for many. The creation of a digital health record will however not be included at this time. The national portal could also enable access to support services for preventing and responding to gender-based violence (GBV), together with crisis response services in the event of adverse climate events, and/or to respond to outbreaks caused by climate diseases such as malaria, dengue, etc. Particular emphasis would be given to services that expand care and strengthen climate resilience for women, the disabled, elderly, and persons living in Outer Islands.

iii. *Employment & Education* – Improving access to public sector employment opportunities, as well as to educational/training and scholarship opportunities, has been highlighted as a priority by the Government of Kiribati. Difficulties exist for citizens to view existing vacancies, apply for the position and for their application to be reviewed by a deadline. It is envisaged that the ability to fulfill these initial steps digitally and with greater trust will afford greater opportunity to attain suitable employment, irrespective of location within Kiribati.

b. *Subcomponent 4.2. Digital Citizen Engagement*. To build public trust in digital government through increased transparency and accountability, this subcomponent will support technical enhancements to the national portal that enable online citizen participation and two-way interaction between government and citizens. These will include multi-channel mechanisms for citizens and businesses to inquire and provide feedback on digital services (including via satisfaction surveys, contact forms, ratings, comments, suggestions, etc.), with provision for anonymous feedback as practicable. Provision will be made to promote universal access, including for persons with disabilities. To close the feedback loop with citizens, the project will support technical assistance and business process (re-) engineering to permit government to periodically report on service improvements undertaken in response to citizen feedback, and to regularly publish engagement statistics and performance for digital services, disaggregating by gender and other factors as applicable. The project will explore further opportunities for leveraging the national portal and multi-channel mechanisms to promote citizen participation, particularly in coordination with Island Councils and CSOs.

34. **Component 5. Project management (US$1 million).** This component will support technical assistance to the PIU[40] and implementing agencies specifically for day-to-day management/administration and implementation of the Project. It will also finance training costs for the PIU. Activities will encompass strengthening the capacity of implementing agencies to process project transactions, project coordination, communications, outreach, procurement, financial and contract management, reporting, audit, fiduciary, safeguards, citizen engagement, and monitoring and evaluation (M&E). The PIU will coordinate with the KFSU primarily on procurement and financial management. Supported activities include:

[40] Component 1 in part supports operationalization of the DTO as a government entity responsible for national coordination of the digital transformation agenda beyond the lifespan of the project, while Component 5 interventions primarily support the DTO's functioning as a PIU to implement the current project.

a. *Grievance Redress Mechanism (GRM):* TA will be provided to support the development of a GRM, with requisite policies, protocols, and adequate staffing for receiving and responding to inquiries, feedback, and complaints on the project within established standards.

b. *Communications and Outreach*: The project will also support the coordination and undertaking of communications and outreach activities to raise awareness on project interventions and the Government's broader digital transformation agenda. Outreach efforts will prioritize activities to encourage buy-in and uptake of digital services (which will also include applications to access timely alerts on expected adverse weather conditions), particularly with women, the elderly, the disabled, and Outer Island residents. To promote knowledge of safety practices and counter target harmful online communication, outreach activities will also aim to raise awareness and improve digital literacy on issues such as online safety, data protection, respectful communication, and address risks of bullying and harassment especially for women and girls. As part of outreach and capacity-building efforts, the project will capitalize and strengthen existing multi-stakeholder networks such as the Child Online Protection Working Group (COPWG) established as part of the implementation of the National Cybersecurity Strategy, to ensure targeted capacity-building on cyber safety and protecting against harmful online activities such as grooming and cyber harassment that affect vulnerable groups such as children and girls. Strengthening coordination mechanisms between the DTO (under which the CERT will be housed) and the Ministry of Women, Youth, Sports and Social Affairs (MYWSSA) will be critical in ensuring targeted outreach.

c. *Beneficiary Feedback Surveys*: This component will support surveys of users of the national portal and digital services developed under Component 4 to gauge satisfaction. Survey results will be disaggregated by gender, age, location, and other factors. Survey results are anticipated to inform government decision-making for improving digital service delivery. Baseline and end-line surveys will be conducted to measure changes in digital access, especially with respect to gender- and location-based disparities, and to help identify priority use cases to be digitized and integrated with the digital ID and Government Services Portal.

Figure 8 - Project Costs

Components (and estimated total costs)	**Subcomponents**	**Estimated total costs (US$ million equivalent)**	**Estimated IDA financing (in US$ million equivalent)**
1. Digital Government Enabling Environment	Establishing the Digital Govt Transformation Office	1.1	1.1
	Digital Govt Implementation Roadmap		
	Legal and Regulatory Reforms for Digital Government and Digital Economy		
	Cyber Security Program		
2. Digital Government Foundational Infrastructure	Government Enterprise Architecture	5.0	5.0
	Digital Government and Data Infrastructure		
3. Digital ID and e-Signatures	Upstream Design	2.5	2.5
	Strengthening Foundational ID Systems		
	Developing inclusive and trusted digital ID and e-signatures		
	Developing priority use cases		
4. **Government Services**	User-Centric Portal and Priority Digital Services	1.5	1.5

Portal and Priority User-Centric Digital Services	Digital Citizen Engagement		
5. **Project management**		1.0	1.0
	TOTAL	**US$12.0**	**US12.0**

C. Project Beneficiaries

35. Project beneficiaries will be the people of Kiribati, including individuals, consumers, businesses and government agencies, who will receive improved access to digital services. This would also include residents living in the outer islands who remain most vulnerable to facing service disruptions due to being unable to travel to Tarawa to access critical Government services, particularly during times of adverse weather conditions. In addition, the project will support the development of critical foundations for the wider digital economy. Over the medium term, the rollout of digital government services will enable individuals and businesses to benefit from increased access to core public services, particularly people in the Outer Islands who are currently excluded. Government will benefit through an improved ability to store and manage data in a more secure, reliable and cost-effective manner through the utilization of common standards, platforms and systems. Government will also enjoy an improved ability to launch and implement digital public services in a cost-effective and citizen-centric manner for the majority of the population.

36. **Gender**. Project interventions are designed to promote women's economic empowerment and reduce gender gaps by improving a) *women's access to services*, including healthcare, social protection, education, asset management, and financial services; and b) *women and girl's safety*, including online safety.

    a. *Increasing women's access to services – Analysis*: Stakeholder interviews identified challenges that women face in accessing physical government service locations in part due to their disproportionate child-care and household responsibilities, but also due to the lengthy travel time and costs associated with going to physical offices. These challenges are exacerbated particularly for women in Outer Islands, as central government services are concentrated in the capital island of Tarawa. These preliminary findings are reflected in Kiribati's *National Policy on Gender Equality and Women's Development* (2019-2022), which underlines several barriers women face in accessing services and participating in income-generating activities, notably time spent on domestic work and church activities. *Actions*: The project will undertake a Gender and Inclusion Diagnostic to further qualify the barriers women and disadvantaged groups might face in accessing public services – including online public services. Recommendations from the Diagnostic will inform the design of the digital ID solution and digital services envisioned under Components 3 and 4, to ensure that these take into consideration the differentiated needs of women and men and facilitate access for women. Components 4 and 5 will also support design workshops and targeted outreach activities specifically aimed at women and girls to incorporate their differentiated needs and increase their uptake of digital services. These gender-informed project interventions to strengthen the national ID system,[41] develop a digital ID system, and digitally avail public services via the national portal would allow women to directly access government services such as social protection, obtaining licenses, registering property, and starting a business online from home, thereby increasing women's access to services – particularly for those based in Outer Islands. *Indicators*: The project will measure progress on these interventions with indicators to i) ensure the Gender Diagnostic is completed, with recommendations to be incorporated in the design of ID systems and the digital services available on the national portal; ii) measure the percentage of digital service users who are women,

[41] From preliminary analysis, there are no significant gender disparities in the coverage of the existing national ID system.

disaggregated by location; and iii) measure satisfaction with digital public services, disaggregated by gender.

b. *Promoting Women's Safety – Analysis*: Prevalence rates of gender-based violence (GBV) in Kiribati are amongst the highest in the region, with 68 percent of women aged 15-49 who have been in a domestic partnership having experienced physical or sexual violence. Women's help-seeking behavior, however, remains low. In 2020, the Ministry of Health (MHMS) reported that there were only about 495 reported incidents of family-based violence, up from 386 in 2019 – an increase that likely reflects the negative impacts of the pandemic. Of women experiencing violence, a majority (78 percent) do not report or seek help from formal services. A large proportion of women, 42 percent, have not told anyone about their partner's violence. Moreover, of the women who sought help for domestic violence, only 13 percent went to the police and less than 1 percent sought help from health personnel or social service organizations (0.7 percent). Across the Pacific, a main barrier is women lack awareness of available services, especially at times of emergencies and climate-related disasters.[42] At the same time, analyses conducted across the Pacific Region have shown that women and girls are particularly vulnerable to online threats such as bullying, harassment and abuse. *Actions*: Given the high prevalence levels of GBV and low levels of utilization of prevention/response services in Kiribati, the project aims to improve awareness and access to these by prioritizing informational digital services on the national portal that provide information on available GBV support services (Component 4). The project will also undertake targeted outreach activities to promote knowledge of safety practices and counter target harmful online communication especially for women and girls, in coordination with – and while working to strengthen – existing multi-stakeholder networks such as the Child Online Protection Working Group (COPWG) established as part of the implementation of the National Cybersecurity Strategy (Component 5). *Indicators*: The project will measure closing of gender gaps on women's safety through an indicator to measure (iv) the inclusion of a digital informational service on the national portal that provides access to information on existing GBV support services.

