Public Disclosure Authorized

Public Disclosure Authorized

THE WORLD BANK
IBRD • IDA | WORLD BANK GROUP

FOR OFFICIAL USE ONLY

Report No: PAD4226

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT
ON A
PROPOSED GRANT

IN THE AMOUNT OF SDR 21.1 MILLION
(US$30 MILLION EQUIVALENT)

TO THE

REPUBLIC OF THE MARSHALL ISLANDS

FOR A

DIGITAL REPUBLIC OF THE MARSHALL ISLANDS PROJECT

August 9, 2021

Digital Development Global Practice
East Asia And Pacific Region

This document is being made publicly available prior to Board consideration. This does not imply a presumed outcome. This document may be updated following Board consideration and the updated document will be made publicly available in accordance with the Bank's policy on Access to Information.

CURRENCY EQUIVALENTS

(Exchange Rate Effective June 30, 2021)

Currency Unit =	US$
SDR 1 =	US$1.42642

FISCAL YEAR
January 1 - December 31

Regional Vice President:	Victoria Kwakwa
Country Director:	Stephen Ndegwa
Global Director:	Boutheina Guermazi
Practice Manager:	Nicole Klingen
Task Team Leaders:	James L. Neumann, Natasha Beschorner

ABBREVIATIONS AND ACRONYMS

$	United States dollars or US$
2G/3G	Second Generation / Third Generation
4G	Fourth Generation
ADSL	Asymmetric Digital Subscriber Line
AG	Attorney-General
CAA	Contract Administration Agent
CERT	Cyber-security Emergency Response Team
CFA	Compact of Free Association
CIU	Central Implementation Unit
CO2	Carbon dioxide
COVID-19	Coronavirus Disease
CPF	Country Partnership Framework
CSG	Compact Sector Grant
CTF	Compact Trust Fund
DGS	Digital Government Strategy
DIDA	Division of International Development Assistance
DSL	Digital Subscriber Line
ESCP	Environmental and Social Commitment Plan
ESMP	Environmental and Social Management Plan
ESRS	Environmental and Social Review Summary
FA	Financing Agreement
FTTP	Fiber-to-the-premises
FM	Financial Management
GB	Gigabyte
Gbps	Gigabits per second
GBV	Gender Based Violence
GDO	Gender Development Office
GDP	Gross Domestic Product
GM	Grievance Mechanism
GNI	Gross National Income
GSM	Global System for Mobile communications
kWh	Kilo-watt hour
KYC	Know Your Customer
IA	Implementing Agency
ICR	Implementation and Completion Results Report
ICT	Information and Communications Technology
IDA	International Development Association
LTE	Long-Term Evolution
M&E	Monitoring and Evaluation

Mbps	Megabits per second
MFBPS	Ministry of Finance, Banking and Postal Services
MOCIA	Ministry of Culture and Internal Affairs
MOU	Memorandum of Understanding
MTCIT	Ministry of Transportation, Communications and Information Technology
NDC	Nationally Determined Contributions
NTA	National Telecommunications Authority
PFM	Public Financial Management
PIU	Project Implementation Unit
POM	Project Operations Manual
PPA	Project Preparation Advance
PPP	Public Private Partnership
PPSD	Project Procurement Strategy for Development
PSC	Project Steering Committee
RMI	Republic of the Marshall Islands
RPF	Regional Partnership Framework
RPU	Revenue per user
RUS	Rural Utilities Service
SDR	Special Drawing Rights
SMS	Short Message Service
SORT	Systematic Operations Risk-rating Tool
SPV	Special Purpose Vehicle
STEP	Systematic Tracking of Exchanges in Procurement
UIN	Unique Identification Number
WB	World Bank

TABLE OF CONTENTS

DATASHEET **1**

I. STRATEGIC CONTEXT **10**

A. Country Context 10

B. Sectoral and Institutional Context 11

C. Relevance to Higher Level Objectives 16

II. PROJECT DESCRIPTION **17**

A. Project Development Objective 17

B. Project Components 18

C. Project Beneficiaries 22

D. Results Chain 25

E. Rationale for Bank Involvement and Role of Partners 25

F. Lessons Learned and Reflected in the Project Design 26

III. IMPLEMENTATION ARRANGEMENTS **28**

A. Institutional and Implementation Arrangements 28

B. Results Monitoring and Evaluation Arrangements 29

C. Sustainability 29

IV. PROJECT APPRAISAL SUMMARY **31**

A. Technical Analysis 31

B. Economic and Financial Analysis 38

C. Fiduciary 41

D. Legal Operational Policies 42

E. Environmental and Social 43

V. GRIEVANCE REDRESS SERVICES **43**

VI. KEY RISKS **44**

VII. RESULTS FRAMEWORK AND MONITORING **47**

ANNEX 1: Implementation Arrangements and Support Plan **60**

ANNEX 2: Gender Assessment **70**

ANNEX 3: Climate Co-Benefits Assessment **77**

DATASHEET

BASIC INFORMATION

Country(ies)	Project Name	
Marshall Islands	Digital Republic of the Marshall Islands Project	
Project ID	**Financing Instrument**	**Environmental and Social Risk Classification**
P171517	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
31-Aug-2021	31-Aug-2028

Bank/IFC Collaboration

No

Proposed Development Objective(s)

To expand access to the internet, promote private sector investment in climate resilient digital infrastructure, and establish the critical foundations for digital government services and the digital economy in the Recipient's territory.

Components

Component Name	Cost (US$, millions)
Component 1. Public Private Partnership and Market Structure Reform	28,000,000.00
Component 2. Digital Government Platforms, Cybersecurity and Digital Skills	6,500,000.00
Component 3. Enabling environment for Digital Government and Digital Economy	1,000,000.00
Component 4. Project Implementation Support	2,000,000.00

Organizations

Borrower:	Republic of the Marshall Islands
Implementing Agency:	Ministry of Finance, Banking and Postal Services Ministry of Transport, Communications and Information Technology Ministry of Culture and Internal Affairs - Gender Development Office

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Project Cost	37.50
Total Financing	37.50
of which IBRD/IDA	30.00
Financing Gap	0.00

DETAILS

Private Sector Investors/Shareholders

Equity	Amount	Debt	Amount
Government Contribution	30.00		
IDA (Credit/Grant)	30.00		
Non-Government Contributions	7.50		
Private Sector Equity	7.50		
Total	**37.50**		**0.00**

IDA Resources (in US$, Millions)

	Credit Amount	Grant Amount	Guarantee Amount	Total Amount
Marshall Islands	0.00	30.00	0.00	30.00
National PBA	0.00	30.00	0.00	30.00
Total	**0.00**	**30.00**	**0.00**	**30.00**

Expected Disbursements (in US$, Millions)

WB Fiscal Year	2022	2023	2024	2025	2026	2027	2028	2029
Annual	3.00	4.00	5.00	6.00	5.00	4.00	2.50	0.50
Cumulative	3.00	7.00	12.00	18.00	23.00	27.00	29.50	30.00

INSTITUTIONAL DATA

Practice Area (Lead)

Digital Development

Contributing Practice Areas

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	High
2. Macroeconomic	Moderate
3. Sector Strategies and Policies	High
4. Technical Design of Project or Program	Moderate
5. Institutional Capacity for Implementation and Sustainability	High
6. Fiduciary	Substantial
7. Environment and Social	Moderate
8. Stakeholders	High

9. Other	
10. Overall	● High

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
Financing Agreement Schedule 2, Section I.A.1. The Recipient shall provide oversight, coordination, and support for Project implementation through the Project Steering Committee in accordance with the provisions of this Agreement and the Project Operations Manual.

Sections and Description
Financing Agreement Schedule 2, Section I.A.2. The Recipient shall maintain, during the entire period of the Project implementation, the Project Steering Committee, chaired by a Minister, and comprised of, inter alia, senior level representatives from the relevant ministries and other stakeholders, all as appointed by the Recipient's cabinet and set forth in the Project Operations Manual, and with an institutional framework, functions, and resources required for the implementation of the Project, in form and substance satisfactory to the Association.

Sections and Description
Financing Agreement Schedule 2, Section I.A.3. The Recipient shall maintain, during the entire period of the Project implementation, the Project Implementation Unit within the Ministry of Finance, Banking and Postal Services, and upon the execution of the PPP Contract or the achievement of other milestone(s) agreed by the Recipient and the Association and set forth in the Project Operations Manual, within the Ministry of Transportation, Communications and Information Technology, with a mandate, composition and resources satisfactory to the Association, which shall be responsible for, inter alia, carrying out day-to-day management of the Project and coordinating overall Project implementation, all in accordance with the details set forth in the Project Operations Manual.

Sections and Description
Financing Agreement Schedule 2, Section I.A.4. The Recipient shall maintain, during the entire period of the Project implementation, the Central Implementation Unit within the Ministry of Finance, Banking and Postal Services, with a mandate, composition and resources satisfactory to the Association, which shall be responsible for providing support on fiduciary aspects of Project management and implementation, including, inter alia, procurement, financial management, audit, monitoring and evaluation, and environmental and social risk management.

Sections and Description
Financing Agreement Schedule 2, Section I.A.5. The Recipient shall maintain, during the entire period of the Project implementation, a Project focal point within the Office of the Attorney-General, with terms of reference, qualifications and experience satisfactory to the Association, who shall be responsible for supporting the Ministry of Finance, Banking and Postal Services with the implementation of Part 1 of the Project and the Ministry of Transportation, Communications and Information Technology with the implementation of Part 3.2 of the Project.

Sections and Description
Financing Agreement Schedule 2, Section I.B.1. The Recipient shall ensure that the purchase of shares in the form of a buy-out of minority private shareholders of NTA is carried out in accordance with the valuation methodology, offer structure and details set forth in the Project Operations Manual.

Sections and Description
Financing Agreement Schedule 2, Section I.B.2. The Recipient shall engage, prior to the execution of the PPP Contract by the parties thereto, and thereafter maintain such role, during the entire period of the PPP Contract, a firm or an individual to serve as a contract administration agent, with terms of reference, qualifications and

experience satisfactory to the Association, which shall be responsible for, inter alia, supporting the Recipient on its administration and monitoring of the execution of the PPP transaction in accordance with the details set forth in the Project Operations Manual.

Sections and Description

Financing Agreement Schedule 2, Section I.B.3. The Recipient shall, under PPP arrangements, enter into a legally binding contractual arrangement with a private partner, selected on a competitive basis in accordance with the criteria and requirements set forth in the Project Operations Manual and the Procurement Regulations, for the rollout and delivery of high-quality, low-cost digital infrastructure and services under Part 1.3 of the Project, in form and substance satisfactory to the Association and in accordance with the details set forth in the Project Operations Manual (referred to herein for east of reference only as the "PPP Contract"). Without limitation to the generality of the foregoing, the PPP Contract shall, inter alia: (a) reflect the institutional and governance arrangements and performance obligations of the parties in accordance with the details set forth in the Project Operations Manual, including to require the private partner to commit to invest its own funds to meet any additional capital expenses, working capital and operational expenses as necessary to meet its commitments under the PPP Contract; (b) require the private partner to maintain accounting system and keep records of expenditures to reflect the payment and performance milestones and mechanism in accordance with the details set forth in the Project Operations Manual; and (c) contain provisions satisfactory to the Association for the purpose of requiring the private partner to comply with the provisions of the Anti-Corruption Guidelines and the relevant aspects of the Environmental and Social Commitment Plan ("ESCP") and the environmental and social instruments referred to therein.

Sections and Description

Financing Agreement Schedule 2, Section I.B.6. The Recipient shall wholly own, from the end of the PPP Contract, and thereafter maintain, during the entire period of the Project implementation, a state-owned entity, with a mandate, composition and resources satisfactory to the Association (such entity shall be referred to herein for ease of reference only as “InfraCo”), for the purposes of providing, on a not-for-profit and wholesale only basis, cost-based and non-discriminatory access to international and domestic fiber optic infrastructure and other facilities to provider(s) who wish(es) to provide telecommunication services to end users in the Recipient’s territory.

Sections and Description

Financing Agreement Schedule 2, Section I.B.7. The Recipient shall establish, prior to the end of the PPP Contract, and thereafter maintain, during the entire period of the Project implementation, a telecommunications regulator position, with a mandate, composition and resources satisfactory to the Association, which shall be responsible for, inter alia, undertaking statutory responsibilities for licensing, market and technical regulation, customer protection, monitoring and enforcement.

Sections and Description

Financing Agreement Schedule 2, Section I.C.1. The Recipient shall ensure that the collection, use and processing (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, and in accordance with the details set forth in the Project Operations Manual.

Sections and Description

Financing Agreement Schedule 2, Section I.D The Recipient shall adopt, not later than one (1) month after the Effective Date, and thereafter maintain, during the entire period of the Project implementation, the Project Operations Manual, satisfactory to the Association, which shall set forth, inter alia, the detailed arrangements and

procedures for the implementation of the Project. The Recipient shall ensure that the Project is carried out in accordance with the Project Operations Manual, and except as the Association may otherwise agree in writing, the Recipient shall not amend or waive, or permit to be amended or waived, any provision of the Project Operations Manual. In the event of any conflict between the provisions of the Project Operations Manual and those of this Agreement, the provisions of this Agreement shall prevail.