37. **Citizen Engagement**. The project has been consultative in its design, incorporating input from various stakeholders in government, the private sector, and civil society organizations. Project implementation will similarly engage citizens and project beneficiaries via several mechanisms, including i) communications and outreach on the various project interventions and the Government's broader digital government agenda; ii) collaborative design thinking workshops with citizens and other stakeholders to prioritize services for the national portal; iii) interventions to create multi-channel feedback mechanisms on the national portal allowing citizens and businesses to interact with government; iv) closing the feedback loop with citizens via Government's periodic publication of engagement statistics for the national portal as well as on measures taken in response to feedback; v) a beneficiary feedback survey to measure citizen's satisfaction with digital services; vi) a project Grievance Redress Mechanism (GRM) with adequate protocols and staffing to receive and respond to beneficiary feedback within set standards and reasonable timeframe; and vi) TA to build capacity on the noted citizen engagement mechanisms. As beneficiary feedback indicators, the project will monitor i) the percentage of national portal users satisfied with digital services; and ii) the percentage of inputs received through the GRM responded to within and established timeframe.

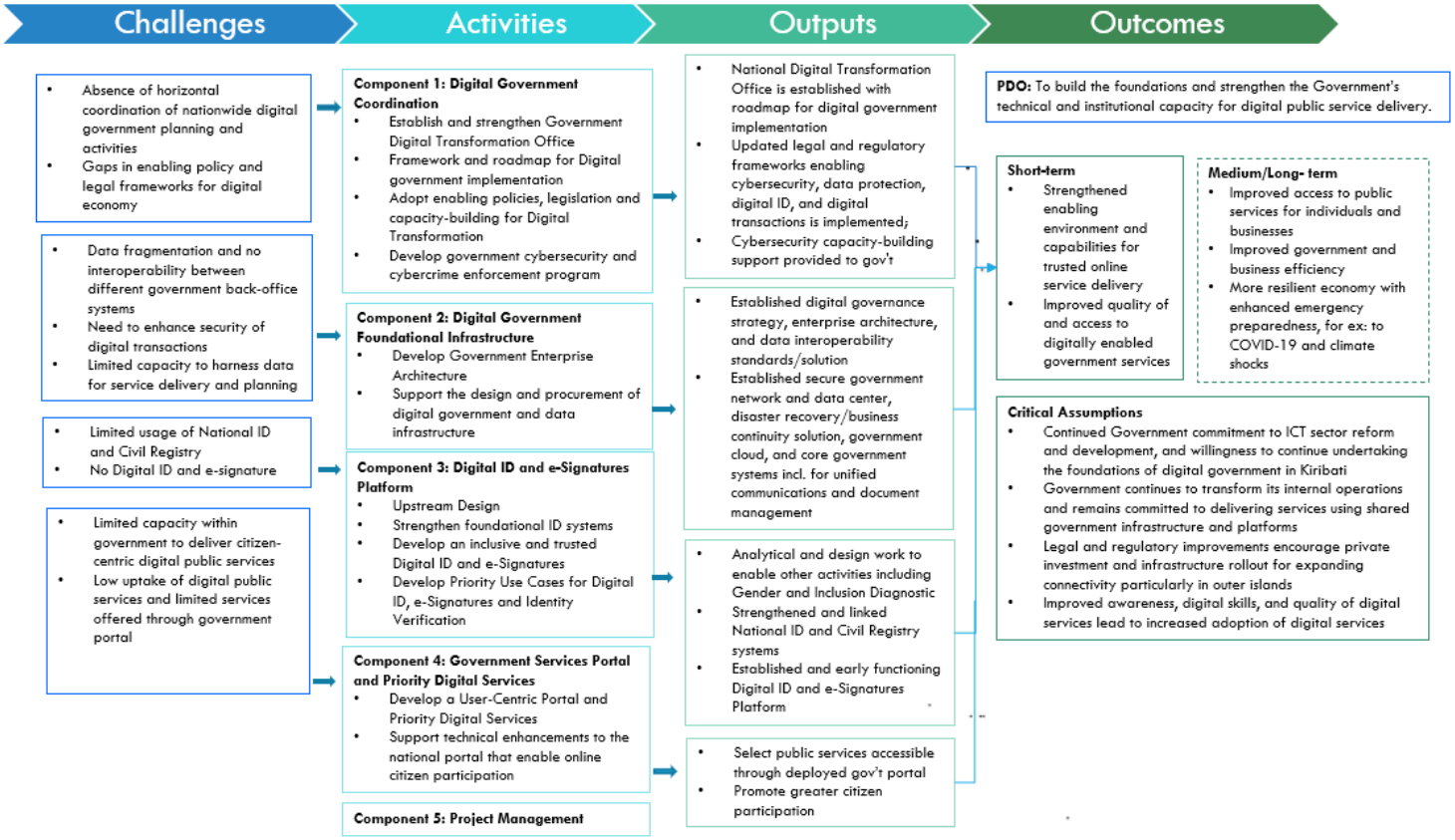
38. **The project will contribute to better service delivery to the I-Kiribati people and increase resilience to climate change risks and other shocks.** Secure identity verification allows public and private sector service providers to improve the efficiency and effectiveness of their services, including to build their systems and applications on top of the ID system for paperless and presence-less transactions. Providers of healthcare, education, social protection, and financial services can streamline and digitalize processes and reduce fraud and risks. For example, countries have

[42] Findings from the 2019 Kiribati Multiple Indicator Cluster Survey (MICS) show that while women are less likely to use traditional mass media (tv, radio, newspapers), there is no gender gap in Internet use in either urban or rural areas.

used ID systems as a platform to better target cash transfers and modernize their payment systems. I-Kiribati and foreign residents will also be able to use digital IDs and e-signatures to access services completely online, including through the National Government Portal, with the same level of security as if they were visiting a physical office. This would remove distance and cost barriers, especially for people not residing on Tarawa. Crucially, this ability to access services online will reduce disruption during and after weather-related events, especially if physical offices are damaged during a disaster. Such resilience has helped countries maintain continuity of services in the face of lockdowns during the COVID-19 pandemic. A digital ID that is designed for interoperability and adherence to international standards also creates opportunities for cross-border transactions with other jurisdictions that recognize digital IDs and e-signatures originating from Kiribati, such as future e-KYC facilities that could be developed to ease remittances in the region, creating new economic and trade opportunities.

D. Results Chain

Figure 9 – Project Theory of Change



E. Rationale for Bank Involvement and Role of Partners

39. The WB has a longstanding engagement in the Pacific region on ICT sector reform and development, including in Kiribati with the earlier Telecommunications and ICT Development Project (P126324) in partnership with the governments of Australia and New Zealand, and through ongoing Kiribati Connectivity Project (P159632). WB support has strengthened the legal, regulatory and institutional environment for ICT, enabled transition to a market-driven telecommunication sector, facilitated improved connectivity to the Outer Islands, and has helped lay out basic foundations for e-Government, articulated in Kiribati's Digital Government Master Plan 2021. The WB's valued added

also includes global expertise on digital economy and digital government support programs, including management of several e-government/e-services programs in different economies, partnership with industry/technical institutions, and its global Identification for Development (ID4D) initiative, which has considerable global knowledge and operational expertise on the design and implementation of digital ID and foundational ID systems, including in the Pacific.

40. Project investments are needed to improve the effectiveness and efficiency of government in fulfilling its mandatory public service obligations. Thus, these will be resourced primarily from public funds. However, given the need to manage institutional/technical challenges and leverage additional expertise, the Project will also explore the potential use of private-public partnerships (PPPs) including but not limited to the following areas: Government cloud service provision, cybersecurity, registry management, applications development, and quality control. Other development partnerships may also be explored.

F. Lessons Learned and Reflected in Project Design

41. **The Project reflects key findings and recommendations from a global review of digital government development**. These findings are described in the World Development Report (WDR) *Digital Dividends, 2016* which emphasized the need to balance investments in technology (*digital*)with appropriate policy measures *(analogue complements)*. The Project design also reflects recommendations from the WDR *Data for Better Lives, 2021.* It front loads strategy and implementation roadmap development and emphasizes the development of a robust legal and regulatory framework prior to investment in potential costly digital infrastructure. A key element of Project design is the "whole of Government" approach and proactive engagement of National government, local governments, and government departments to build consensus and collaborative decision-making processes around shared services.

42. **The Project's design also considers the experiences of other similar World Bank-supported projects in the Federated States of Micronesia, Tonga, Samoa, Tuvalu, Papua New Guinea, Vanuatu, and the Republic of the Marshall Islands, among others.** A common finding was that while innovative and ambitious targets can be set, the design needs to be balanced and carefully aligned against the client's absorptive capacity and readiness to execute. For example, experience from other ID projects in the Pacific and small island developing states highlights the importance of simplicity, given the nascent nature of the topic and relevant technologies. The Project takes this into account by strengthening what already exists and aiming to add to that through a smartphone app with digital ID and e-signature capabilities.

43. **The following are key lessons learned and principles from such projects**:

- High-level leadership is essential for implementation of a "whole of government" approach to digital government, as are effective whole of government governance processes. Government-wide shared infrastructure and centralized solutions are preferable to working on sector-specific solutions.
- The development of strategy and implementation roadmaps, as well as having the appropriate legal and regulatory framework are vital prior to investing in potential costly digital infrastructure.
- Project design needs to account for limited institutional and technical capacity in digital government, minimizing the number and complexity of contracts and ensuring that adequate resources are available for technical, transactional and managerial support. Adequate remote work arrangements are needed to address challenges posed by COVID-19 pandemic.

- An inclusive and consultative design process with various stakeholders including citizens/CSOs, the private sector, and government can help identify and examine key priorities and concerns for achieving desired development outcomes, especially to understand and proactively address concerns regarding data protection and digital ID.
- Participation of end users and beneficiaries early on in project design and implementation is also crucial for fostering adoption and use of e-Services. A focus on citizens and businesses helps overcome the fragmentation of government services.
- Ensure cybersecurity of all shared infrastructure, platforms, and solutions ('Secure by Design').
- Adopt a phased approach to the development and implementation of complex projects
- In procuring/implementing digital infrastructure, try to leverage solutions that already exist and have been proven to work, whenever possible; consider leasing before buying, before building; undertake turnkey solutions only (when procuring vendor solutions); where feasible, and where adequate technical support exists, consider open-source solutions.
- Where feasible, and where adequate technical support exists, consider open-source solutions; and
- Find a good balance between quick wins (highly visible e-services) and less visible components such as back-end infrastructure.

44. **The Project has also drawn on the World Bank's global expertise on identification for development and analytical work that the WB has been undertaking on digital ID in the Pacific region, including in Samoa and Tonga**. This has entailed sharing global knowledge and best practices on: (a) civil registration systems; (b) national identification systems; (c) legal frameworks that enable the operation of the civil registration and national identification systems: privacy and data protection, electronic transactions, and cybersecurity. Experience from other ID projects and the wealth of analytical and global convening work on identification by the WB's Identification for Development (ID4D) Initiative have also been incorporated in the Project design.

45. **The design of Component 3 has been informed by a rapid ID4D Diagnostic that began as part of project preparation.** The Diagnostic found that the national ID database and civil registry are strong assets that can be built on but some limitations and gaps in the legal framework and current smartcard technical design, which are elaborated in the sectoral context section. International experience, including operational experience of the Bank on ID projects across the world, have shown that the ten *Principles on Identification for Sustainable Development* are a useful guiding framework for the implementation of ID systems across the three pillars of: (i) inclusion; (ii) design; and (iii) governance.

III. IMPLEMENTATION ARRANGEMENTS

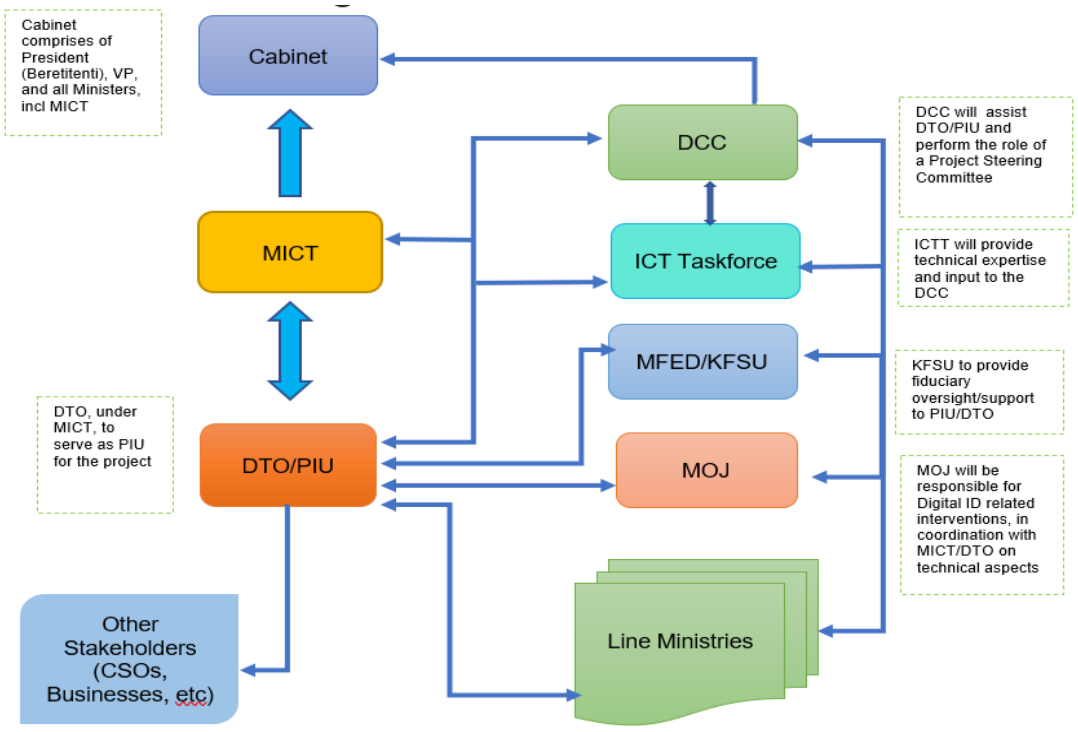
A. Institutional and Implementation Arrangements

46. **The Project will build on the implementation arrangements of the ongoing Kiribati Connectivity Project (P159632), with MICT as the main and overall implementing entity**. A Digital Transformation Office (DTO) will be established under MICT, which will include staff and consultants assigned to act as the PIU for the Project. The DTO functions are expected to continue beyond the lifetime of the Project as the key management and coordination body for digital transformation. The MoJ, in coordination with the MICT/DTO, will implement Component 3. MoJ will also work with MICT/DTO on related policy and legal reforms for digital ID and e-signatures under Component 1.3. The Kiribati Fiduciary Services Unit (KFSU), based within the Ministry of Finance and Economic Development (MFED), will provide

support to the PIU on fiduciary aspects. KFSU will provide oversight to PIU staff responsible for fiduciary aspects. These arrangements will be governed by the guidelines and procedures set out in a Project Operations Manual (POM).

47. **Given the complexities of the Project, the institutional capacity constraints and the need for strong inter-ministerial coordination the Development Coordination Committee (DCC) with assistance from the ICT Taskforce (ICTT)[43] will provide oversight and guidance to MICT throughout implementation**. The DCC comprises the Secretaries from across all Government Ministries and reports directly to the Cabinet.[44] The DCC will perform the role of a project steering committee and help coordinate actions of other ministries to improve quality, timeliness, and ensure relevance of activities. The ICTT comprises the Heads of the ICT Departments across all ministries and will serve the role of a technical working group to provide technical advice to the DCC. The POM will include detailed procedures and criteria for the selection and prioritization of digital government and data infrastructure to support information systems and applications under Component 2.2(a) of the Project, services to be targeted under Component 3.4 of the Project, and activities to be supported under Component 4.1 of the Project.

Figure 10 – Proposed Implementation Arrangements



48. **Environment and Social (E&S) risk management will be supported by the KFSU**. The KFSU will provide Financial

[43] ICT Taskforce (ICTT) is a Technical Working Group comprising of ICT support staff from across all Government Ministries and Departments. The ICTT will be responsible for the provision of technical oversight of the implementation of the project.
[44] The DCC will serve the role of a Project Steering Committee supported by the ICTT as a Technical Working Group. Their roles and responsibilities, operating procedures, and coordination mechanisms are to be outlined in respective Terms of References and the Project Operational Manual (POM).

Management, Procurement, E&S, and Monitoring & Evaluation (M&E) oversight to the Project. The KFSU is a new unit and will require capacity building with respect to the implementation of the WB Environmental and Social Framework (ESF). The PIU, supported by the KFSU, will lead the development of projects E&S instruments. The WB will continue to provide support regarding ESF capacity-building and support for implementation as needed. The detailed arrangements for ESF will be reviewed and updated regularly during implementation.

49. **The Ministries whose services are proposed for digital delivery will be key partners as their legislation and business systems will be updated, revised and staff retrained as required for the new service delivery approach.** MICT recognizes that these Ministries will have key roles to confirm, adjust or introduce necessary legislation or regulations and additionally establish appropriate business policies and practices for digital operation of identified functions of the ministries. As several institutions are directly concerned by the activities to be carried out, the project would require an effective cross-agency coordination and implementation mechanism.

50. **As a whole of government effort that transforms the service delivery paradigm in the country, the activities supported by the Project will require the ongoing engagement of high-level decision makers, especially for legal and regulatory reforms, together with coordination needed to successfully roll out digital government foundations**. For this reason, implementation arrangements will take a multi-tiered approach to include high level buy-in at the Ministry level through the DCC, technical buy-in at the agency level through the ICT, and on-the-ground buy-in through regular stakeholder consultations.

B. Results Monitoring and Evaluation Arrangements

51. **The Results Framework for the Project has been developed to track the development of key building blocks for the delivery of digital services. Each component includes specific milestones/targets.** Climate co-benefits will be tracked by monitoring activities that are aligned to the adaptation and mitigation measures as outlined in Annex 2 – Climate Co-Benefits Table. The M&E framework will also track the usage of digital applications/services developed under the Project. The Project will also track overall performance on digital government readiness indicators as reported in the periodic United Nations E-Government Development Index (if available) and the GovTech Maturity Index (as applicable). The PIU, in consultation with the other implementing agencies, will prepare progress reports every semester, in accordance with a format agreed with the WB and will cover: (a) physical and financial progress achieved against agreed implementation and disbursement indicators; (b) issues and problem areas, including comments on actions to address identified problems; and (c) work programs and budget, including forward-looking estimates. The PIU will also conduct two beneficiary satisfaction surveys of nationwide national portal users during project implementation: (i) at project mid-term; and (ii) towards the end of project implementation.

C. Sustainability

52. **The proposed "whole of Government" approach adopted by the Project interventions envisages integration of digital Government infrastructure and services within a single platform that is designed for long-term shared use.** This approach is expected to be more sustainable than investment in individual siloed information systems. Technical and managerial outsourcing solutions in the private sector (in-country and overseas) will also be explored, given limited capacity in Kiribati. The use of cloud-based solutions will help to minimize the burden of technology upgrades for Government reducing the burden of reinvestments in data center facilities, and to standardize ICT resource management and provisioning.

53. **Other measures to support sustainability of Project investments include: (i) strong focus on cybersecurity support; (ii) identification of priority e-services with immediate application; and (iii) exploring opportunities for shared services across the Pacific region. T**he Project is also expected to support climate change adaptation by incorporating resilient measures into the interventions and technical designs, and to improve climate resilience of Digital Government and facilitate management of climate-related risks. By supporting the development of digital platforms for online services, the Project will contribute to climate change mitigation by improving energy efficiency and reducing the need for travel.