Sections and Description
Financing Agreement Schedule 2, Section II.2. The Recipient shall: (a) not later than four (4) years after the Effective Date (or such other date as the Association may agree in writing), prepare and furnish to the Association a mid-term report, in such detail as the Association shall reasonably request; documenting progress achieved in the carrying out of the Project during the period preceding the date of such reports, taking into account the monitoring and evaluation activities performed pursuant to Section II.1 and setting out the measures recommended to ensure the continued efficient carrying out of the Project and the achievement of its objectives during the period following such date; and and (b) review with the Association such mid-term report, on or about the date one (1) month after its submission, carry out a mid-term review of the Project, and thereafter take all measures required to ensure the continued efficient implementation of the Project and the achievement of its objectives, based on the conclusions and recommendations of the mid-term report and the Association's views on the matter.

Sections and Description
Financing Agreement Schedule 2, Section I.E. The Recipient shall prepare and furnish to the Association not later than: (a) two months after the Effective Date (or such later date as the Association may agree); and (b) July 1 of each year for every subsequent year during the implementation of the Project (or such later date as the Association may agree) for the Association's review and no-objection, an annual work plan and budget. The Recipient shall ensure that the Project is implemented in accordance with the Annual Work Plans and Budgets, provided, however, that in the event of any conflict between the Annual Work Plans and Budgets and the provisions of this agreement, the provisions of this agreement shall prevail. Any amendment to an Annual Work Plan and Budget needed during the fiscal year covered by such plan shall be subject to the prior written no-objection of the Association.

Conditions

Type	Financing source	Description
Disbursement	IBRD/IDA	Financing Agreement Schedule 2, Section III.B.1(a). No withdrawal shall be made for payments made prior to the Signature Date.
Type	Financing source	Description
Disbursement	IBRD/IDA	Financing Agreement Schedule 2, Section III.B.1(b). No withdrawal shall be made under Category (2) unless and until the Association is satisfied that acceptances sufficient in number of shares for the Recipient to hold directly or indirectly at least ninety (90) percent of the shareholding in NTA have been received, in a manner acceptable to the Association.
Type	Financing source	Description
Disbursement	IBRD/IDA	Financing Agreement Schedule 2, Section III.B.1(c)(i). No withdrawal shall be made under Category 3 unless and until the Association is

		satisfied that (A) the Recipient and the private partner have entered into the PPP Contract in accordance with Section I.B.3 of Schedule 2, and the PPP Contract has become effective in accordance with its terms; and (B) the Association has received a legal opinion or opinions satisfactory to the Association of counsel acceptable to the Association, or if the Association so requests, a certificate or certificates satisfactory to the Association of a competent official or officials, attesting that the PPP Contract has been duly executed and delivered on behalf of the parties thereto, ratified by all necessary governmental or corporate action, is legally binding upon the parties thereto and has become effective in accordance with the terms thereof.
Type Disbursement	Financing source IBRD/IDA	Description Financing Agreement Schedule 2, Section III.B.1(c)(ii). No withdrawal shall be made under Category 3 unless and until the Association is satisfied that the Recipient's primary laws required to support the execution and implementation of the PPP Contract, the introduction of competition upon the completion of the PPP Contract and the establishment of the telecommunications regulator position have been enacted and come into force and effect in accordance with their terms, all in accordance with the details set forth in the Project Operations Manual.
Type Disbursement	Financing source IBRD/IDA	Description Financing Agreement Schedule 2, Section III.B.1(c)(iii). No withdrawal shall be made under Category 3 unless and until the Association is satisfied that the Recipient has prepared, disclosed, consulted upon and adopted the Land Access Process, in form and substance satisfactory to the Association.
Type Disbursement	Financing source IBRD/IDA	Description Financing Agreement Schedule 2, Section III.B.1(c)(iv). No withdrawal shall be made under Category 3 unless and until the Association is satisfied that all other implementation arrangements required for Part 1.3 of the Project, as agreed between the Recipient and the Association and reflected in the Project Operations Manual, have been completed as satisfactory to the Association.
Type Effectiveness	Financing source IBRD/IDA	Description Financing Agreement Article V, 5.01.(a). The Recipient has submitted to the Association in a letter, in form and substance satisfactory to the Association, setting out the Sector Program and

		declaring the Recipient's commitment to the execution of the Sector Program.
Type Effectiveness	Financing source IBRD/IDA	Description Financing Agreement Article V, 5.01.(b). The Parliament has adopted a resolution supporting the execution of the Sector Program for the reform of the telecommunications sector and the key steps necessary to achieve such reform, including the support for the public-private partnership arrangements and subsequent introduction of competition, and the fair value purchase of shares in the form of a buy-out of minority private shareholders of NTA to enable restructuring of NTA, with contents satisfactory to the Association.
Type Effectiveness	Financing source IBRD/IDA	Description Financing Agreement Article V, 5.01.(c). The Recipient and NTA have entered into an MOU, in form and substance satisfactory to the Association, setting forth, inter alia, NTA's good faith cooperation, to the extent lawful, on the execution of the Sector Program.
Type Effectiveness	Financing source IBRD/IDA	Description Financing Agreement Article V, 5.01.(d). The Recipient has prepared, disclosed, consulted upon and adopted the Labor Management Procedures, in form and substance satisfactory to the Association.

I. STRATEGIC CONTEXT

A. Country Context

1. **The Republic of the Marshall Islands (RMI) is one of the world's smallest, most isolated, and vulnerable nations.** The country consists of 29 atolls and five individual islands (24 out of these 34 atolls and islands are inhabited). It has a total land mass of just 181 km² set in an area of over 1.9 million km² in the Pacific Ocean. The population of RMI was estimated at 58,413 in 2018,[1] of which 28,000 (53 percent) reside in Majuro (the nation's capital) and 10,000 (18 percent) in Ebeye, the two largest urban centers. RMI was consolidated into the Trust Territory of the Pacific Islands governed by the United States (U.S.) during the Second World War. It became self-governing in 1979 and achieved formal independence in 1986. Economic growth registered 3.6 percent in FY2018 (ending September 30) and is projected to have accelerated to over 5 percent in FY2019 due to a strong pick-up in fisheries and construction. The economic impacts of the COVID-19 pandemic are expected to drive the economy into recession in FY2020 and FY2021, though economic growth is forecast to be about 1.5 percent over the medium term. The fishing sector remains the main source of revenue, representing 13 percent of Gross Domestic Product (GDP) in 2018.

2. **With substantial constraints to export-led growth, the RMI is heavily dependent on aid and other fiscal transfers.** The fiscal surplus registered 2.5 percent of GDP in FY2018, but is projected to turn into a deficit of 1.5 percent by FY2023, as government spending is expected to continue growing strongly while fishing license revenues remain stable in nominal terms.[2] The current account deficit is largely financed by grant inflows. Aid and fiscal transfers come primarily from the US. The first Compact of Free Association (CFA) agreement with the US was signed in 1983 and continued through 2003. An amended CFA became effective on May 1, 2004, providing approximately $37 million in grants per year through the Compact Sector Grants (CSGs). Though the CSGs are scheduled to cease after 2023, the US and the RMI governments have entered into negotiations on the financial aspects of the Compact post 2023. The CFA remains in force in perpetuity. While a Compact Trust Fund (CTF) has been established to replace CSGs from 2024 onward, current projections point to inadequate contributions to the CTF to assure a smooth transition. Annual CTF income is expected to fall short of what is needed to replace the CSGs in 2024, which presents a key challenge to the country's fiscal sustainability.

3. **RMI faces many of the development challenges common to small, remote economies with dispersed populations.** Small size and remoteness increase the cost of economic activities and make it difficult to achieve economies of scale. Remoteness also imposes significant transport costs that increase the costs of trade and fundamentally constrain competitiveness of exports of goods and services in world markets. These same factors also increase the cost and complexity of providing public services. RMI is also one of the most vulnerable countries to climate change, with more severe cyclones predicted and sea levels projected to rise by five inches by 2030. Cyclones combined with sea level rise cause flooding and coastal erosion, damaging lives and infrastructure. Geographical characteristics, including population centered on small, low-lying atolls, means that over 99 percent of the population lives along the coastline, rendering a considerable portion of the country's economy, infrastructure, and livelihoods highly vulnerable to natural hazards such as cyclones and climatic hazards such as sea level rise. According to

[1] World Development Indicators (2018)
[2] IMF, 2018 Article IV Report

the Intergovernmental Panel on Climate Change's (IPCC) 4th Assessment Report, the effects of rising sea level are "likely to be of a magnitude that will disrupt virtually all economic and social sectors in small island nations" such as RMI. Temperatures in the Pacific are projected to increase between 1.4 and 3.1°C.[3] Climate change imposes high costs and may even threaten the physical viability of some areas of both the main islands and more remote neighboring islands.[4]

4. **RMI is at "moderate to high risk" for COVID-19 cases due to its close transport links with the United States and quarantine compliance issues at points of entry.** In October 2020, RMI reported its first COVID-19 cases, when one worker arriving from the U.S. tested positive for the coronavirus at a U.S. military base on Kwajalein Atoll. Three additional repatriated citizens also tested positive. There have been no community transmissions. RMI's remoteness has bought the country time in preventing a COVID-19 outbreak, but the prevention strategies put in place have had significant economic consequences. Since March 8, 2020, RMI has prohibited all international arrivals by land and sea and suspended nearly all commercial air transport. A COVID-19 outbreak would place considerable strain on an already under-resourced health care system. COVID-19 isolation wards have been set up in both Majuro and Ebeye hospitals. However, there is very limited tertiary care capacity and medical provider/patient ratios are below World Health Organization's recommended guidelines. The Government has mobilized its National Disaster Committee and has developed the RMI Coronavirus (COVID-19) Pandemic Preparedness and Response Plan.

B. Sectoral and Institutional Context

5. **The majority government-owned Marshall Islands National Telecommunications Authority (NTA) is the sole supplier of telecommunications services in RMI.** The National Telecommunications Authority Act of 1990 established NTA as the exclusive provider of domestic and international telecommunications services in the Marshall Islands. NTA currently employs 133 staff and has total annual revenues of approximately $9.3 million. The Government owns approximately 68 percent of NTA. The remaining shares are held by the Marshall Islands Marine Resources Authority (15 percent), a government entity; the Bank of Marshall Islands (7 percent), a private bank; and private individuals (9 percent). The Act sets out the objectives, functions and powers of NTA to provide telecommunications services in RMI, but there is no modern regulatory framework permitting competition, providing for independent regulatory supervision of NTA or protecting the interests of users of telecommunications services. There are no laws to support digital services and build trust in a modern digital economy, such as for digital transactions, e-commerce, data protection, cybersecurity or cybercrimes.

6. **Very limited access to high-speed Internet constrains the ability of individuals and businesses to unlock the full potential of a digital economy.** Majuro and Ebeye were connected via spurs to the HANTRU-1 submarine cable system in 2010, financed by a loan from the United States Rural Utilities Service (RUS). However, available capacity on the HANTRU-1 cable system is not being utilized effectively due to the poor quality of terrestrial fixed and wireless services, sometimes referred to as middle and last mile services, which are also needed to connect users to the Internet. With approximately 12,000 voice and mobile data subscribers,[5] RMI's mobile penetration rate of approximately 20 percent is one of the

[3] Refer: https://climateknowledgeportal.worldbank.org/country/marshall-islands/climate-data-projections (accessed on December 1, 2020).
[4] The term neighboring islands, previously referred to as 'Outer Islands', refers to the islands and atolls of the Marshall Islands except Majuro and Ebeye.
[5] NTA data, October 2020

lowest in the Pacific and very low by global standards. While until very recently only basic voice and Short Message Services (SMS) were available, mobile broadband penetration rates on Majuro and Ebeye have grown recently with the roll-out of 4G/LTE services. The majority of fixed broadband customers, approximately 2,000 premises, only have access to asymmetric digital subscriber line (ADSL) services at low bit rates (1 Mbps). Voice and data services on the neighboring islands is severely constrained, which has led to a substantial and increasing digital divide between the main centers and the neighboring islands.

7. **High cost of digital services is a serious issue.** Access to high-speed Internet is limited and costly for both residential and business users. Fixed broadband is provided via digital subscriber line (DSL) over copper lines. Only low-end ADSL packages are available, with services offered in the $49.95/month range for 1 Mbps. This speed of 1 Mbps is not considered a broadband service under the common standards adopted by the US and Europe, which mandate minimum speeds of 25 Mbps and 30 Mbps respectively. The affordability target for entry-level broadband services in developing countries is less than 2 percent of monthly gross national income (GNI) per capita (International Telecommunication Union – UNESCO Broadband Commission). The cost of broadband services in RMI is well above this threshold. The entry-level 1 Mbps ADSL service constitutes 12.56 percent of monthly GNI per capita, although given the large average household size (6.8 people per household) it is more affordable at 1.86 percent of GNI/Household. Globally in developing and emerging markets, entry-level mobile broadband services typically cost below $1 to $5 per GB. In comparison, the cost for a basic entry-level monthly mobile broadband service in RMI was around $22 for a 5 GB package as of March 2018. This corresponds to 5.6 percent of the GNI per capita. Average revenue per voice and mobile broadband connection is approximately $23, compared to less than $9 in other small Pacific nations such as Tonga, Samoa and Vanuatu.

8. **Poor network performance constrains the ability of RMI to rollout out digital services, create new income-generating opportunities and provide better access to public and private sector services.** It also significantly constrains economic, jobs and educational opportunities which are driven by digitalization. By developing and increasing utilization of high quality, lower price broadband services, substantial social benefits will be achieved, including more accessible telecommunication services for both retailers and end users, better access to information resources, education, training, development of electronically-delivered services, such as digital government administration (reducing time and effort to carry out administrative procedures), and overall improved productivity. Affordable and quality telecommunications services also enable access to weather information to support disaster preparedness for adverse weather events, support relief and rescue efforts by improving timely information dissemination, and supporting recovery efforts by facilitating digital payments for affected communities. A strong positive relationship is also observed between internet connectivity and employment mobility,[6] which includes significant new job creation and job growth,[7] positive effects on the reemployment probabilities,[8] and improved labor force participation rates of married females.[9] The ability to work and

[6] Stevenson, *The Impact of the Internet on Worker Flows* (2006)
[7] Shapiro and Hassett, *The Employment Effects of Advances in Internet and Wireless Technology: Evaluating the Transitions from 2G to 3G and from 3G to 4G* (2012)
[8] Gurtzgen, Nolte, Pohlan and van den Berg, *Does the Internet Help Unemployed Job Seekers Find a Job? Evidence from the Broadband Internet Expansion in Germany* (2018)
[9] Dettling, *Broadband in the Labor Market: The Impact of Residential High-Speed Internet on Married Women's Labor Force Participation*, Federal Reserve Board, Washington, D.C. (2015)

access training opportunities remotely is also improved, which increases economic and social resilience, particularly for geographically remote countries and during adverse shocks such as COVID-19.[10]

9. **Government has long recognized the need to improve digital services in RMI.** Analytical work to examine the benefits of sector reform began in 2010 and numerous attempts were made over many years to open up the market to competition. In 2017, the Government retained international expert advisers to undertake a major review of telecommunications in RMI and to identify options to improve sector performance. This technical assistance (TA) was financed under the World Bank (WB) ICT Technical Assistance Project (P132119). The wide-ranging work covered technical, financial, legal, social and economic issues and took two years to complete. Stakeholder consultations focused on the customer experience and the potential benefits of improved access to digital services. The final telecommunications sector options report[11] was delivered in 2019 and identified a wide range of deficiencies, including the poor quality of services, lack of availability, unaffordability and the lack of an adequate legal, regulatory and institutional environment to encourage investment in new services and protect users. The report concluded that: (i) telecommunication infrastructure in RMI is in a poor state and needs significant modernization; (ii) services and service quality are poor and increasingly expensive on a comparative basis, which will get worse if no action is taken; and (iii) the relative poor performance of the sector reflects the structural difficulties inherent in a locally-owned government monopoly telecommunications company, which has a limited ability to source investment capital, expertise and the latest technology.

10. **Three strategic options for addressing sector deficiencies were identified and evaluated according to implementation risks.** These options included continuing to operate NTA on a "business as usual" basis, contracting an external manager to operate NTA or repositioning NTA as a Public Private Partnership (PPP). The report concluded on each option:

- *NTA Business as Usual*: Substantial risk. This option would not be sustainable, would result in ongoing poor performance of NTA and would require significant continued financial contributions by the Government to avoid insolvency.
- *NTA Management Contract*: High risk. Key detriments included the high cost of the management contract, low ongoing sustainability due to a hollowing out of local management expertise, very limited scope for performance improvements due to lack of new capital investment, and limited private sector interest in taking on a management role.
- *Reposition NTA as a PPP*: Low risk. This option would trigger substantial new private sector-led investment, significantly expand coverage, including for neighboring islands, and deliver better services and lower pricing. It would also eliminate the need for ongoing financial contributions by the government.

11. **The findings and recommendations of the telecommunications sector options report were accepted by the Government in May 2019**. Through a programmatic Project Preparation Advance (PPA) financed by the WB, work to validate the report and to prepare for implementation began in late 2019. A Cabinet Project Steering Committee (PSC) was established to lead this process and take overall responsibility for the digital development agenda in RMI. The PSC is chaired by the Minister of Education, Sports and Training and includes senior relevant agency representatives, including the Chief Secretary, the Secretary of Finance, the Secretary of Transport and Communication, the Secretary of Culture and

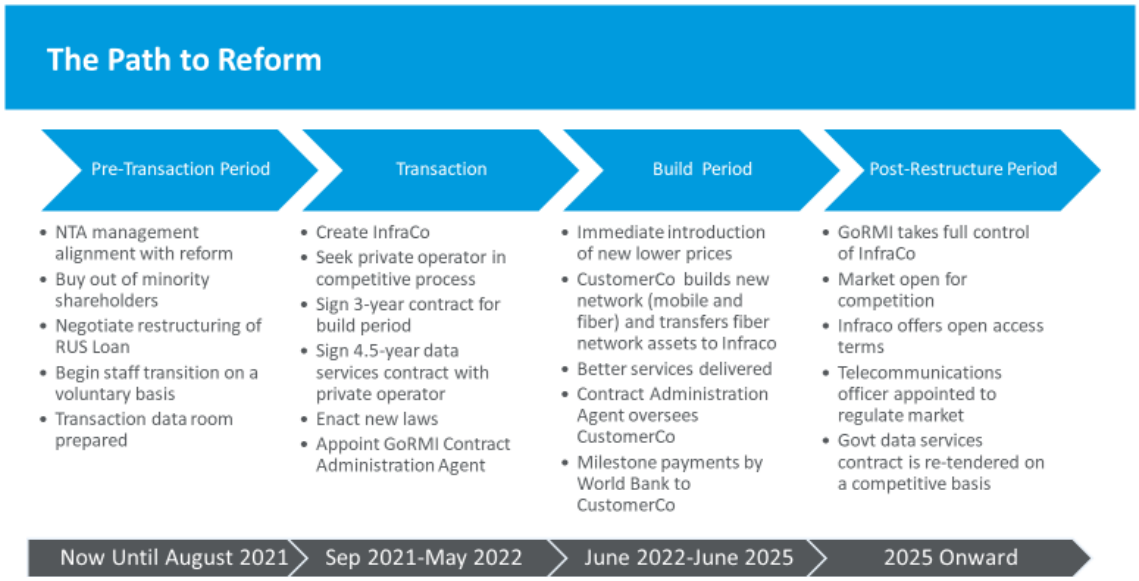
[10] Özden, *Who on Earth Can Work from Home*, World Bank Working Paper (2020)
[11] Telecommunications Sector Options Report, Great Village International Consultants Inc. (2019)

Internal Affairs and the CEO/President of NTA. Other agencies have also been identified as being core beneficiaries of the digital development agenda, including the Ministry of Health, the Commissioner for Public School Services and the College of the Marshall Islands, and consultations have been undertaken with them. The PSC is the focal point coordinating a whole of government response to the PPP transaction and market structure reforms, the design and rollout of digital government across government, and the enabling legal and regulatory reforms. It has responsibility for the design and implementation of the Digital RMI Project and reports directly to the Cabinet on key issues and milestones.

12. **The PSC has focused the preparatory work around three priority workstreams.** These include (i) the PPP transaction and associated market structure reforms; (ii) digital government and the digital economy; and (iii) the enabling legal and regulatory reforms to support the market structure reforms and the rollout of digital services.

13. **The first priority, the PPP transaction and market reforms, will introduce sustainable, reliable, quality telecommunication services at affordable prices.** An experienced private sector operator will be selected competitively to install new climate-resilient infrastructure, decommission obsolete infrastructure and provide telecommunications services throughout RMI. The selected private sector operator (sometimes also referred to as "CustomerCo") will mobilize its own private capital, but will also receive payments from Government on achieving specified time-bound performance and infrastructure build milestones. Long-term, strategic national telecommunications infrastructure (core fiber infrastructure and towers) will be placed in a new open-access entity called InfraCo which will be owned by Government. The PPP contract will grant the private operator a three-year period of exclusivity during the build period to complete these reforms before the market is opened to competition. However, once competition starts, CustomerCo and any other private providers who enter the market will be responsible for providing communications services to users. InfraCo will provide cost-based and non-discriminatory access to the core fiber infrastructure and related facilities to CustomerCo and any other provider who wishes to provide telecommunication services to citizens. Figure 1 sets out the market reform steps.

Figure 1: PPP Transaction and Associated Market Structure Reforms



14. **The second priority, building on improved connectivity, is for Government, its public service providers and its citizens to get better use out of the enhanced technology and services.** This work is focused on improved Government processes as well as changes to enable the people of RMI to access Government services (e.g. health and education) digitally. The development and implementation of a Digital Government Strategy will ensure that RMI accesses the benefits of the modernization of the digital infrastructure and services in Majuro and Ebeye, and on the neighboring islands. Citizen engagement and digital skills development are essential elements to build support for reform and build trust in online services. A community engagement strategy is currently under preparation to develop a broad public understanding of the reasons for the reforms, the benefits, and how community concerns will be addressed. The engagement strategy will distinguish between the broad differences in technology use maturity (and likely concerns) of the two main populated islands and the neighboring islands.

15. **The third priority is for the development and implementation of the enabling legal and regulatory reforms to support the proposed market structure reforms and the rollout of digital services.** The existing Telecommunications Act will be repealed and replaced by a modern legal framework to provide investment for the implementation of the PPP transaction, support the introduction of competition, protect the interests of customers and ensure the delivery of affordable and high-quality connectivity services throughout RMI. A Telecommunications Regulator position will be established with responsibility for market regulation following the end of the PPP build period and the commencement of competition. Laws on e-commerce, cybercrimes, harmful digital communications and cybersecurity will also be developed and introduced to support the rollout of digital services and build trust in the digital economy.

16. **In May 2021, the Government confirmed its commitment to the Project design and recommendations made by the PSC.** On May 3, 2021, the Cabinet approved recommendations in the December 2020 Cabinet Paper regarding the proposed market structure reforms and the rollout of digital services, and resolved to authorize (a) Project negotiations, and subject to the Bank's approval, Project implementation; (b) negotiating and entering into an Memorandum of Understanding (MOU) with NTA that confirms NTA's commitment to the Project and NTA's agreement to assist in the timely and efficient implementation of the Project; (c) to make a buy-out offer to the minority (non public) shareholders in NTA; and (d) discussions with the United States RUS on NTA debt restructuring. Throughout the calendar year 2021, the Government has also carried out a stakeholder engagement process for improving understanding around the nature of the proposed reforms and the rollout of digital services, address potential concerns and build overall support for the Project's development objectives. These engagements included meetings with the NTA Board and management, the Mayors' Association, community groups, civil society and the general public.

17. **The Project responds to gender gaps in access to and use of digital infrastructure and digital services in RMI.** Project activities are designed to mitigate gender inequalities that may arise from improved digital infrastructure and e-services provisioning. This is a key objective of the Project's support to the Gender Development Office (GDO) within the Ministry of Culture and Internal Affairs (MOCIA). A gender and social inclusion assessment was conducted during preparation and included consultation with key stakeholders to determine the opportunities and risks associated with the Project (see Annex 2). While there is no evidence of an existing gender gap in RMI to access the internet or digital services, persistent inequalities in terms of economic opportunity, violence against women and girls, and participation in leadership and decision-making were identified. If allowed to persist, these gender gaps, can impact women's ability to benefit from the socio-economic impact of enhanced digital infrastructure and

services. Currently, there is no sex disaggregated telecommunications data in RMI and no legal or regulatory provisions which require the collection of sex disaggregated data. The Project will respond to this gap by supporting the capacity of the GDO to collect relevant sex-disaggregated data as well as to mitigate issues and concerns associated with harmful digital communications that can disproportionately affect women and girls.

C. Relevance to Higher Level Objectives

18. **The Project is closely aligned with the WB's twin goals of ending extreme poverty and boosting shared prosperity.** The transition to digital government services is predicated on shared prosperity, particularly improving access for the most vulnerable people, including citizens (men and women) living in remote areas. The project will facilitate increased access to high-quality, low-cost digital connectivity services, which is important for social and economic growth and development. There is a strong relationship between access to broadband services and economic growth. Links between extreme poverty and lack of access to basic public services are well established. In RMI and other small, remote island nations, digital communications services are the essential lifeline connecting families, providing access to basic services and linking people to markets. Improving access to the internet and expanding the availability of digital government services is a high priority for Government and a core focus of this Project. The Project also supports key IDA19 policy commitments to support economic empowerment and entrepreneurship opportunities for women through measures and interventions designed to ensure that women benefit equally from the expansion of digital infrastructure, digital services and training in digital skills.

19. **The Regional Partnership Framework (RPF) for FY17-FY21 (Report #120479, extended by the Board of Executive Directors on February 6, 2020 to FY23) covers nine small Pacific Island Countries (PIC9),**[12] **including RMI.** The RPF identifies four areas of focus for these PIC9 as: (1) fully exploiting the available economic opportunities; (2) enhancing access to economic opportunities; (3) protecting incomes and livelihoods; and, (4) strengthening the enablers of growth and opportunities (macro-economic management, infrastructure and addressing knowledge gaps). The Project will support the fourth focus area, specifically (i) objective 4.2 that aims to increase access to basic services and improved connectivity infrastructure – including expanding access to broadband services – and (ii) objective 4.3 that addresses knowledge gaps and data issues. Through the strategic development of digital technologies and provision of public data, the Project will support more efficient and effective management of government institutions which would contribute to improved development outcomes in multiple sectors and programs supported under the RPF. The Project will also support objective 3.1a under the third focus area to strengthen preparedness and resilience to natural disasters and climate change through establishing disaster and climate resilient national backbone networks in Majuro and Ebeye, connecting all neighboring islands.