IV. PROJECT APPRAISAL SUMMARY

A. Technical, Economic and Financial Analysis (if applicable)

54. **By making digitally enabled services more accessible and affordable, the proposed project stands to generate substantial economic impact through both direct and indirect interventions.** The impact of increased uptake of broadband services on growth, poverty reduction, and employment is significant and widely documented. According to various resources, a 10 percent increase in mobile broadband penetration significantly impacts GDP growth, reaching up to 2.8 percent. Greater digital adoption amongst individuals and businesses across all sectors will bring substantial potential for job creation and innovative business models for everyone, including the unskilled, uneducated, or lower-educated populations. Furthermore, the public sector is expected to yield substantial benefits from digital transformation. Through the adoption of enhanced and large-scale digital public service delivery and platforms, the government will improve the service quality and ensure the populations at high risk of poverty or social exclusion receive the services.

55. **More citizens connected to the Internet would facilitate an increase in demand for online services such as mobile wallets, and this medium could be extremely useful to the Government to disseminate social transfer payments as well as emergency relief payments in the aftermath of severe weather-related events.** Deploying government services not only creates more demand for broadband but also improves the ease of access for citizens, especially those that are in the outer islands. The lack of baseline data makes identification of quantifiable benefits of digital government very challenging. Using increasing broadband penetration as a proxy of quantifying benefits of digital government, the proposed project refers to the following analysis.

56. **Based on the ITU Impact of Broadband on the Economy, Broadband Series 2012, it is estimated that a 10 percent increase in broadband penetration would yield an additional 1.38 percent in GDP Growth**.[45] Kiribati has seen a growth in the penetration of broadband from 12 percent to 47 percent and increase of 35 percent between 2012 and 2019. Extrapolating the figures, the contribution of broadband to GDP growth in Kiribati should be approximately 4.83 percent between 2012 and 2019. This represents a potential injection of US$9.4 million into the local economy between 2012 and 2019, which averages US$1.34 million injection annually on average. The WB's Pacific Possible Report 2017 further estimates that the ICT sector's contribution to GDP in Kiribati would be about US$27 million by 2040, as well as contributing US$4 million to Government revenue and increasing the number of available jobs by 700. The estimated injection of US$27 million over a 22-year period (from 2018 – 2040) averages to about a US$1.2 million annual injection into GDP.

[45] See, also, ITU, *The Economic impact of broadband and digitization through the COVID-19 pandemic: Econometric modelling* (June 2021). Available at: *https://www.itu.int/pub/D-PREF-EF.COV_ECO_IMPACT_B-2021*

57. **Economic and convenience benefits will flow to Government and the public through digital delivery of services**. Many interactions with government are paper based and require the physical presence of a person at a government office to complete the transaction. While this may be the initial requirement to say, establish an identity, once done it will become possible to transact with the Government without paper documents or physical presence. This will realize time and cost savings particularly for Outer Islands residents. Digitalization of services will require review and prospectively simplification of Government business processes and sharpening of skills and internal efficiency. The public sector will gain from cost savings, higher efficiency and productivity gains associated with digitalizing operations.

58. **Delivering services via an online platform or application can provide benefits both through time savings and by making a tangible economic contribution**. Gains have been quantified based on previous WB experiences and best practices in similar projects involving digital ID and e-services. A recent analysis[46] in Australia calculated that if citizens saved at least 1 hour in accessing critical Government processes by accessing it online, it will lead to a national time savings of 163 million hours distributed over 19.4 million adults. This represents a potential time savings of 8.4 hours per adult in Australia in a year. There are numerous non-monetary benefits the public sector can offer leveraging digital solutions, such as enhanced quality and access to public services, reduced cost of administration and operations in delivering services, efficient public revenue mobilization, and transparency. Similarly, digital services in Sri Lanka[47] reduced the time that citizens spend to obtain a public service from 371 minutes (about 6 hours) in 2011 to 124 minutes (about 2 hours) in 2013. The average amount spent by citizens obtaining public service before the introduction of e-services in 2011 was LKR1,553 (US$13.74) or 0.31 percent of average annual household expenditure. By 2013, this figure had dropped to LKR747 (US$5.79) or 0.15 percent of average annual household expenditure, contributing to an annual reduction in household expenditures by 22 percent. There are numerous non-monetary benefits the public sector can offer leveraging digital solutions, such as enhanced quality and access to public services, reduced cost of administration and operations in delivering services, efficient public revenue mobilization, and transparency.

59. **Investment in cloud and shared services can help save considerable costs for the Government.** International experience has demonstrated savings for government budgets through the adoption of consolidated and centralized purchases based on common technical standards, and adoption of cloud computing and shared services. Savings may thus be realized in terms of reduced capital expenditure and more efficient management of operating expenses including, for example, energy costs associated with communications networks, hardware, and human resources requirements. For that reason, many Governments have been adopting “cloud first” policies which mandate the use of shared services. For example, the US federal government is moving to an ‘infrastructure as a service’ model which will provide approximately US$20 billion in cloud computing services to more than 25 of its agencies.

60. **The Project is also expected to deliver social benefits associated with more efficient delivery of services and increased accessibility of government services, along with reduced processing costs**. The available evidence on the benefits of robust and inclusive ID systems strongly suggests positive social and economic returns: (a) social returns in the form of a variety of important benefits to individuals by enabling access to public and private-sector services, reducing transaction costs and facilitating the protection of vulnerable groups and humanitarian responses; (b) economic benefits through increased efficiency of firms; and (c) fiscal savings through the reduction of error, fraud and corruption (EFC) and duplication of costs. In 2005, Pakistan was able to disburse more than US$350 million to

[46] Deloitte, 2019 Rethinking the Digital Dividend Report
[47] World Bank 2021 Analytical Insights, Minimum Data Consumption Report

those affected by a major earthquake in just a few months using the national ID database and a robust authentication process. In contrast, when Nepal was hit by a devastating earthquake in 2015, millions of dollars and many months were spent collecting data on individuals living in the affected areas before aid could be disbursed. More than two years after the event, WB-supported efforts are still paying out benefits. Thailand uses its national population register to manage its local response to disease outbreaks.

61. **Fiscal savings arising from the introduction of a robust national identification system are well established globally and the expansion of use cases for Kiribati's existing ID system are expected to contribute to such benefits.** For example, any subsidies and other transfer payments may be more effectively targeted to those in need and there will be strengthened integrity in pension payments through more reliable proof of identity and proof of life processes. Population statistics may be more accurate and timely improving the targeting and delivery of services. IDs can also potentially generate fiscal savings by reducing error, fraud, and corruption. In 2010, Pakistan launched the Watan Card program in response to devastating floods that displaced some 20 million people (over 10 percent of the country's population). About 40 percent of the initial 2.7 million people that applied were found to be ineligible or were duplicate family members. This translates to an estimated savings of some PKR 21 billion (US$248 million in 2010). In 2016, Thailand eliminated 660,000 applicants out of 8.4 million based on cross-checking databases using the UIN, generating savings of US$30-60 million. Savings are often found through reducing pension and wage bill costs for the civil service.

62. **ID is also critically important for financial services and payments systems. Know your customer (KYC) costs for banks and telecom firms have been reduced dramatically in India after the introduction of the Aadhaar ID.** A recent study in Zambia estimated that savings for banks and telecoms from lower costs of KYC would run into the tens of millions of dollars over the medium term should the new government-recognized ID be introduced. Credit rating agencies and microfinance institutions also stand to benefit from the ability to link unique numbers across databases in order to track credit histories. Finally, the existence of a robust system for authentication obviates the need for individual entities or industry associations to set up their own silo systems, duplicating costs many times over.

B. Fiduciary

63. **Financial Management.** A financial management (FM) assessment was carried out in accordance with *the Principles Based Financial Management Practice Manual* issued by the WB on February 4, 2015, and as further elaborated in the *World Bank Guidance Financial Management in World Bank-Financed Investment Operations* issued by the WB on February 24, 2015. Under WB Policy on Investment Project Financing with respect to projects financed by the World Bank, the borrower and the project implementing agencies are required to maintain FM arrangements—including planning and budgeting, accounting, internal controls, funds flow, financial reporting, and auditing arrangements—acceptable to the WB to provide reasonable assurance that the proceeds are used for the purpose for which they were granted. Overall, the proposed project FM arrangements of the KFSU meet the minimum requirements of the WB. The KFSU is located within MFED and provides day-to-day FM support and is currently staffed by three finance and administration officers as well as other PMU (Project Management Unit) staff. The KFSU is financed by the WB-supported Kiribati Outer Islands Transport Infrastructure Investment Project (KOITIIP). The project will finance a dedicated project accountant to be based at the KFSU office and closely coordinate with MICT to ensure the FM arrangements throughout the project are maintained.

64. **The FM risk residual risk is assessed as Substantial.** KFSU has recently scaled up its project management unit with new staff and it will take some time to train and gain experience with managing WB and other donor projects. In

addition, Kiribati had lapsed loans in the last fiscal year which has been resolved. To mitigate FM risks, the Project Operational Manual (POM) will include a section on budgeting, disbursement, financial management arrangements, monitoring and reporting, and a provision for additional FM support will be assessed during the project implementation. In addition, a dedicated project accountant at KFSU will be financed by the project.

65. **Funds Flow and Disbursement Arrangements.** Funds will flow from the WB to the Government of Kiribati (GoK) via a) reimbursement of GoK expenditure; b) advances; c) direct payments; and d) special commitment (including UN commitment, if needed). To facilitate and expedite payment processes, the minimum application size for reimbursements, direct payments and special commitment would be set at a normal level of AUD$100,000. Direct payments will be utilized for procurement of goods and contracts with payments exceeding the minimum application size. An Australian dollar segregated Designated Account (DA) will be opened at the Australia and New Zealand Banking Group Limited (ANZ) Bank in Kiribati. The DA ceiling will be set at AUD$500,000 to consider project expenditures expected to be financed out of the funds in the DA and to accommodate project requirements. Supporting documentation required for documenting eligible expenditures paid from the DA is Statement Expenditure and the frequency of reporting of expenditure paid by the DA is quarterly, or more often if needed.

66. **Overdue audits**. Currently there is one outstanding audit for the Telecommunications and ICT Development Project for the year ended 31 December 2019 with the same implementing agency MICT. There have been further delays by the KFSU in completing the audit report with expected completion by late June 2022. The Project received exceptional approval to proceed to negotiations notwithstanding the overdue audit.

67. Further details of financial reporting, audit and disbursement arrangements will be provided in the Disbursement and Financial Information Letter. The Project will have a disbursement deadline date of four (4) months after the closing of the Project. The IDA grant proceeds will be disbursed against eligible expenditures as shown in Table 1 below, inclusive of taxes. No counterpart fund or retroactive financing is anticipated under the project. No withdrawal shall be made under Category (2), until the Recipient has provided evidence satisfactory to the Association that the Recipient has enacted and given effect to laws and associated regulations that are consistent with the Principles on Identification for Sustainable Development and which establish and govern the implementation of the National Digital ID System in a manner which guarantees universal coverage and accessibility; ensures the design is robust, secure, responsive and sustainable; and mandates governance arrangements that build trust by protecting Personal Data, privacy and associated user rights.

Table 1. Eligible Expenditure and Allocation of Grant Proceeds:

Category	Allocation of the Credit Allocated (Expressed in SDR)	Amount of the Credit Allocated (expressed in USD equivalent)	Percentage of Expenditures to be Financed (Inclusive of Taxes)
(1) Goods, works, consulting services, non-consulting services, training and workshops, and Operating Costs for components 1, 2, 3.1, 4 and 5 of the Project	7,100,000	9,800,000	100%
(2) Goods, consulting services, non-consulting services, training and workshops, and		2,200,000	100%

Operating Costs for Components 3.2, 3.3, 3.4 of the Project	1,600,000		
Total Amount	8,700,000	12,000,000	

68. **Financial Reporting and Audit.** The KFSU is responsible for submitting a six-month interim unaudited financial report, starting from the first semester following the project's first disbursement to the WB no later than 45 days after semester-end. An annual audit of the Project financial statements will be required. The Kiribati National Audit Office is mandated to audit all Government funds. The audited financial statements, audit report and management letter must be received by the Bank within 6 months of the end of the fiscal year and shall be made publicly available by the Recipient in a manner acceptable to the Bank as per the General conditions of IDA.

69. **Procurement**. Procurement risk is assessed as Substantial. Although the MICT has experience over the past years in implementing World Bank financed projects, it will likely face challenges in sourcing and implementing major procurement packages due to lack of in-house procurement and technical staff. To mitigate procurement associated risks, a full-time procurement consultant will assist the MICT/PIU in conducting its procurement in addition to receiving technical procurement support and oversight by the KFSU. Detailed procurement implementation arrangements and risk mitigation measures are described in **Annex 1**.

70. Procurement activities under the project will be implemented in accordance with the WB's "Procurement Regulations for IPF Borrowers", dated November 2020 (Procurement Regulations). MICT is the implementing agency that will manage all procurements with procurement technical support from the KFSU. The Project Procurement Strategy for Development (PPSD) is being prepared including an initial Procurement Plan. The Project is expected to finance contracts involving technical advisors/consultancy services, non-consultant services, provision of goods of office and IT equipment, and minor works contracts.

C. Legal Operational Policies

	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

D. Environmental and Social

71. **Environmental risk is rated as Moderate** for the Project which may result in moderate direct and downstream environmental risks. The risks are not expected to be complex or significant and have a low probability of serious adverse effects to human health or the environment. Potential risks and impacts include the generation of dust, noise, waste, sedimentation etc. and occupational health and safety impacts to workers from minor construction works (e.g. network installation, digging of trenches and laying of foundations for the data center), the consumption of energy, and the generation of e-waste from the procurement of hardware both directly from the establishment of the containerized data center and as a downstream impact from the implementation of the Digital Government Implementation Roadmap and other work completed by the Digital Government Transformation Office. Any civil works will be completed on previously disturbed land minimizing impacts to biodiversity.

72. **Social risk is rated as Moderate.** Potential risks and impacts include exclusion or inequity in understanding and accessing digital public services; cybersecurity and safety concerns as access increases; labor, community health and safety and land use and screening issues during minor civil works; and potential changes in terms and conditions of employment for some civil servants. Risks associated with increased connectivity and provision of public services through digital means may include cyber-bullying, addiction and exposure to illicit material, and risks relating to unequal access based on gender, age, ability, income, and remoteness. These can be managed through effective stakeholder engagement during project implementation, with a focus on improving and removing barriers to access for all (including the vulnerable), developing safeguards within the institutional frameworks to ensure equitable access and means to engage with and complain about services. The issues associated with the development of an e-services platform and digital ID will be considered as part of stakeholder engagement activities. The civil works and construction impacts are expected to be minor and can be adequately managed. The project may require small-scale land use, but this will be planned on government land or communal land to be leased by the government through a voluntary negotiated settlement. The land will be selected to avoid any displacement of communities from such land. The risk of sexual exploitation and abuse/sexual harassment (SEA/SH) is assessed as low. The project is only expected to employ a minor number of overseas workers and worker behavior can be informed by appropriate training and code of conduct.

73. **Potential risks and impacts will be managed through the implementation of an environmental and social management plan (ESMP), a stakeholder engagement plan (SEP), a labor management procedures (LMP**) and an environmental and social commitment plan (ESCP) that have been developed, consulted, and approved through project preparation. The ESMP, LMP, and SEP were disclosed by the Government on December 1, 2021, and on the Bank's external website on January 25 & 27, 2022 and February 3, 2022, respectively. Environmental and social risk management support will be provided to the PMU through the Kiribati Fiduciary Services Unit (KFSU).

IV. GRIEVANCE REDRESS SERVICES

Communities and individuals who believe that they are adversely affected by a WB supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

V. KEY RISKS

74. **The overall risk of the proposed project is assessed as Substantial**, primarily reflecting limited institutional capacity for project implementation and sustainability.

75. **Technical design risk is rated Substantial, given significant challenges anticipated for coordinating digital government rollout with multiple ministries and agencies.** Ministries currently operate different back-office systems with no interoperability and few strides have been made in digitizing internal government documents or information

and data flows. Project interventions meant to standardize government IT systems and digitalize business flows for improved efficiency and online service delivery (Components 2 and 4) might meet significant resistance to these changes. Resistance to change especially within Government will be mitigated in part through support for a change management strategy (Component 1), with actions that drive adoption, minimize resistance, enhance skills, and maximize return on digital investments. The project will also employ an approach of continuous outreach and awareness with government stakeholders and the public (citizens and businesses), to begin early on and continue over the project lifecycle.

76. **Substantial technical design risk rating also reflects current gaps in the enabling environment for the project, such as the absence of implementing regulations for electronic transactions, of a personal data protection law of general application, and additional safeguards needed for ID and cybercrime, amongst others.** Subcomponent 1.3 interventions to strengthen the legal and regulatory framework for digital transformation are envisioned to address these gaps, however there is a residual risk that the key building blocks for the enabling environment are delayed or do not come into place during the project period, or do not meet the Bank's standards.

77. **The Project proposes to leverage the Development Coordinating Committee, constituted of the Secretaries across all ministries and reporting directly to the Cabinet, as well as an ICT Taskforce encompassing the Heads of the ICT Departments across all ministries, to facilitate coordination and build buy-in for project interventions,** including the operationalization and positioning of the Digital Transformation Office (DTO) as the government entity responsible for coordinating the digital transformation agenda. While the DTO at its initial stages will face challenges, a dedicated team from the current ICT Division of the MICT will be tasked to ensure that there is continuity in staffing and coordination with existing initiatives and stakeholders. The project will also seek to consolidate the design work for multiple components into a small number of consultancies in order to increase efficiency of procurement and reduce the risks of fragmentation of outputs and promote economies of scale, such as to ensure that the digital ID system and National Government Portal are interoperable by default. Furthermore, the World Bank will provide ongoing Bank-Executed TA and implementation support on digital ID to address knowledge and capacity gaps on relevant technologies and trends through the ID4D initiative.

78. **Institutional capacity for implementation and sustainability risk is rated Substantial.** While planned investments are designed to improve efficiency and quality of service delivery over the medium term, the project will require significant efforts supporting change management and new service delivery paradigms based on evolving technologies. Technical project management skills are limited and specific areas of expertise (e.g., in cybersecurity and applications development) are difficult to source locally and will need to be bolstered significantly by external technical resources, and possibly long-term institutional partnerships, including with private sector providers. Existing MICT technical staff are limited and stretched in responsibilities, and border closures with travel restrictions owing to the COVID-19 pandemic in turn impose constraints on the ability to secure and coordinate effectively with external technical resources.

79. **The Project will mitigate this risk in part by investing in good governance frameworks and resources to support project design and implementation activities,** such as the Digital Government implementation roadmap, change management strategy, adequately staffing the PIU, and support for training and capacity-building of PIU and government staff, including on cybersecurity. The Government of Kiribati has adopted a Digital Government Masterplan which will form the basis of the roadmap. Additional resources will also be provided to support project coordination, reporting and stakeholder engagement. The Project will also aim to expedite the operationalization of the DTO/PIU, with implementation support from the WB to ensure adequate staffing and training. To mitigate against

constraints in mobilizing international expertise, exacerbated by travel restrictions, regular (weekly) teleconferencing will be required to coordinate meetings, consultations, and trainings, while local, and potentially regional, consultants with knowledge of local context will be recruited to serve as counterparts for remote advisors. The project will also explore opportunities for South-South knowledge exchanges to build DTO/PIU and the implementing agency capacity with cross-learning on similar interventions in comparable contexts.

80. **Fiduciary risk is rated Substantial**. Procurement related risk is rated "Substantial." Key procurement risks are associated with anticipated: (a) Processing delays, non-compliance with agreed procurement procedures, and poor-quality outputs, due to inadequate in-house capacity and expertise; (b) Delays due to weak in-house capacity including insufficient coordination between project concerned parties during the procurement process. The procurement risk will be mitigated by: (a) the PIU hiring an experienced (relevant to the sector) procurement expert who can further strengthen procurement technical support for the project; (b) the KFSU to be equipped with additional procurement staff and the needed skills and knowledge to boost technical procurement support and oversight for the project; (c) refresher training on the Procurement Regulations and contract management for project staff (MICT/PIU, KFSU, etc.). Additionally, the provision of Hands-on Expanded Implementation Support (HEIS) by the WB for select procurement activities may be initiated based on the request of the Government.