20. **The Project will support a resilient recovery from the COVID-19 pandemic and RMI's longer-term response to rebuilding better.** Despite the overall negative economic effects of COVID-19 restrictions (including the loss of telecommunications revenue from international visitors), NTA reports that its overall revenues have held up reasonably well. Despite prohibitive prices, revenue from 4G LTE

[12] Kiribati, Republic of Nauru, RMI, Federated States of Micronesia, Republic of Palau, Independent State of Samoa, Kingdom of Tonga, Tuvalu and Vanuatu; https://documents.worldbank.org/en/publication/documents-reports/documentdetail/137341508303097110/pacific-islands-regional-partnership-framework-fy17-fy21

services has outperformed expectations. This indicates that residents of the Marshall Islands are to some extent addressing the effects of isolation from families in the United States and elsewhere through greater consumption of telecommunications services from falling incomes. A similar dynamic has been observed among other Pacific Islands telecommunications operators reflecting the sudden isolation of Pacific Islands community due to COVID-19 and the sudden and enduring cancellation of transportation links, particularly airline travel. The strategic relevance of the Project—building better, more resilient communication networks and improving the availability and access to digital services—is further enhanced by the changed social and business environments triggered by the COVID-19 pandemic. The Project aligns with the WB Group COVID-19 Crisis Response Approach Paper[13] and responds to the Bank's program in the PIC9 which has been adjusted to align with the three phases of Relief, Restructuring and Resilient Recovery.

21. **The Project will help deliver on RMI's ambitious agenda to combat climate change through a program of activities spanning both climate adaptation and mitigation.** As part of its Nationally Determined Contributions (NDCs) under the Paris Agreement, RMI set a new goal of cutting emissions by 58 percent by 2035 and aspired to reach net zero greenhouse gas emissions by 2050.[14] Under Component 1, public sector financing under the PPP contract will support underground, climate-resilient fiber-to-the-premises (FTTP) infrastructure and decommission obsolete diesel-reliant legacy mobile and copper networks. Climate resilient digital infrastructure will increase the likelihood of communications in the aftermath of a disaster, enabling first responders to coordinate and deliver support (adaptation). The new FTTP infrastructure will be more-energy-efficient than traditional copper-based networks, triggering significant energy savings of between 40-60 percent. The Project will seek to support energy efficient photo-voltaic systems to power communications infrastructure in the neighboring islands and reduce dependence on diesel generators. The Project is expected to reduce carbon dioxide emissions by at least 50 percent per end user.

II. PROJECT DESCRIPTION

A. Project Development Objective

PDO Statement

To expand access to the internet, promote private sector investment in climate resilient digital infrastructure, and establish the critical foundations for digital government services and the digital economy in the Recipient's territory.

PDO Level Indicators

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

- People provided with access to the Internet (number) (disaggregated by gender)[15]

[13] *Saving Lives, Scaling-up Impact and Getting Back on Track*. World Bank Group COVID-19 Crisis Response Approach Paper, June 2020
[14] The Republic of Marshall Islands Nationally Determined Contributions to the UNFCCC, November 2018
[15] World Bank Corporate Results Indicator

- Expanded access to internet services on neighboring islands (percentage of neighboring islands with internet access)
- Mobile broadband penetration (Percentage)
- Private sector capital investment in RMI (value)
- Reduction in hours lost per year by end users due to climate events (percentage decrease)
- Digital government strategy adopted (yes/no)
- Regulatory framework for digital services adopted (yes/no)

B. Project Components

23. The Project components will be structured as follows:

24. **Component 1. Public Private Partnership and Market Structure Reform ($28 million equivalent, of which $20.5 million equivalent IDA and $7.5M private capital).** This component will support the government's reform program by strengthening national digital connectivity infrastructure, triggering substantial new private sector-led investment, expanding coverage, improving service quality and lowering pricing. It will finance technical assistance; the costs associated with the purchase of shares in the form of a buy-out of the minority private sector shareholders of NTA, which is a necessary step required to enable the restructuring of NTA and the PPP transaction; and the Government's contribution to the PPP Contract. Specific activities supported are:

25. *Subcomponent 1.1. Transactional, legal and regulatory support for the PPP and associated market structure reforms ($4.1 million equivalent IDA)*. Technical assistance and carrying out capacity building for the preparation, negotiation and implementation of the PPP transaction and associated market structure reforms, including: (i) consultation processes, validation of design, costs, preparation of tender documentation, and marketing and bidding through a competitive process; and (ii) development and implementation of the legal and regulatory enabling environment, including for the Contract Administration Agent (CAA) to monitor and promote compliance by the private sector operator (CustomerCo) during the PPP build period.

26. *Subcomponent 1.2. Supporting reform by providing financial assistance for the purchase of shares in the form of a buy-out of minority private shareholders of NTA ($1.7 million equivalent IDA)*. Around 19 percent of the voting share capital in NTA is held by minority private shareholders. Government will purchase the shares owned by these minority shareholders in the form of a buy-out in order to permit the telecommunications sector reforms to proceed without delay or opposition from shareholders and to complete various transaction steps associated with the reforms that will require NTA shareholder approval, including the transfer of assets from NTA to InfraCo and CustomerCo, and the wind up of NTA. InfraCo will be established as a SOE to own and operate the core bottleneck facilities (such as the interest in HANTRU-1 and land access rights) on a not-for-profit basis. Establishing InfraCo as wholly state owned entity delivers on the Government's commitment to retain critical national infrastructure under 100 percent Government ownership and control. Operating InfraCo on a not-for-profit basis will also ensure GoRMI takes full advantage of the grant financing and help deliver telecommunications services to end users at the lowest possible prices. The private operator under the PPP Contract will establish a local company called CustomerCo to deliver retail services to customers. This company will be 100 percent owned by the private sector partner selected by Government under PPP arrangements. The ability to attract a private sector partner on favorable terms is maximized if that partner assumes full ownership

and control of CustomerCo. The valuation methodology and offer structure for the purchase of the NTA shares from the minority shareholders is prescribed in the Project Operations Manual. The buy-out process will establish fair value and ensure that the reforms are not unfairly detrimental and do not deprive the minority shareholders of fair value for their shares. At the completion of the transaction, NTA will be wound up and any residual funds (which is likely to be zero or only very limited funds) will be distributed among all remaining shareholders.

27. In considering the cost of the buy-out process, Government has had regard to the value to Government and to the country of the wider telecommunications reform process. By permitting the Government to complete various transaction steps associated with the sector reforms and windup of NTA, the minority buy-out will help to realize benefits for RMI that significantly outweighs the fiscal cost of the buy-out of these shareholders. Over the period to 2040, it is envisaged that the reforms will deliver Government savings of approximately $27 million, comprising a reduction of operating subsidy to NTA of $4.7 million, increased tax revenues of $5.5 million and leased-line internet service cost reductions of approximately $22.7 million. In addition, sector reforms are expected to lead to a 6.9 percent increase in GDP by 2027 (or $15.2 million equivalent). Further economic and social benefits will also accrue as a result of the reforms, which include improved service quality, expanded service coverage areas across the neighboring islands and the development of digital government applications which will improve access to critical public services. Fiscal savings will also be redirected to areas with greater social impact and public need, including health and education. The Project Operations Manual will prescribe oversight and fiduciary arrangements to ensure that Bank funds are only used for the purposes intended. Offers will only be made (with limited exceptions) to registered shareholders as of the date of the offer (the Record Date). Upon satisfying the conditions of the offer, which includes acceptances of more than 50 percent of the minority shares and that each accepting shareholder has accepted the offer for all their shares, such that Government holds directly or indirectly at least 90 percent of the shareholding in NTA, the settlement process will contemporaneously confirm the identity of each shareholder, register the share transfer agreements, effect the change in the NTA share registrar recording the Government as the new owner and process payment to each shareholder. This process will mitigate against any improper dealing and means that Government, as offeror, only has an obligation to the registered shareholder and not to any creditor or other counterparty of the shareholder in relation to any rights they may assert in relation to or over any shares.

28. *Subcomponent 1.3. Supporting high-quality, low-cost digital infrastructure and services under PPP arrangements ($14.7 million equivalent IDA)*. Supporting the Government's contribution to the PPP Contract to rollout and deliver high quality, low-cost digital infrastructure and services, including but not limited to, the rollout of new investments in energy efficient, disaster and climate resilient digital infrastructure in the 24 inhabited atolls and islands (including Majuro and Ebeye); the decommissioning of obsolete and energy inefficient infrastructure and services; the achievement of new price, coverage and service standards; and the transfer of assets and key operational staff to InfraCo prior to the end of the PPP build period. Performance standards, which will include capability to meet network resilience, recovery and repair in the aftermath of disasters and cybersecurity standards, will be set as part of the PPP bidding process and will shift performance risk from the public sector to the private operator pursuant to terms and conditions specified in the PPP and prescribed under the licensing framework. New digital infrastructure investments will include specifications mandating energy efficiency standards. New infrastructure will predominantly include underground fiber optic cables, which are less likely to be impacted by adverse climate events than aerial cables and over-the-ground microwave links. Satellite receivers, switches, and off-grid PV systems in the network will be weather proofed during construction

to improve resilience. Reliance on legacy infrastructure will be minimal and upgraded to enhance energy efficiency and resilience to adverse climate events. Energy consumption and CO2 emissions will reduce substantially for the sector due to the switchover to new energy efficient infrastructure and the decommissioning of inefficient legacy equipment.

29. **Component 2. Digital Government Platforms, Cybersecurity and Digital Skills ($6.5 million equivalent IDA).** This component will finance a range of interventions and investments focused on priority government services (e.g., eHealth and e-education) and initiatives (e.g., improving services on the neighboring islands), beginning with the development and implementation of a Digital Government Strategy (DGS) under the supervision of the PSC. The DGS will be linked to cybersecurity initiatives, priority business process reviews, the development of government enterprise architecture and the rollout of a national government portal and priority digital services. Specific job creation and skill development initiatives will also be prioritized as part of the transition to the digital economy, including support to increase participation in the digital economy on a gender informed basis. This component will include the following subcomponents:

30. *Subcomponent 2.1. Development of a Digital Government Strategy (DGS) ($1.4 million equivalent IDA)*. This subcomponent includes developing a digital government strategic framework on the direction, principles and practices for the use of digital technologies, including but not limited to stakeholder consultations and developing processes for its implementation. The DGS will set the direction for the use of digital technologies, with the ultimate intent of improving Government business process and workflow efficiencies, improving the quality of life for citizens and residents, while reducing the complexity for businesses transacting with Government. The DGS will follow a "whole of Government" approach, which will also specify governance, services delivery, investment roadmap and implementation arrangements. A process for putting in place digital authentication mechanisms, digital delivery platforms, digital payment gateways, share platforms and common standards and interoperability mechanisms will be pursued which will also help to ensure continuity of business operations and service delivery during climate-induced disasters and help relief efforts in the event of inaccessibility of physical office locations.

31. *Subcomponent 2.2. Creation and rollout of a Government's Cybersecurity Program ($0.5 million equivalent IDA)*. Developing and rolling out the Government's cybersecurity program, including but not limited to, developing operational and administrative standards, assurance, monitoring, audit and Cyber-Security Emergency Response Team (CERT) capabilities; and carrying out security training and awareness programs for all relevant stakeholders.

32. *Subcomponent 2.3. Digital Skills Development ($0.3 million equivalent IDA)*. Designing and implementing job creation and digital skills initiatives, focusing particularly on the changing nature of digital infrastructure and digital services. The emphasis will be on developing strategies to address possible job losses that may occur due to increased digital activities, digital platforms and improved connectivity services. Closely linked with existing WB-supported activities focused on strengthening the education system and promoting skills development,[16] this Subcomponent will also provide support to identify opportunities and modalities to train citizens with the skills needed to succeed in a digital economy.

[16] RMI Education and Skills Strengthening Project (P171924)

33. *Subcomponent 2.4. Digital ID ($1.5 million equivalent IDA)*. Designing and implementing a nationwide digital ID platform to increase access to, and enable the digitalization of, public and private sector services, consistent with the Principles on Identification for Sustainable Development. Digital ID will facilitate authentication of identity and electronic signatures online. Priority services for digital ID may include financial services (e.g. remittances and account opening), uniquely identifying patients in the health sector, students and for other trusted transactions through the digital government platform and in the digital economy (e.g. e-commerce), including facilitating Know Your Customer (KYC) requirements. Digital ID will be integrated into Digital Government Strategy Framework services to help citizens, especially those on neighbouring islands, access critical disaster relief programs including digital payments and identify patients for healthcare provisioning, in the event and aftermath of climate-induced natural disasters.

34. *Subcomponent 2.5. Secure Government Network, Disaster Recovery/Business Continuity and Government Cloud (G-Cloud) ($1.5 million equivalent IDA)*. Designing and implementing secure government network systems to promote common information systems, standards and applications, including e-mail, for government users. Proprietary and open source options will be considered. This Subcomponent will consider and evaluate alternative data center or cloud computing ownership models 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, including to promote compatibility and interoperability with existing and proposed digital platforms and solutions, for example the Public Financial Management (PFM) system(s).[17]

35. *Subcomponent 2.6. Implementation of pilot e-Service(s) ($1.0 million equivalent IDA)*. Conducting a readiness assessment for selected priority digital services and identifying and developing high value pilot e-digital services to demonstrate the value of shared digital government infrastructure and services.The focus will be on developing e-services and smart solutions in key sectors (potentially aligned with the objectives under current initiatives to strengthen PFM,[18] health,[19] education,[20] and improve service delivery on the neighboring islands) . Support will also focus on modifying business processes within relevant ministries and agencies for digital service delivery.

36. *Subcomponent 2.7. Gender Development Office Support ($0.3 million equivalent IDA).* Strengthening the institutional capacity of the Gender Development Office of the MOCIA to carry out activities to increase participation in the digital economy on a gender informed basis, including but not limited to, policy development, research, monitoring and evaluation, citizen engagement, and outreach activities relating to digital literacy and digital entrepreneurship. This Subcomponent will assist the Gender Development Office in contributing to gender informed policy development associated with the roll out of digital infrastructure and services, particularly the passage of gender-sensitive legislation relating to harmful digital communication. The capacity of the Gender Development Office to monitor and mitigate issues and concerns associated with digital harms from a gender perspective will also be strengthened.

[17] Project to Strengthen budget execution and financial reporting systems (P163131)
[18] *Ibid*
[19] Multisectoral Early Childhood Development Project (P166800)
[20] RMI Education and Skills Strengthening Project (P171924)

37. **Component 3. Enabling environment for Digital Government and Digital Economy ($1 million equivalent IDA).** This component will support the development and strengthening of the policy, legal and regulatory enabling environment and institutional arrangements needed to underpin the investments in digital government and the digital economy. It will also provide ongoing support for traditional telecommunications regulatory priorities, particularly to promote investment, technological innovation and evolution, and the long-term interests of users of digital infrastructure and services. This component will include the following activities:

38. *Subcomponent 3.1. Regulatory support for the long-term development of the Information and Communications Technology (ICT) sector ($0.3 million equivalent IDA)*. Developing and implementing telecommunciations sector legal and regulatory frameworks and enabling arrangements to ensure successful development of the sector and promote the long-term interests of users. Support will include technical assistance and capacity building for the Telecommunications Regulator who will be responsible for telecommunications sector regulation at the end of the PPP build period. Such Telecommunications Regulator will undertake statutory responsibilities for licensing, market and technical regulation, customer protection, monitoring and enforcement.

39. *Subcomponent 3.2. Legal and regulatory framework for Digital Government ($0.7 million equivalent IDA)*. Establishing, modernizing and implementing the legal and regulatory frameworks and institutional and data governance arrangements to support digital government and the digital economy, including but not limited to, aspects related to cybersecurity, cybercrime, data protection, digital ID, digital transactions, e-commerce and harmful digital communications.

40. **Component 4. Project Implementation Support ($2.0 million equivalent IDA).** Providing technical and operational assistance to the Recipient on Project management and implementation. A Project Implementation Unit (PIU) will be established within the Ministry of Transportation, Communications and Information Technology (MTCIT). The PIU will be responsible for overall Project management and coordination. Other aspects of Project administration (procurement, financial management, audit, monitoring and evaluation, and environmental and social risk management) will be supported by the Central Implementation Unit (CIU) in the Division of International Development Assistance (DIDA), which has been established within the Ministry of Finance, Banking and Postal Services (MFBPS) and which currently provides support to all WB-financed operations in RMI.

C. Project Beneficiaries

41. **The Project is focused on expanding access to high quality terrestrial broadband infrastructure and bringing internet access to underserved neighboring islands.** The project beneficiaries will be the people of RMI, including individuals, consumers, businesses and government agencies, who will receive improved access to broadband internet and digital services. In addition, the project will support the development of critical foundations for digital government services and 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 remote areas or on the neighboring islands who are currently excluded. The 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. The Government will also enjoy an improved ability to launch and implement digital public services in a cost-effective and citizen-centric manner.

42. **Gender analysis.** Data collected during project preparation identified existing gaps between the experiences and status of women and men, particularly around employment opportunities and a higher exposure to harassment online for women and girls. Analysis of this data has identified activities for the project to address these gaps and suggested suitable indicators to track progress (see Annex 2). The lower female labor force participation, and higher female unemployment, especially among youths, are important challenges that remain to be addressed. Men are more likely to work for wages or salaries than women, with women more likely to work in the production of goods for sale than men. According to the 2012 Labor Force Survey, 64 percent of women and 80 percent of men in RMI took part in the labor force. Data from the Labor Force Survey further shows that female unemployment is significantly higher at 39 percent, compared to 27 percent for men. Youth unemployment is also especially high at 63 percent, with female youth experiencing a 67 percent unemployment rate.[21] At the same time, women do not have equal access to vocational courses and employment support. While data from the College of the Marshall Islands indicates that there are no gaps in university enrolments, women represent only 20 percent of student successfully completing the various types of vocational courses offered. In addition, the downturn to tourist trade in the wake of the COVID-19 pandemic is likely to disproportionately affect women, whose employment is concentrated in services, retail and handicrafts.

43. While there is no data on female entrepreneurs' use of digital technologies in RMI, the Asian Development Bank's report on gender and trade in neighboring Pacific countries (2019) indicates that lower digital and technical literacy skills contribute to fewer female-led businesses having websites and their lower adoption of e-commerce.[22] Stakeholder consultations in RMI highlighted potential applications for improved digital technology and infrastructure to increase women's economic empowerment and entrepreneurship opportunities by: (i) facilitating the provisions of new services, access to goods and eCommerce, (ii) linking demand for goods and services to supply in efficient ways, including through online retailers with lower overheads than traditional shopfronts, (iii) facilitating access to international marks and improved information sharing facilities, (iv) increased awareness through digital marketing and promotions, as well as access to online networks and communities of practice. These have particular potential to expand retail and service activities, which currently account for 93 percent of women's employment in the country.[23] The development and rollout of a women targeted capacity program on digital literacy and entrepreneurship will ensure that women benefit equally from the expansion of digital services, support female entrepreneurs to grow their digital activities and ultimately reduce the gender gap in employment opportunities.

44. The presence of widespread harassment and violence (with 51 percent of Marshallese women ever experiencing Gender Based Violence (GBV)) is mirrored in women and girls' higher exposure to harassment online. Stakeholder and community consultations and focus group discussions during project preparation highlighted a demonstrable gap with regard to how men and women are using the internet and their sense of risk and safety online. In particular, these qualitative consultations found high rates of community concerns regarding the digital circulation of sexually degrading images and videos, often circulated without consent and including girls below the age of consent, in particular the circulation of 'revenge pornography' online. Young women have been found to be particularly vulnerable to online bullying and harassment. RMI currently has very limited capacity to deal with concerns over online violence, the circulation of 'revenge porn' or harmful digital communication. Currently there is no

[21] Republic of Marshall Islands, Gender Equality Where Do We Stand? (2018).
[22] Asian Development Bank, Leveraging Trade for Women's Economic Empowerment in the Pacific (2019)
[23] Republic of Marshall Islands, Gender Equality Where Do We Stand? (2018)

legislation or policy framework on cyber safety or harmful digital communication in RMI. They also indicated a lack of support services or reporting pathways at a national level. This results in: (i) a knowledge gap on safe digital behavior, (ii) the inability to view these harmful digital practices as 'criminal' or 'illegal', and (iii) a lack of knowledge about avenues for reporting complaints or seeking redress.

45. **Gender actions.** The Project seeks to address these gaps through the following Subcomponents: 2.3 (digital skills development), 2.7 (Gender Development Office support), 3.2 (legal and regulatory framework for digital government) and 2.2 (creation and roll out of a government cybersecurity program). In doing so, the project will support the development of a cybersecurity policy framework, including through support to the gender division of national government to contribute to these policy developments and ensure that women's concerns are addressed. As part of this action, the Project will also facilitate legislative reform criminalising harmful digital communications, which includes legislating against cyberbullying, harassment and "revenge pornography". This will be accompanied by targeted awareness activities to bridge knowledge gaps at a community level, with a particular focus on the youth population who have been identified by stakeholders as a vulnerable group for issues relating to harmful digital communication.

46. **There is no sex disaggregated telecommunications data in RMI.** There are no legal or regulatory provisions which provide for the collection of disaggregated data. To ensure that men and women benefit equally from the digital expansion, the project would also seek to strengthen capacity for sex-disaggregated telecommunications data collection. The Project will support the Gender Development Office to monitor and mitigate issues and concerns associated with digital harms from a gender perspective. It will also collect sex-disaggregated data of telecommunications users, which will help to identify and address potential differences in men and women's access in urban areas versus neighboring islands. Furthermore, the project will also support digital skills and literacy workshops, which will also focus on capacity building for women employed in RMI's retail and trade sectors.

47. **Gender monitoring & evaluation indicators.** Progress towards closing the outlined gaps will be measured with the following indicators: (i) People provided with access to the Internet – Female (Number); (ii) People reached through digital literacy and entrepreneurship programs – Female (percent); and (ii) Passage of harmful digital communication bill (Yes/No).

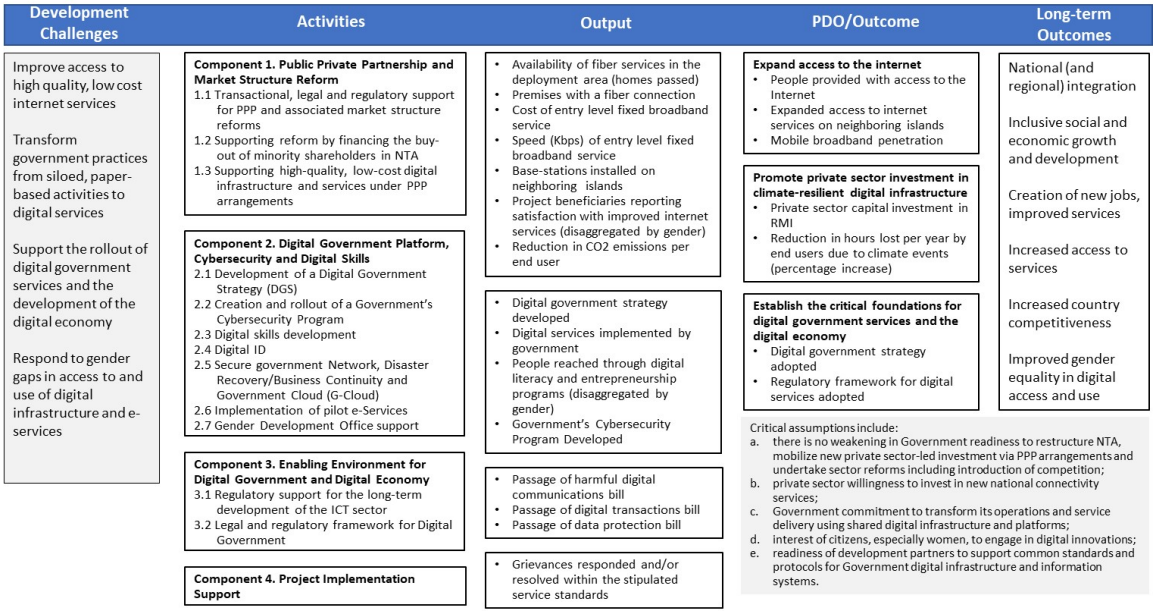
48. **Citizen engagement.** Enhancing citizen engagement is one of the key objectives underpinning the development of the Digital Government Strategy. Citizen engagement activities will be carried out to engage with communities and key stakeholders, including through surveys of women's groups and school children, to obtain feedback on opportunities and risks associated with the Project, particularly the content of the Digital Government Strategy to be developed under the Project. Feedback will also be taken into account to inform Project design, including to improve the climate resilience of new infrastructure investments, and to identify appropriate feedback mechanisms and indicators to monitor citizen engagement throughout Project implementation. The Project will implement a Grievance Mechanism (GM) which addresses citizen engagement. It will provide processes and procedures for Project beneficiaries and any other people affected by the Project to provide feedback and complaints regarding Project activities. The GM will be publicized online and during consultation events. An annual report will be prepared by MTCIT and disclosed on the MTCIT website to provide feedback on how the Project has responded to any feedback and complaints. Special communications will be held with vulnerable groups. MTCIT will also conduct two beneficiary satisfaction surveys of nationwide internet users during Project implementation at Project mid-term and towards the end of Project implementation. For monitoring, the

results framework includes two intermediate indicators: (i) Project beneficiaries reporting satisfaction with improved internet services; and (ii) Grievances responded and/or resolved within the stipulated service standards.