81. **Financial management (FM) risk is rated "Substantial"** as KFSU has recently scaled-up its project management unit with new staff and it will take some time to train and gain experience with managing WB and other development partner-funded projects. In addition, Kiribati had lapsed loans in the last fiscal year, though this issue has now been resolved. To mitigate FM risks, the Project Operational Manual (POM) will include a section on budgeting, disbursement, FM arrangements, monitoring and reporting, and a provision for additional FM support during project implementation.

RESULTS FRAMEWORK AND MONITORING

Results Framework

COUNTRY: Kiribati

Kiribati Digital Government Project

Project Development Objectives(s)

To build the foundations and strengthen the Recipient's technical and institutional capacity for digital public service delivery.

Project Development Objective Indicators

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Establishing Foundations for Digital Government							
Establishment and operationalization of Digital Transformation Office (Yes/No)		No	No	Yes	Yes	Yes	Yes
Regulatory framework for digital government and digital economy adopted (Yes/No)		No	No	Yes	Yes	Yes	Yes
Services using digital identity verification of persons (Number)		0.00	0.00	0.00	0.00	1.00	3.00
National portal users reporting satisfaction with select public digital services (Percentage)		0.00	0.00	0.00	0.00	0.00	60.00
Of which women (Percentage)		0.00	0.00	0.00	0.00	0.00	50.00

Intermediate Results Indicators by Components

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Component 1. Digital Government Enabling Environment							
Digital Government Implementation Roadmap Completed (Yes/No)		No	Yes	Yes	Yes	Yes	Yes
Change management strategy adopted (Yes/No)		No	No	Yes	Yes	Yes	Yes
Development of a legal and regulatory framework that adequately protects individuals' personal data and privacy (Yes/No)		No	No	No	Yes	Yes	Yes
Adoption of implementing regulations on e-transactions to ensure applicability of e-transactions Act across public sector (Yes/No)		No	No	No	No	No	Yes
Number of government officials trained under the cybersecurity program (Number)		0.00	0.00	0.00	10.00	20.00	30.00
Of which female (Number)		0.00					15.00
Component 2. Digital Government Foundational Infrastructure							
Government Enterprise Architecture Developed (Yes/No)		No	No	Yes	Yes	Yes	Yes
Government Cloud Designed and Operationalized (Yes/No)		No	No	No	Yes	Yes	Yes

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Disaster Recovery and Business Continuity Plan Adopted (Yes/No)		No	No	Yes	Yes	Yes	Yes
Component 3. Digital ID and e-Signatures							
Gender and Inclusion Diagnostic Completed (Yes/No)		No	No	Yes	Yes	Yes	Yes
National ID and civil registration system upgraded (Yes/No)		No	No	No	Yes	Yes	Yes
Digital ID and e-Signature system operational (Yes/No)		No	No	No	Yes	Yes	Yes
Number of people with digital IDs (Number)		0.00	0.00	0.00	0.00	10,000.00	20,000.00
of which are female (Number)		0.00	0.00	0.00	0.00	5,000.00	10,000.00
Component 4. Government Services Portal and Priority User-Centric Services							
National government portal designed and developed (Yes/No)		No	No	No	Yes	Yes	Yes
User-centric digital services implemented by government (Number)		0.00	0.00	0.00	1.00	2.00	3.00
Of which are providing information on available GBV prevention and response services (Number)		0.00	0.00	0.00	0.00	0.00	1.00
Citizen engagement feedback mechanism incorporated in national government portal (Yes/No)		No	No	No	No	Yes	Yes

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Users of select digital services that are women (Percentage)		0.00	0.00	0.00	0.00	25.00	50.00
Of whom from Outer Islands (Percentage)		0.00					30.00
Component 5. Project Management							
Grievances responded to and/or resolved within stipulated service standards (Percentage)		0.00	0.00	0.00	30.00	50.00	70.00

Monitoring & Evaluation Plan: PDO Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Establishment and operationalization of Digital Transformation Office	Establishment and operationalization of the Digital Transformation Office	Annual	MICT	MICT/DTO to submit project implementation report detailing legal establishment of DTO, Project Operational Manual, policies and governance for DTO, organizational organogram, staff TORs and contracts, business plan and annual budgeting	MICT/DTO

Regulatory framework for digital government and digital economy adopted	Laws and regulations adopted to support digital government, that includes addressing cybersecurity, cybercrime, data protection, digital ID, digital transactions, e-commerce and Netsafe principles and practices.	Annual	MICT/DTO	MICT will report on whether the law(s) comprising the framework for digital services has been passed by Parliament, approved by Cabinet and signed into law by the President	MICT/DTO
Services using digital identity verification of persons	Measures the number of services that are using automated authentication capabilities in the digital ID system and interfaces developed through the project to verify the identity of their customers and clients.		Software providing digital identity verification of persons.	Generated reports on number of successful verifications.	Ministry of Justice
National portal users reporting satisfaction with select public digital services	National portal users reporting satisfaction with select public digital services	Two beneficiary satisfaction surveys of nationwide national portal users will be conducted during project	MICT/DTO	National survey of government portal users conducted by DTO/PIU	DTO/PIU

		implementation, with baseline tentatively planned within first two years of implementation and another towards the end of project implementation			
Of which women					

Monitoring & Evaluation Plan: Intermediate Results Indicators					
Indicator Name	**Definition/Description**	**Frequency**	**Datasource**	**Methodology for Data Collection**	**Responsibility for Data Collection**
Digital Government Implementation Roadmap Completed	Elaboration and adoption of Digital Government Implementation Roadmap	Annual	MICT/DTO	MICT/DTO Progress Report	MICT/DTO
Change management strategy adopted	Strategy for change management elaborated and adopted	Annual	MICT/DTO	MICT/DTO Progress report	MICT/DTO
Development of a legal and regulatory framework that adequately protects	Relevant data protection and/or privacy laws passed	Annual	MICT/DTO Progress	MICT/DTO to submit project implementation	MICT/DTO

individuals' personal data and privacy	and implemented, including through the designation of an independent data protection commission		Reports	report and relevant documentation outlining Cabinet approval and Presidential signing of law into effect	
Adoption of implementing regulations on e-transactions to ensure applicability of e-transactions Act across public sector	Implementing regulations giving effect to e-transactions Act (enable e-transactions and e-signature) across the public sector adopted by government to promote a whole-of-government approach to e-service delivery	Annual	MICT/DTO Progress Report	MICT/DTO to submit project implementation report and relevant documentation outlining Cabinet approval and Presidential signing of law into effect	MICT/DTO
Number of government officials trained under the cybersecurity program	Implementation of training activities relating to cybersecurity and digital government foundations designed to strengthen cybersecurity (disaggregated by gender)	Annual	MICT/DTO	MICT/DTO progress reports, outlining attendance at cybersecurity training activities	MICT/DTO
Of which female					
Government Enterprise Architecture Developed	Government Enterprise Architecture has been developed and is operational	Annual	MICT/DTO progress report / project data	MICT/DTO to report on progress	MICT/DTO

Government Cloud Designed and Operationalized	Government Cloud Solution has been designed and is operational	Annual	MICT/DTO Progress Report	MICT/DTO to track completion	MICT/DTO
Disaster Recovery and Business Continuity Plan Adopted	Development and Adoption of a Disaster Recovery and Business Continuity Plan for govt data center and cloud-based Govt IT systems	Annual	MICT/DTO Progress Report	MICT/DTO to track completion	MICT/DTO
Gender and Inclusion Diagnostic Completed	Gender and Inclusion Diagnostic completed		MICT/DTO	Qualitative assessment of constraints women and disadvantaged groups face in accessing public services incl. ID and online services. Methodology TBD	MICT/DTO
National ID and civil registration system upgraded	Enhancements to the National ID and Civil Registration System are operational.	Annual	MICT/DTO Progress report incorporating inputs from MOJ	Official report or announcement; Completion report by vendor	Ministry of Justice
Digital ID and e-Signature system operational	The digital ID and e-Signature system goes live, with the ability to issue digital IDs to registrants and facilitate electronic signatures	Annual	MICT/DTO Progress report incorporating inputs from MOJ	Official report or announcement; Completion report by vendor	Ministry of Justice

Number of people with digital IDs	People issued with digital IDs, disaggregated by gender and location	Annual	MICT/DTO Progress report incorporating inputs from MOJ	MOJ Database	Ministry of Justice
of which are female					
National government portal designed and developed	Design and implementation of national government has been completed	Annual	MICT/DTO Progress Reports	MICT/DTO to track completion from vendor reports following demo, user testing, and stress tests	MICT/DTO
User-centric digital services implemented by government	Select user-centric digital services have been implemented by government on national portal	Annual	MICT/DTO Progress Report	MICT/DTO to track completion from vendor reports following demo, user testing, and stress tests	MICT/DTO
Of which are providing information on available GBV prevention and response services	Informational service on available resources for GBV Prevention and Response.	Annual	MICT/DTO	MICT/DTO Progress Report	MICT/DTO
Citizen engagement feedback mechanism incorporated in national government portal	Two-way citizen engagement feedback mechanism incorporated in national government portal	Annual	MICT/DTO Progress Report	MICT/DTO to track completion from vendor reports following demo, user testing, and stress tests	MICT/DTO
Users of select digital services that are women	This indicator will track the percentage of users of	Annual	MICT/DTO	Survey data and/or website usage	MICT/DTO

	select digital services supported through the Project who are women, disaggregated by location			statistics, disaggregated by sex	
Of whom from Outer Islands					
Grievances responded to and/or resolved within stipulated service standards	Percentage of grievances, information requests, or feedback received via the project GRM responded to and/or resolved within stipulated service standards (ex: High/Medium/Low priority responded to within 5/10/30 working days respectively)	Continuous	MICT/DTO Reports and GRM Database	MICT/DTO to record relevant data in GRM database	MICT/DTO

ANNEX 1: Implementation Arrangements and Support Plan

COUNTRY: Kiribati
Kiribati Digital Government Project

1. **The Ministry of Information, Communication and Transport (MICT) will be the main and overall implementing entity**. MICT will establish a Digital Transformation Office (DTO) which will assign staff and consultants to act as the Project Implementation Unit (PIU). The Ministry of Justice (MOJ) will be responsible for the implementation of Component 3, in coordination with MICT/DTO. In addition, it will work with MICT/DTO to coordinate relevant policy and legal reforms under Component 1.3. The DTO functions are expected to continue beyond the lifetime of the Project as the key management and coordination body for digital development in Kiribati. The Kiribati Fiduciary Services Unit (KFSU) will provide support and oversight to the PIU on fiduciary aspects. These arrangements will be governed by the guidelines and procedures set out in a Project Operations Manual (POM).