D. Results Chain

49. **The Theory of Change.** RMI needs to improve access to high quality, low cost Internet services, transform government practices from siloed, paper-based activities to digital services, and support the rollout of digital government services and the development of the digital economy. The project uses a three-pronged approach to deliver these changes: (i) supply-side (connectivity) interventions to increase private sector-led investments in digital infrastructure; (ii) demand side (digital government and digital economy) interventions to increase availability and access to key services online; and (iii) helping to develop a robust enabling environment (policy and regulation, institutions and skills) to build trust and confidence in digital services. It is expected that through these interventions, the Project will generate a positive impact contributing to national (and regional) integration, inclusive social and economic growth and development, the creation of new jobs, improved services, increased access to services and increased country competitiveness. Specific project outcomes will include improved digital connectivity and country-wide digital infrastructure, including underserved areas and neighboring islands, increased private sector investments in the ICT sector, strengthened leadership and institutional capacity of government in digital solutions, improved and expanded provision of digital government services, and improved climate resilience and adaptation.

Figure 2. Results Chain



E. Rationale for Bank Involvement and Role of Partners

50. **Rationale for WB involvement.** The rationale for WB involvement in digital government development is based on two pillars: (i) the WB's long-standing engagement in the Pacific region on digital development issues, including in RMI under the MH: ICT Technical Assistance Project (P132119), which supported a major review of the ICT sector and identified options to improve sector performance—the

Government endorsed and adopted the findings in May 2019; and (ii) the WB's global expertise on digital economy and digital government support programs, including management of several e-government/e-services programs in different economies, and partnership with industry/technical institutions, and on digital identification for development.

51. **The WB is also well-positioned to support the development of robust and inclusive ID systems in line with the shared principles for sustainable development.** The WB has undertaken, and continues to undertake, systematic analytical work on ID systems in countries around the world. Further, much of the WB's work is conducted across many sectors, which depends on accurate, meaningful identification and tracking of individuals (e.g., safety nets programs, health, financial, trade services). WB leadership in this area brings relevant and insightful cross-sectoral knowledge. Further, the WB's convening power helps to create synergies in different sectors and to bring together partners in a coherent and sustained manner. The Project, which focuses on developing connectivity, digital platforms and building the Government's capacity for citizen-centered integrated digital public service delivery across sectors, is envisaged as a complementary engagement with ongoing activities by other partners to support digital public services, particularly the USA which has deep and cross-cutting engagements in RMI under the Compact.

F. Lessons Learned and Reflected in the Project Design

52. **Lessons learned from previous engagements in RMI.** Previous work in RMI around sector reform emphasized the importance of following an inclusive and consultative process, particularly to address multifaceted concerns from the incumbent NTA. Work was carried out by the PSC to identify and examine key priorities and concerns as part of the market structure reform workstream, including (i) developing a methodology and approach for the negotiated purchase of the shares from the minority private NTA shareholders which provides fair value for their shares; (ii) ensuring NTA staff are managed in a fair and supportive way; (iii) ensuring the continuation of important social services that are currently provided by NTA on a non-commercial basis; (iv) agreeing what strategic national assets should be transferred to the open access InfraCo; and (v) analyzing what residual assets are no longer needed by the sector and might best be retained by the Government and repurposed (for example land and buildings). The PPA also supported initial preparatory work to develop a robust process for the preparation of the Digital Government Strategy and development of the legal and regulatory reforms to help improve the readiness of the proposed implementing entities for this Project.

53. **The early creation of the PSC to lead the sector reforms and digital development agenda has ensured an inclusive and consultative process which is owned and delivered locally.** The PSC has overseen a broad analytical approach, focusing on the wide range of benefits and impacts of the investments and reforms. It has also encouraged a highly collaborative approach, involving Government, public sector agencies, NTA and other key stakeholders in the development process. Previous sector reform efforts in RMI struggled in part due to a lack of understanding among key stakeholders, concerns about what the changes would mean for the community and doubts about whether the types of changes proposed were necessary or appropriate for the RMI country context. The PSC structure and approach is intended to ensure (i) greater emphasis and understanding of the technical, financial and economic benefits which the reforms will generate; and (ii) appropriate focus and response to concerns identified through the PSC. A human resources plan is being developed for dealing with changes around the deployment of NTA staff triggered by the reforms. In previous years, the issue of redundancies was a key

concern which had weakened political and stakeholder commitment. The Government has subsequently adopted a policy that no employment will be lost as a result of the reform of NTA.

54. **The impacts of the sector reforms and digital development agenda are not limited only to financial, economic and telecommunications issues.** The PSC will also focus on the opportunities for digital government services and the digital economy, as well as the potential disruptions which these changes may trigger. The opportunity to support the rollout of digital services for priority public sector applications (e.g., health and education) has been highlighted, which has helped to build enthusiasm for the reforms. The rollout of improved digital services for the neighboring islands, closing the digital divide between Majuro, Ebeye and the remote communities, has also been an important catalyst towards broadening support for the reforms. Placing the responsibility of the PSC with the Minister of Education, Sports and Training has also been highly effective in helping to ensure that the focus is not limited solely to digital infrastructure or financial benefits, but also includes the potential for new digital applications and services. It has also helped to improve linkages with other WB projects in RMI such as RMI Education and Skills Strengthening Project (P171924).

55. **The Project also reflects key findings and recommendations from a global review of digital government development**. These findings are described in the World Development Report *Digital Dividends* 2016 which emphasized the need to balance investments in technology (*digital*) with appropriate policy measures (*analogue complements*). The Project design places upfront emphasis on strategy and implementation roadmap development, and development of an appropriate 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.

56. **The Project's design also considers the experiences of other similar WB-supported projects in Federated States of Micronesia, Tonga, Samoa, Tuvalu, Papua New Guinea, Vanuatu, 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, which will be particularly relevant for the Project considering the thin and weak implementing capacity in RMI. Following are key lessons learned and principles from such projects:

- Encourage high level leadership which is essential for implementation of a whole of government approach, as are effective whole of government governance processes;
- Align the national digital strategy with the national development plan;
- Give preference to developing government-wide shared infrastructure and centralized solutions, versus working on sector-specific solutions;
- Focus on the citizen and businesses to overcome the fragmentation of government services;
- Ensure cybersecurity of all digital infrastructure and digital services ('Secure by Design');
- Adopt a phased approach to the development and implementation of complex projects;
- Prefer solutions that already exist and have been proven to work;
- Where adequate technical support exists, consider open source solutions; and
- Balance quick wins (e.g. e-services) and less visible components e.g. back-end infrastructure.

57. The Project has also drawn on the WB'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. Experiences from other ID projects and analytical and global convening work on ID by the WB's Identification for Development (ID4D) Initiative have also been incorporated in the Project design.

III. IMPLEMENTATION ARRANGEMENTS

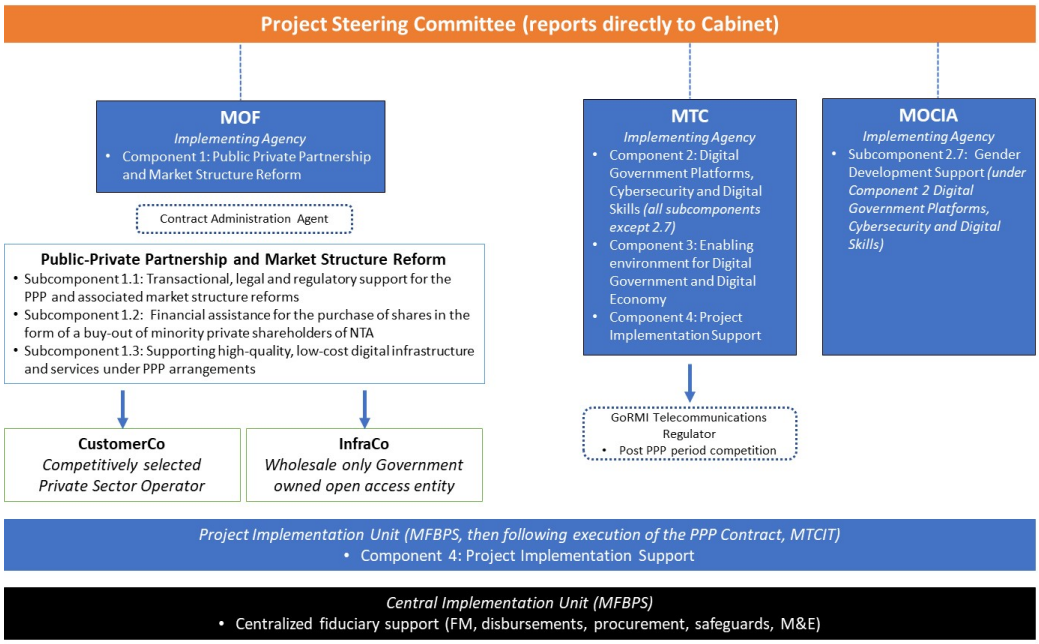
A. Institutional and Implementation Arrangements

58. The Project will be implemented over a seven-year period. The PSC will provide oversight, coordination and support for Project implementation and will report directly to Cabinet. The PSC is currently chaired by the Minister of Education, Sports and Training and is comprised of *inter alia* the Secretaries for each IA, and the Chief Secretary and Chief Executive Officer/President of NTA. It is envisaged that the composition of the PSC, which will always be chaired by a Minister, will evolve as Project implementation progresses. The PSC composition will be as determined and appointed by the Cabinet and set forth in the Project Operations Manual. The PSC will be critical. Strong engagement across Government ministries and stakeholders will be critical to facilitating effective implementation of the national connectivity infrastructure and build consensus around the "whole of government" approach to digital government. The Government will need to ensure effective communications with stakeholders, particularly as the restructuring steps are completed and new infrastructure is rolled out. The MFBPS will implement Component 1. MTCIT will implement Subcomponents 2.1-2.6 and Components 3 and 4. MOCIA, through its Gender Development Office, will implement Subcomponent 2.7, which is focused on strengthening actions and initiatives on gender. The MFBPS and MTCIT will work closely with the Office of the Attorney-General (AG) in implementing Subcomponent 1 (PPP transaction and associated market structure reforms) and Subcomponent 3.2 (legal and regulatory framework for Digital Government and the Digital Economy). The Office of the AG will maintain a Project focal point to support MFBPS and MTCIT on such implementation.

59. MFBPS will host the PIU to carry out day to day management of the Project and coordinate overall Project implementation. The PIU will facilitate the daily collaboration among all implementing agencies and other Project stakeholders. Upon the execution of the PPP contract or the achievement of other milestone(s) agreed by the Recipient and the Bank and set forth in the Project Operations Manual, the PIU will be transferred to be hosted within MTCIT. The composition and other details of the PIU will be set forth in the Project Operations Manual. The Project will also be supported by the CIU within the MFBPS. The CIU provides a centralized approach to project implementation functions needed for all WB projects in RMI, particularly procurement, financial management, audit, social and environmental risk management, monitoring and evaluation. The Director of DIDA and a full-time Program Manager are responsible for overseeing and managing the CIU and ensuring the implementing agencies receive timely and adequate support services. The CIU has been effective in improving compliance with WB processes and procedures, reducing the inefficiencies and complexities of each project having to development and maintain its own systems and processes for core fiduciary activities. The CIU will continue to identify opportunities to enhance quality and timeliness of implementation, build systems and operating procedures, aligned where possible with Government processes and procedures, and develop and

operationalize performance management standards for all project staff. The implementation arrangements are set out in the following diagram.

Figure 3. Implementation Arrangements



B. Results Monitoring and Evaluation Arrangements

60. The Results Framework for the Project has been developed to track the deployment of the broadband infrastructure and the development of key building blocks for the delivery of digital services. Each component includes specific milestones/targets. Climate cobenefits will be tracked by monitoring performance mobilizing private sector investment in climate-resilient digital services. The M&E framework will also track the usage of digital applications/services developed under the Project. For Component 3, the framework will track the transition from event to people centric, and the linkages of the systems. 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). The Project Manager, in consultation with the implementing agencies, will prepare progress reports every semester, for submission not later than 45 days after the end of each calendar 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 MTCIT will also conduct two beneficiary satisfaction surveys of nationwide internet users during project implementation: (i) at project mid-term; and (ii) towards the end of project implementation.

C. Sustainability

61. **The development of an attractive investment climate for doing business in RMI is a critical component to promote the long-term sustainability of digital investments.** Predictability and transparency of the legal and regulatory framework that is conducive to private sector participation and

competition will increase the demand for affordable quality ICT services, including advanced applications. A Contract Administration Agent (CAA) will be engaged by MFBPS during the PPP build period and will be responsible for administering the PPP contract under delegated authority from the MFBPS. The CAA will manage the PPP and will be responsible for monitoring compliance by the private party with its obligations under the PPP and special license. The CAA will eventually transition into the role of a Telecommunications Regulator, which will take over regulatory responsibilities for the sector at the end of the PPP build period. The CAA will be supported by the Project. The Telecommunications Regulator will be supported by the Project during its initial establishment phase, but over the longer-term resources will be generated through license and regulatory fees to sustain the required regulatory capacity to supervise the sector on a self-funded basis. TA is also provided under Component 3 to support the development of the wider enabling environment for digital services—helping to build trust and further stimulate demand for digital services.

62. **The business case for the PPP indicates positive long-term cashflow and demonstrates the affordability of the new services utilizing the new infrastructure supported under the Project.** The existing network architecture in RMI (comprising GSM and copper networks that involve high personnel commitments and maintenance costs and a separate 4G LTE network leased to a third party operator), combined with NTA's go-it-alone corporate arrangements which see it attempting to implement solutions without the scale or scope afforded to larger regional operators, lead to high costs and result in some of the highest mobile and fixed line prices in the world. The PPP contract will require an experienced international private sector operator to modernize the network architecture, introduce efficiencies based on shared corporate services which support operations across multiple jurisdictions, and set tariffs consistent with competitive prices obtained in other Pacific Island countries with functioning competitive telecommunications markets. While public sector contributions to the PPP contract will be required to enable solutions to various legacy issues accumulated by NTA (including those resulting both from Government policy and past technology choices), financial modelling shows that estimated private investment of approximately $7.5 million will earn its weighted average cost of capital even on the assumption of up to 30 percent loss of market share following the end of the exclusivity period. The table below summarizes the main capital outlays and the expected funding source:

Table 1. Summary of Investment Needs, Financing Costs and Financing Sources

Investment Needs	Costs $ (estimate)
Legacy network and business costs and retirements	9,360,000
New FTTP network and neighboring islands solution	5,000,000
Private operator retail investment	7,000,000
Total Investment Costs	***21,360,000***
Public sector Financing under PPP	*14,700,000*
Private Capital	*7,360,000*

63. **Prices for fixed and mobile services will decline significantly under new pricing tariffs which will be prescribed by the PPP contract and new licensing framework.** FTTP connection costs for businesses and the Government will fall from between $600 to $4,000 per month (depending on connection speed) to between $60-$400 per month with an average RPU of $90 per month. Mobile voice and data services will be bundled, with expected household spending per connection declining from $23 per month for a

relatively inferior combination of GSM voice and 4G LTE to about $8 per month for a modern 4G LTE service. While public sector contributions to the PPP contract will be required to enable orderly transition to new market arrangements, including addressing legacy financial liabilities and contractual commitments by NTA, as well as the cost of retiring the existing costly network architecture, over the medium term, new fixed and mobile broadband services will be financially viable at considerably lower prices than are currently being charged by the NTA. The financial analysis of the neighboring islands investments—on a standalone basis—also shows a viable and sustainable business case over the life of the infrastructure.

64. **Decommissioning legacy infrastructure will also trigger significantly cost savings, reduced energy consumption and lower CO2 emissions.** The transition to fiber will trigger significant offsetting savings as costs associated with maintaining and operating the existing copper network are eliminated—operating expenses (OPEX) savings of 15-30 percent are fairly common and in some cases OPEX savings of up to 60 percent have been reported. The transition from the 30-year-old copper network will also reduce energy costs by between 40-60 percent and labor costs—fiber is 70-80 percent more reliable than copper which results in approximately 60 percent fewer call-outs and savings of between 40-60 percent on maintenance.[24] Lower energy consumption due to the switchover to new energy efficient infrastructure and decommissioning of inefficient legacy equipment will also result in significant reductions in CO2 emissions for the sector due. These emissions are expected to reduce by at least 50 percent over the Project implementation period on a per user basis.

65. **The proposed "whole of Government" approach adopted by the Digital Government Strategic Framework 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 capacity limitations in RMI. The use of cloud-based solutions will help to minimize the burden of technology upgrades for Government reducing the burned of reinvestments in data center facilities, and to standardize ICT resource management and provisioning. Other measures to support sustainability of Project investments include: (i) strong focus on cybersecurity support; (ii) identification of opportunities for fees for services and PPP models; and (iii) exploring opportunities for shared services across the Pacific region. The 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 travel.

IV. PROJECT APPRAISAL SUMMARY

A. Technical Analysis

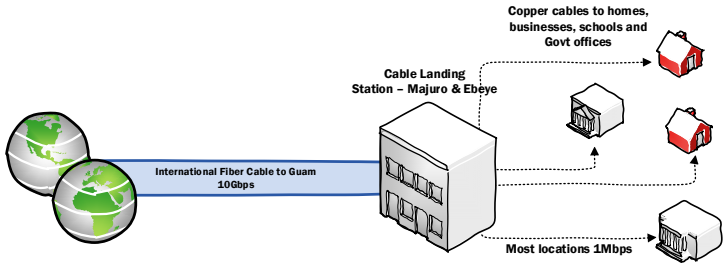
66. **The project will deliver better connectivity and more accessible, lower cost, communications services for all users in RMI.** Key coverage goals include the rollout of terrestrial fiber passing 95 percent of premises in the deployment area and access to mobile voice and mobile broadband services covering

[24] Ilsa Godlovitch Peter Kroon Sonia Strube Martins Fabian Eltges, *Copper switch-off, A European benchmark*, FTTH Council Europe Conference, Amsterdam 13 March 2019, at page 8. See https://www.ftthcouncil.eu/documents/Reports/2019/Copper_switch-off_analysis_12032019_short.pdf

all neighboring islands with established populations (around 100 or more inhabitants). The PPP will also include obligations on the private operator to rollout 4G LTE mobile services according to specified coverage, quality and price services standards. The project will focus on improving existing connectivity and bringing digital infrastructure to underserved areas. Project outputs will include rollout of high speed fixed and mobile data services, deployment of fiber optic networks, microwave links, remote mobile sites and other critical connectivity infrastructure.

67. **Access networks on Majuro and Ebeye will be upgraded to deliver high capacity bandwidth directly to end-users.** The existing infrastructure in RMI which connects users to the existing international submarine cable system (via HANTRU-1) is old. It was developed and installed when voice was the only form of communication and was never designed to meet the needs of 21st century internet use. The current fixed network topology is shown in the following diagram.

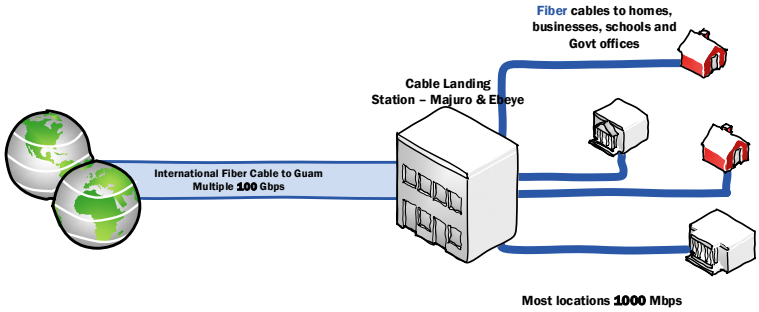
Figure 4. Existing fixed access networks in Majuro and Ebeye



The existing access networks on Majuro and Ebeye were designed with voice in mind when they were originally built 30 years ago. They cannot deliver the potential of the submarine cable's capacity and act as a bottleneck on connecting to the internet.

68. **Terrestrial fiber optic access networks will be rolled out on Majuro and Ebeye.** The new FTTP infrastructure will remove the bottlenecks between the existing international submarine cables that land in Ebeye and Majuro (via HANTRU-1) and users. Upgrades or replacement of the current 4G LTE mobile network will also be completed. The intention is to deliver on the potential of the existing international cables for all internet users in Ebeye and Majuro. The new investments will allow the older copper telephone, pay television and internet networks to be turned off, saving energy and freeing up buildings and land. High quality, low cost services will allow entertainment to be delivered online. High quality internet will allow streaming of locally produced content and information and content from around the world.

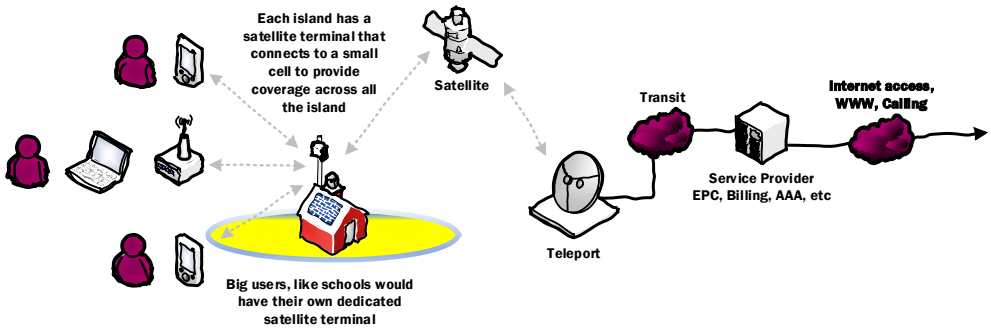
Figure 5. Proposed fixed access networks in Majuro and Ebeye



Proposed infrastructure upgrades will deliver 10 times the capacity to Guam and 1000 times the connection speed to most homes, businesses, schools and Government offices.

69. **The neighboring islands will benefit from enhanced satellite services.** It is not technically or commercially feasible to connect the communities on the 24 neighboring islands by fiber optic networks. Due to the extreme remoteness and small populations, these islands will be connected by satellite technology.[25] The benefit of satellite technology is that it can cover all the neighboring atolls and islands at once and there is no expensive and time consuming process to lay fiber optic cables. Satellite technology has continuously improved its speed, performance and price over many decades. However, at any given point in time, the capacity available over satellite will lag behind what can be offered over a fiber optic network. This means that satellite services for the neighboring islands will always be slower and more expensive than a comparative fixed line service like that available in Majuro or Ebeye. The Project will support the deployment of additional satellite capability from 2023 onwards when new satellite services covering RMI are expected to launch. This new satellite technology is expected to provide at least a 100Mbps backhaul (peak) at less than $2 per Gbps. The expected price / performance level of the new technology will allow a better mobile data service. It will also support the rollout out of a modern 4G LTE network, which will be carried out by the private sector partner under the PPP contract. Existing 2G/3G only phones and equipment will be supported during the interim period and then retired by 2025.

Figure 6. Enhanced satellite services for neighboring islands



High level end to end satellite and 4G mobile diagram. The combination of satellite to connect the island and mobile radio to share the satellite capacity across the island can deliver quickly and with low installation costs compared to building submarine fiber cables to each island.

[25] Arno will be connected by terrestrial radio links from Majuro. This means it sits in between fiber and satellite. It will have better connectivity that the satellite connected islands, but not as good as the fiber connected Majuro and Ebeye.

70. **The objective of the PPP and market structure reform is to procure through competitive bidding an experienced international telecommunications operator to execute the technical and institutional upgrades.** In anticipation of eventual market structure supporting multiple competing providers, the sector will be unbundled into a wholesale infrastructure access provider (InfraCo) and retail service providers. However, during the initial 3 year PPP build period, a single retail service provider will take over the existing retail business and assets of NTA and will also be responsible for operating InfraCo. This will enable RMI to take advantage of the technical and commercial capabilities of the private operator by giving it the operational flexibility to address both fixed and mobile infrastructure issues and to roll out new services. Under the PPP contract, the private operator will be obligated to meet specified service level standards. These service standards will require the private operator to roll out a modern and upgradeable 4G LTE network across all populated areas, roll out FTTP and provide fixed line and mobile services at pre-specified prices for the duration of the PPP build period. In return for taking on the investment obligations, reducing prices to pre-specified competitive levels and meeting requirements associated with the establishment of InfraCo, the private operator will be provided with exclusive access to the market for 3 years to allow the private operator to complete the transition and roll-out before competition is permitted. It will also enter into a data services contract with the Government which may run for 1 to 2 years beyond the end of the PPP build period.

71. **The private sector partner for the PPP will be procured through an internationally competitive bidding process.** Bidders will compete on the basis of the most advantageous proposal according to criteria (technical and cost), specified in the request for proposals document, which meets all investment, reform and restructuring requirements. During the PPP build period, the PPP company will receive Government contributions, financed under the Project, through milestone payments linked to meeting specific objectives, such as the implementation of new prices and customer contracts, meeting service level requirements, implementing FTTP roll out, paying down legacy liabilities and obligations, delivering the required improvements to the operation of InfraCo, and transferring the FTTP network prior to the end of the PPP build period. The private operator will use its own funds, Government contributions and debt finance to meet all financial obligations associated with performance requirements to be set out in the PPP contract. Overall, modelling indicates approximately $7.5 million of private investment will be required and that this private sector financing is commercially viable.

72. **The private operator will be responsible for rolling out FTTP services for all users (government, business and homes) on Majuro and Ebeye.** The private operator will do this on behalf of InfraCo and the FTTP network (including core fiber optic network and drops to individual premises) will be transferred to InfraCo at the end of the PPP build period. The final connections delivering retail services for end users (government, business and homes) will be done by the service providers, initially the private operator and at the end of the exclusivity period, any ISPs who enter the market. These service providers will be responsible for customer relations, customer service, etc., and will access the wholesale fiber services from InfraCo on an open access and non-discriminatory basis which ensures that every service provider is treated equitably. The network topology of the passive infrastructure will consist primarily of underground fiber optic cable. Some aerial fiber optic cable and cabinets will be utilized to connect the drop cables to the correct service provider.

73. **The FTTP network will be designed to a Layer 1 open access standard.** This means that competing service providers will be able to choose to use the underlying infrastructure for either shared fiber technologies such as gigabit-capable passive optical networks (GPON) or point to point technologies for high capacity applications such as cellular backhaul or connecting Government offices and key businesses

to 10G or 100Gbps connectivity. The passive nature of the network means that it will be able to accommodate advances in speeds and technologies as they become relevant to the RMI market. The network will be constructed such that it can be easily expanded and upgraded to provide additional connections to premises to accommodate growth and building / land use changes over its expected life. The costs for the active layer (active infrastructure such as customer premises equipment (CPEs) and optical line terminals (OLTs) and passive splitters) will be incurred by the service providers.