2. **The Development Coordination Committee (DCC) with technical guidance from the ICT Taskforce (ICTT) will support MICT in project implementation.** The DCC will perform the role of a project steering committee and help coordinate actions of other ministries to improve coordination, quality, timeliness, and relevance of activities. The DCC comprises of Secretaries from across all Government Ministries and reports directly to the Cabinet. The Cabinet is the top decision-making body in Kiribati and includes the President, Vice President, and select Ministers including the Ministry of Information, Communication and Transport. The ICTT comprises the Heads of the ICT departments across different ministries. The roles and responsibilities, operating procedures, and coordination mechanisms of the DCC and ICTT are to be outlined in respective Terms of References and the Project Operational Manual (POM).

3. **Digital Transformation Office (DTO).** In addition to its PIU function, the DTO's responsibilities will include, but are not limited to:
    a. Leading ICT strategy planning, implementation, and supervision, as well as national coordination on the digital transformation agenda;
    b. Leading the initiation, review, update, and coordination on ICT-related legislation, regulations, policies, and programs to support the development of the Government's digital transformation agenda - including on data protection, e-transactions, and cybersecurity;
    c. Development of an Interoperability Framework and ICT architecture for government, building on a review of existing business policies, practices, and procedures across ministries and agencies;
    d. Coordinating the standardization of ministerial hardware, software, applications development and associated efficient procurement practices, to the extent practicable;
    e. Administering and supporting digital government technical solutions, including infrastructure and applications;
    f. Planning and implementing training and awareness-raising activities on digital transformation;
    g. National cooperation on digital transformation with local government and various stakeholder groups, including telecoms, banks, academia, and CSOs to expand access to and adoption of digital public services;
    h. International cooperation on the digital transformation agenda.

4. **Environment and social (E&S) risk management will be supported by the KFSU**. The KFSU is based within the Ministry of Finance and Economic Development (MFED) who will provide Financial Management, Procurement, E&S, and Monitoring & Evaluation (M&E) oversight to the Project. The KFSU is a new unit and will require capacity building with respect to the implementation of the WB Environmental and Social Framework (ESF). The PIU, supported by the

KFSU, will lead the development of projects E&S instruments. The WB will continue to provide support regarding ESF capacity-building and support for implementation as needed. The detailed implementation arrangements for the project would be developed as preparation progresses.

5. **Procurement Arrangements**. A full-time procurement consultant will assist MICT/PIU in conducting its procurement in addition to the technical procurement support and oversight by the KFSU (2 additional Procurement Officers and 1 Procurement Specialist [international/ongoing selection process]). The PIU, supervised by a MICT Official (Director Level), will be responsible for project procurement activities, planning, design and implementation with procurement technical support by the KFSU. An updated assessment (building on the current Kiribati Connectivity Project experience) of MICT's procurement capacity to carry out project procurement identified the following risks:

Perceived Risk	Proposed Mitigation action	Timeframe	Action by
Weak procurement capacity	In-house dedicated procurement staff to work and follow up closely on procurement activities implementation by the KFSU. Application of HEIS arrangement pursuant to the Procurement Regulations for IPF Borrowers Section III. Governance 3.10-11.	Soon after project effectiveness Request for HEIS during the preparation stage	MICT, KFSU MFED/MICT
Delay in procurement due to unfamiliarity with the WB procurement procedures	Conduct training/workshop on applicable project procurement procedures and trimester project operations clinic. The WB will provide intensive implementation support to the MICT, KFSU to closely monitor procurement progress during project implementation. Recruit an experienced Procurement Specialist (International) to assist the PIU in procurement planning, draft procurement documents/TOR/specifications. The expert to sign intermittent contract to provide support to PIU remotely from home office.	During implementation	WB & MICT, KFSU MICT, KFSU
Delay in project implementation due to the delays in adopting project procurement plan	Preparation of the project procurement plan, updates, utilizing it as a monitoring tool for project implementation such STEP Provide technical support during the selection process and closely monitor the implementation of project activities Conduct training on FM, community level Procurement, record keeping etc. for the targeted farmer groups.	Draft procurement plan prepared during project design After project effectiveness	MICT, KFSU and WB MICT, KFSU MAF/PMU and WB

6. **Procurement Thresholds and Prior Review Thresholds**. The Procurement Plan shall set forth those contracts which shall be subject to the WB's Prior Review. All other contracts shall be subject to Post Review by the WB.

7. **Systematic Tracking of Exchanges in Procurement (STEP).** All the communication and exchanges on project procurement will be done through the STEP system. MICCTD will prepare a Procurement Plan for at least the first 18 months based on the PPSD analysis. Procurement plan will be uploaded onto the STEP and be published in the Project's database and on the WB's external website once the WB provides no objection. MICT/KFSU will update the procurement plan in agreement with the WB at least annually or as required to reflect project implementation needs.

8. **Procurement Support Plan**. Procurement supervision will be part of the overall supervision effort for this Project. In addition to the prior review supervision, the WB procurement team will carry out post review on a sample contract basis, on an annual basis when necessary.

9. **Financial Management (FM) Arrangements.** Overall, the proposed project FM arrangements of the KFSU meet the minimum requirements of the WB. The KFSU is located within MFED and provides the day-to-day FM support and is currently staffed by three finance and administration officers as well as other PMU staff and is financed by the Kiribati Outer Islands Transport Infrastructure Investment Project (KOITIIP) WB project. KFSU has recently scaled up its project management unit with new staff and it will take some time to train and gain experience with managing WB and other donor projects. In addition, Kiribati had lapsed loans in the last fiscal year which has been resolved. To mitigate FM risks, the Project Operational Manual (POM) will include a section on budgeting, disbursement, financial management arrangements, monitoring and reporting, and a provision for additional FM support will be assessed during the project implementation. In addition, a dedicated project accountant will be financed by the project to be located at the KFSU.

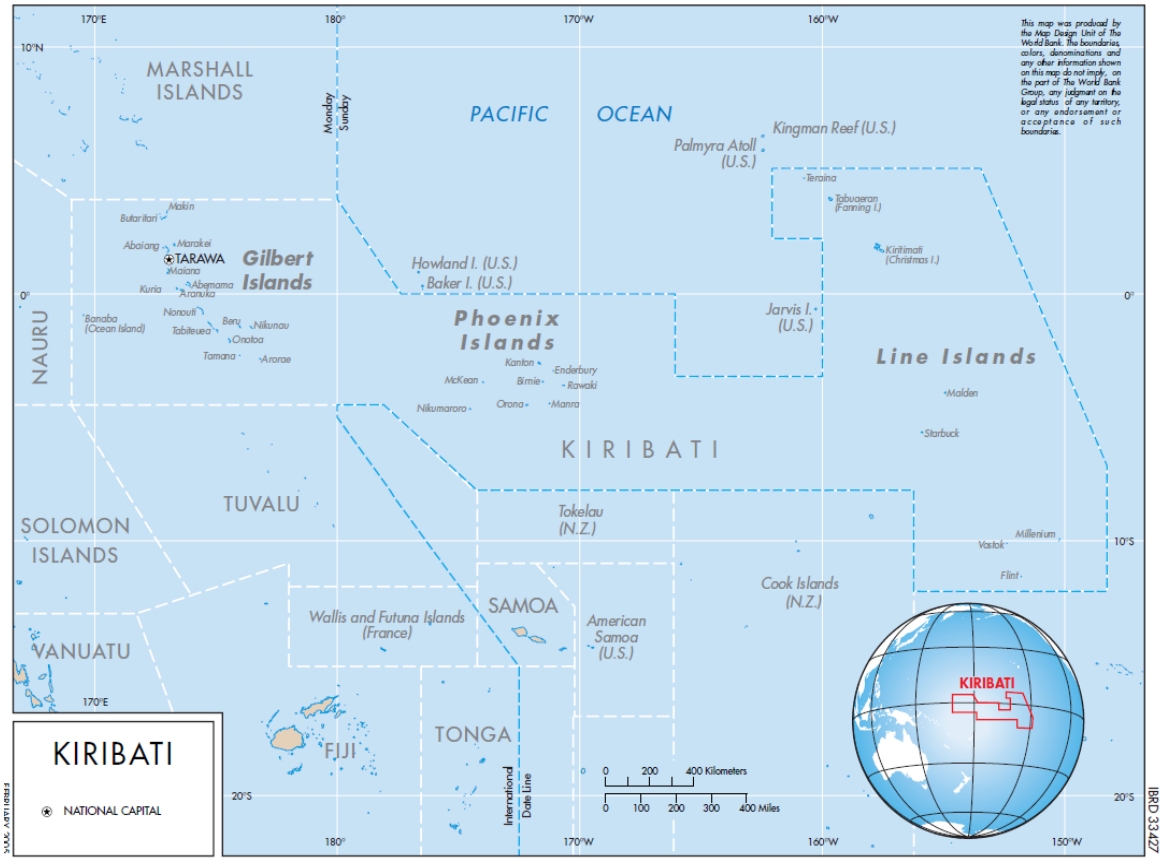
10. **FM Supervision Plan.** Based on the FM risk rating, FM supervision of the project will be undertaken for at least six months virtually/on site travelling permissible. Ongoing implementation support and training will be provided by Bank staff on financial management (and disbursement by WFA Manila) during each supervision mission and remotely.

FM activity	**Frequency**
Desk reviews	
Unaudited interim financial reports - review	Half-yearly
Annual audit report - review	Annually
On site visits	
Formal supervision	Half yearly initially, then Annually based on risk and performance ratings.
Monitoring of actions taken on issues highlighted in review of the interim financial reports and audit reports, auditors' management letters, and other applicable reviews	As needed.
Transaction reviews (if needed)	On an as needed basis, and in the case of any issue arising.

FM Implementation Plan

Agreed Action & Next Steps	Responsible Party	Timeline
Main Action Items –are: 1 A Project Operations Manual (POM) will be developed not later than three months after the effective date with FM procedures for reporting, roles and responsibilities, contract management, monitoring, budget preparation, tax policies etc.	KFSU	By not later than three months after the effective date
2. IFR to be prepared every semester for the project	KFSU	Due not later than 45 days after the semester
3. An annual audit of the project financial statements will be required to be undertaken by the Kiribati Audit Office for the fiscal period Jan – December	KFSU	Due not later June 30
4. Coordination between KFSU, MICT	KFSU/MICT	ASAP
5. Financial Management Training for budget preparation, reporting and monitoring for MICT	KFSU	ASAP

MAP – Republic of Kiribati in the South Pacific



ANNEX 2: Climate Co-Benefits Table

Sub-components / Activity	Financing (US$m)	Adaptation Measures	Mitigation Measures
Component 1. Digital Government Enabling Environment (US$ 0.6M)			
Enabling policies and legislation for Digital Transformation	**0.6**	As outlined in section 18 and 27 Kiribati faces climate induced risks, including flooding, which threatens digital infrastructure and public service delivery. A **TA** under sub-component 1.1 will encompass support for strengthening the digital skills of government staff including training on how to use digital tools to be able to offer and deliver online government services to citizens and support business continuity during times of adverse climate events. Under sub-component 1.2, a **roadmap** will be developed including guidance on how to ensure digital infrastructure is designed to take climate change risks into consideration, for example building in areas that are not prone to climate inducted weather events, building with weather resistant materials, wider drains for flood management. The roadmap will also include guidance on how to include renewable energy sources (see mitigation), which will help reduce energy disruptions that could be generated by impacts of weather events on the diesel transportation value chain.	Under sub-component 1.2, a **roadmap** will be developed that includes provisions to ensure infrastructure that is funded by the project, whenever possible, is based on high energy efficiency standards and renewable energy sources, standards could include EDGE certification and energy STAR labelled solutions.
Component 2. Digital Government Foundational Infrastructure (US$5M)			
2.1 Government Enterprise Architecture. 2.2 Secure Government Network and Data Center, Disaster Recovery / Business	**5**	**Resilient infrastructure** As per the roadmap the planning and building of digital architecture solutions and infrastructure in Component 2 will include climate risk analysis and **resilience measures** to improve the ability of digital solutions and infrastructure to withstand the impacts of climate change. **2.1:** Enterprise architecture will consider climate resilience, for example redundancy or back-ups solutions to support business	As specified in the roadmap energy efficiency standards will be incorporated into the planning and design of infrastructure that is funded by the project to reduce GHG emissions. Examples include: - The project will consider climate implications of decommissioning legacy equipment vs. investing in

Continuity, Government Cloud. Government core systems		continuity in the case of a climate induced weather event causing network failure, power loss etc. **2.2:** Digital infrastructure solutions, including cloud and datacenter options will take climate risks into account to enhance the resilience of the infrastructure itself, this could be through site selection, weather resistant building materials. Supporting renewable energy solutions (see mitigation) will also help reduce energy disruptions that could be generated by impacts of weather events on the diesel transportation value chain. **Resilience effect** **2.1:** The development of an improved data and cloud infrastructure, as well as Government Network allows digital delivery platforms and payment gateways, which will strengthen continuity of operations during weather-related. The component will also support the development of a business continuity plan encompassing hardware and software-related measures, as well as workflows to ensure that human resources are available and adequately trained to ensure continuity of service provision in the event of an emergency or climate disaster. The ability to store critical government data mitigates against risks of loss due to adverse weather impacts such as flooding and cyclones. ***2.2:*** The Government core systems will improve communications across key Government agencies and enable the deployment of disaster risk monitoring tools enhancing preparedness and response to extreme weather events, improve dissemination of early warnings to help mitigate against climate-related risks, including floods, improve damage assessment and response times to provide relief to citizens affected.	more efficient technology. - Investments and procurement for new digital infrastructure will, whenever possible, include specifications mandating the adaptation of energy efficient and green certifications, such as LEED, Green Globes, and Energy Star to reduce energy consumption and CO2 emissions. - Cloud and datacenter investments will follow green procurement principles encouraging green design choices (cooling, energy efficiency) and consider best practices for energy efficient datacenters operations. - Solutions will, when possible, rely on renewable energy sources like solar panels to reduce reliance on diesel generators and reduce GHG emissions.

Component 3. Digital ID and e-Signatures Platform (US$1.5M)			
Developing an inclusive and trusted Digital ID and e-Signatures System	1.5	The development of Digital ID would enable relief and strengthen disaster response during climate disasters and events. *As described in section 33* of the PAD, digital ID for financial services would allow to transfer funds for disaster response in areas affected and inaccessible in the event of a climate disaster. In the health sector, a Digital ID would allow us to better monitor climate-related diseases. If physical office locations are inaccessible in the event of natural disasters, digital platform would allow to provide business/service continuity.	Accessing services online will reduce the need for people to physically travel to government offices, particularly from the outer islands, which will significantly reduce the amount of fossil fuel consumed to facilitate inter-island travel. This will help achieve the long-term effect of reducing GHG emission.
Component 4. Government Services Portal and Priority User-Centric Digital Services (US$ 4M)			
Identifying and implementing 1-2 priority citizen-centric public services to be deployed through the portal	4	If physical office locations are inaccessible in the event of natural disasters, the digital services as developed in the component will allow business/service continuity and enhance the resilience of the population. Given the significant climate change vulnerabilities faced by Kiribati, timely dissemination of weather alerts *as described in section 34* of the PAD would give the citizens an opportunity to mitigate against risks and minimize losses to property and lives.	Accessing services online will reduce the need for people to physically travel to government offices, particularly from the outer islands, which will reduce the amount of fossil fuel consumed to facilitate inter-island travel. This will help achieve GHG emission reduction.

ANNEX 3: Preliminary Gender and Inclusion Considerations for Foundational ID systems and e-Services in Kiribati[48]

1. **There are no apparent gender disparities in the coverage of the national ID system**. Administrative data from MOJ reveals that around 80 percent of the population aged 18 and older have registered for a national identity card. However, around 55 percent of personalized cards have not yet been collected. The 2018-19 Kiribati Social Development Indicator Survey (KSDIS) found that 92 percent of children aged below five have had their birth registered, but with 33 percent of those not receiving a birth certificate. In both cases, there are no gender disparities in coverage. The KSDIS shows that factors that reduce birth registration coverage include younger children, lower wealth quintile households, and lower levels of education of the mother.

2. **Domestic work, care responsibilities, and travel costs pose significant constraints to accessing public services, particularly for women and Outer Island residents**. Two significant barriers for both the national identity card and civil registration are the fees involved, [49] and the requirement for physical presentation to MOJ offices, which comes with additional indirect costs (e.g., for travel and taking time off work, domestic work, and other community activities). MOJ has established units in the two main hospitals in South Tarawa that share information directly with the Civil Registration Office (CRO) in Bairiki. If the birth takes place elsewhere (e.g., health clinics), then it is the family or birth attendant's responsibility to take the birth notification form to the Island Council Clerk to complete the registration. The additional indirect costs disproportionately impact on women and people living in remote islands. These challenges are compounded by the current process that any fees must be paid at a revenue office and then a physical return to the MOJ office to present evidence of payment. This process could at least partially explain the significant gap between national identity card registration and collection.

3. **These barriers and costs are a broader issue for public sector service delivery in Kiribati.** The requirement to attend different offices result in lengthy wait-times, costly travel requirements, and complex logistics that are prohibitive for disadvantaged groups, such as mothers of young children, the elderly, persons with disabilities, and people living in remote communities. Applying for a passport requires a visit to five separate locations across multiple days. Obtaining a medical certificate requires travel to a hospital, which typically takes an entire day to complete. Applying for employment with the government requires physical presence at the Public Service Office to complete a paper-based application, but also present original supporting documents.

4. **To promote inclusion and women's economic empowerment, the Project's interventions seek to address the noted barriers**. Component 3 will simplify national identity card and civil registration processes to reduce complexity and direct/indirect costs to the public and government.[50] Components 3 and 4 will integrate a digital ID into priority digitalized services, with emphasis on those enabling women and Outer Island residents to access services online. This would include some civil registration and national identity card transactions that could be completed online without the need to visit a MOJ office. Other examples include telehealth for basic medical requirements, applying for government jobs, and applying for social protection. The Project will undertake these activities in ways that reduce risks that limited digital literacy will introduce new barriers (and digital divides), including, for example, through human centered design approaches. Furthermore, the Project will invest in legal reforms to boost trust in digital services and promote online safety particularly for women and children.

[48] This Annex describes preliminary findings of a rapid ID4D Diagnostic carried out as part of Project preparation.
[49] To obtain a national identity card costs AU$10 and the late fee for birth registration (after the first birthday) is AU$9, which could be substantial costs for lower income households.
[50] For example, a simple national identity card with a barcode (rather than a chip) or a digital ID smartphone app equivalent to the national identity card could be free