74. **Decommissioning and removal of legacy infrastructure.** Once the FTTP network rollout is complete and a high-quality internet service is in place to all premises that wish to take the service, the private operator will be required to decommission and (where appropriate) remove the old network platforms. The most significant asset to be decommissioned is the legacy copper network, which includes the direct buried copper cables and above ground copper infrastructure such as pedestals, cabinets and terminals. The old copper main distribution frame (MDF), telephone and DSL equipment at the NTA head office building in Majuro and the Exchange building in Ebeye will also be decommissioned and removed. These buildings may be repurposed freeing up valuable commercial spaces for other uses. The Rita and Airport sites will no longer be needed, as the longer transmission distances of fiber compared to copper mean that these distribution sites can be cleared and repurposed. The Laura distribution site will be replaced by a street side cabinet, which will also allow the current building to be repurposed. Turning off the copper PSTN and DSL equipment will save significant energy costs both at head office and at the three surplus sites.

75. **Prior to the end of the PPP, the private operator will transfer the FTTP network to InfraCo and relinquish all control of InfraCo to the Government.** InfraCo will be vested with a number of key infrastructure assets from the start of the PPP build period, such as HANTRU1 cable and mobile towers. However, due to the need to ensure execution flexibility, other fixed line assets, such as the existing copper, and all staff will be transferred from NTA to the private operator. During the PPP build period, the private operator will undertake FTTP investment, retire copper, train staff and undertake other activities that are necessary to ensure that InfraCo will have the full complement of open access assets and the staff able to operate them from the end of the PPP build period. Prior to the end of the PPP build period, the private operator will transfer all pre-specified open access assets, staff and systems that until then had been on its balance sheet to InfraCo, to complete the InfraCo asset register and to enable it to operate on a stand-alone basis. At the end of the PPP build period, the private operator will cease any governance control of InfraCo and from that point will access the wholesale services on the FTTP network from InfraCo on an open access and non-discriminatory basis.

76. **The restructuring of NTA will not involve involuntary employment losses for NTA staff.** However, the total estimated number of local staff working at InfraCo and at the first private sector operator (CustomerCo) in a competitive market environment is expected to reduce staffing levels from about 133 at present to a range from 82 (under a resilient scenario) to 68 (under a slim scenario where staffing levels are minimized). A voluntary separation program and retirements will gradually reduce staffing levels from current levels to around 115 (about 18 fewer positions) by mid-2022. These voluntary separations before the PPP contract begins will be paid out by NTA on a business-as-usual basis. The private sector operator will also be required to prepare a redeployment plan for any former NTA employees who will no longer be required under the new operating model. Government will assist in the redeployment of these staff in accordance with the Labor Management Procedure (LMP) to secure new positions. The government will combine various active labor market policies (ALMP) to enhance redeployment opportunities, such as career counseling, job search/matching assistance and reskilling. The

retention will not be unconditional and these retained workers will be required to take up ALMP, especially participating in career counseling services, completing training courses, and receiving job matching assistance. The Government will be obliged within a 5 year period to have made offers of employment to staff whose roles are no longer available, in accordance with the LMP.

77. **A new telecommunications regulatory regime will be put in place to enable third party retail service providers to obtain access to InfraCo assets and promote new competitive entry into the RMI market.** A Telecommunications Regulator will be created under MTCIT to make regulatory decisions necessary for the sector, including licenses, spectrum, numbering and customer protection. At the end of the data services contract, the Government will re-bid an all-of-government contract (or split it into a number of contracts for bidding). This further competitive process, facilitated by the newly operational regulatory regime and independent InfraCo, will provide a further boost to market, promote contestability and encourage new competitive entry into the market, and will serve to ensure the sustainability of the reformed market structure.

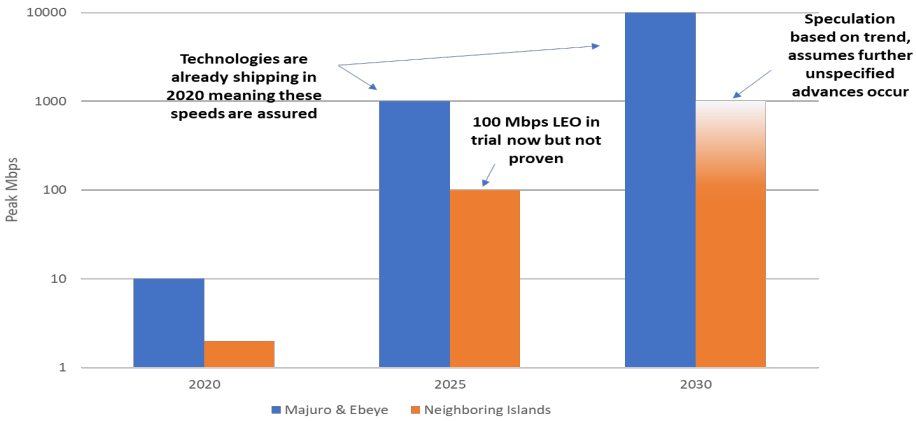
78. **A number of alternative technical solutions to FTTP were considered, including the potential for 5G mmWave for Fixed Wireless Access.** However, none were preferred or considered appropriate. To provide high bandwidth services, new fiber optic infrastructure would still be needed to connect small cell sites in the streets close (within 100-200 meters) to individual premises—this is the fiber optic network which will be supported under the Project. The precise costs of 5G deployment are not yet known, as this technology is still in its infancy, but early estimates indicate that a 5G solution would be significantly more expensive than FTTP—the fiber backbone network would still be required, and the radio sites, modems and operational costs would be significantly higher. Future upgrades for FTTP are also easier—unlike 5G, FTTP can be scaled by orders of magnitude at low cost. 5G using mmWave technology is also better suited to densely populated locations due to its lack of penetration into buildings, cars, very small range and high attenuation by water vapor, etc. It is not suitable for country contexts such as in RMI where the cost of putting in drop wires is low.

79. **While Majuro and Ebeye have fiber connection, the neighboring islands will likely always need to rely on satellite services.** The combination of technical and commercial reasons means the neighboring islands will always have poorer services than what is available in Majuro and Ebeye. RMI currently has more limited satellite options than its Pacific comparators due to its extreme isolation and location relative to existing satellite orbits. However, improvements in satellite technology will close the gap to a significant degree. The next generation of satellite services, called Low Earth Orbit (LEO) Satellites,[26] promise to provide a better technical solution than currently available and importantly provide coverage over the Marshall Islands. However, in an absolute price / performance sense, the neighboring islands will always be at an infrastructure disadvantage despite continuous improvements in satellite technology. Government will plan accordingly for a "two-speed" model for delivering digital services throughout RMI. This will allow for the delivery of services in Majuro and Ebeye to be at the same level as any modern city around the world, boosting development and efficiency. Digital applications for the neighboring islands

[26] There are a number of providers (Oneweb, Starlink, Telesat) who are launching hundreds of satellites. Pricing and service viability is yet to be proven but the significant investment and early information looks promising. Starlink has offered beta testing of a ~100Mbps service for $99 per month with a $500 terminal cost. *https://observer.com/2020/10/spacex-reveal-pricing-of-starlink-beta-service/*

will be modified to work in a low bandwidth model, while maintaining equivalent functionality to minimize the digital divide between these different communities.

Figure 7. Expected network capability at Majuro and Ebeye schools compared to neighboring islands



80. **Government will develop a Digital Government Strategic Framework and Implementation Roadmap.** The development of a Digital Government Strategic Framework will be led by MTCIT, which will be responsible for coordination and consultation across government. It will have the following objectives: (i) implement Digital Government across priority Government agencies and activities; (ii) advance digital inclusion for all RMI citizens; (iii) strengthen governance and efficiency; (iv) promote data sharing and a service-oriented information systems architecture; and (v) enhance citizen engagement. The ultimate focus will be on improving Government business process and workflow efficiencies, improving the quality of life for citizens and residents, while reducing the complexity for businesses transacting with Government. Work on the Framework began in 2020, supported under the PPA, and should be delivered by late 2021. It will promote the use of digital technologies within Government departments and agencies, including the transition from paper-based transactions to digital Government. This model is expected to enable a far more integrated, shared, accurate, and inclusive information flow within and across Government agencies and also support open data initiatives in the future.

81. **An integrated Government digital platform will need to be developed to consolidate multiple independent systems.** As part of the development of the Digital Government Strategic Framework, government will identify how to consolidate systems and the highest priority frontline digital services that could be deployed in the next 2-3 years. Business registration, land registration, social systems and taxation, for example, are generally not accessible online. The interface between these existing systems will need to be developed, particularly around common standards and coding to promote interoperability between datasets, in addition to the Government ICT architecture to support the more widespread and systematic rollout of digital services. Such architecture would provide common enablers needed by most electronic and mobile services such as identity authentication, business authentication, digital ID integration, content management, electronic payment services, data services, notification services etc. Using such enabling tools, government departments could potentially save 30-40 percent of the time needed for online service implementation and could reduce their overall ICT cost by 20-30 percent, based on experiences in other countries. As part of the development of the Digital Government Strategic Framework, government will identify its highest priority frontline services that could be deployed in the next 2-3 years.

82. **Integration and consolidation of multiple systems does not reduce the level of control by data owners or managers.** The adoption of a common approach to IT systems and processes will reduce costs and improve functionality and resilience. However, it is not predicated on changes to existing responsibilities and mandates for data management, access or service delivery. Existing agencies may continue to carry out their existing functions and responsibilities. Strict privacy and data protection controls may be included in the design of the system and prescribed by law to ensure that only relevant ministries and individuals who are responsible for managing service level systems and processes have access to relevant data. The migration to common platforms nationwide also does not mean that the Government will have access to data held and managed by local authorities or councils, or *vice versa*, or that data within one ministry can be read by another. The move to common standards and platforms will however help to ensure that existing agencies can perform their existing tasks more efficiently—and that overall, government systems are more secure, resilient and robust.

83. **Investments in digital government will focus on improving human resources and human capacity.** Shortfalls exist locally for systems administrators, skilled security professionals, systems developers (including developing interoperability components such as applications programming interfaces to enable data sharing), and enterprise architects needed to bring the national ICT environment into a managed, structured, standardized, and customer-focused platform. The development of the DGSF will help ensure a structured process for transitioning government agency information systems into a Cloud Computing environment, as well as encourage interoperability, portability, and better security to protect the confidentiality, integrity, and availability of RMI's data resources. This will also provide an architectural and operational basis for ensuring both disaster recovery design and continuity of government information systems during natural disasters. Workflow and process codification for agencies adopting digital government services is also limited, so this will be an important focus of the Project. Addressing the cybersecurity challenges will be a priority. A comprehensive cybersecurity training and awareness program is needed to both implement the proposed Cybersecurity Framework, as well as to provide a continuing awareness program to keep government and citizens informed of emerging threats and potential incidents which may impact the security or well-being of both government agencies and citizens.

84. **The quality of digital ID systems depends on design and technical factors and use cases, which have profound implications for system cost, utility and security.** These factors include the organizational design of identity management, the choice of technology used for establishing uniqueness, the authentication infrastructure (i.e., how IDs are used to verify proof of identification at the point of transaction), the form and type of token or credential (i.e., different types of cards, use of only numbers or biometrics), security measures put in place for protecting databases (e.g., natural disasters, cyberattacks), and availability to support service delivery (e.g. to prevent duplicate ID systems or databases from emerging). Hardware and software may adopt open standards to reduce costs, promote portability of data, avoid vendor lock-in and provide flexibility for future adaptation.[27]

B. Economic and Financial Analysis

85. **Economic analysis shows positive economic impacts.** At present, NTA's financial viability is underwritten by significant direct and indirect fiscal commitments by Government. Directly, the

[27] Identification for Development. 2018. "Technical Standards for Digital Identity". Draft for Discussion. Washington, DC: World Bank Group. *http://pubdocs.worldbank.org/en/579151515518705630/ID4D-Technical-Standards-for-Digital-Identity.pdf*.

Government has been providing an operating subsidy of approximately $1.2 million per year. While this subsidy has now reduced to approximately $500,000 per annum, financial projections indicate that a total direct support of approximately $2.2 million over the period from 2022 to 2027 will be required to keep NTA solvent. In addition, indirect support of approximately $1.7 million is being provided both through NTA being exempted from the 3 percent revenue tax and as a result of the government paying excessive prices for broadband services. The Government also pays extremely high prices for telecommunications services, which accounts for more than 30 percent of NTA customer revenues. Overall, fiscal savings alone in the period from 2022 to 2040 are estimated to amount to approximately $38 million. These savings can be directed towards improving government services and health, education and other areas, with subsequent effects on economic growth. For households, monthly telecommunications spending (for significantly improved services) will decline by about two thirds. This will enable more households to purchase connections. Mobile and fixed line penetration in RMI is expected to grow rapidly, reaching around 80 percent within 5 years, which is in line with levels achieved on other small Pacific Islands.

86. **Economic literature provides strong evidence of impact of mobile broadband in particular in developing countries.**[28] WB and other studies show that broadband deployment in developing countries assists economic growth, with average impact on GDP growth ranging from 0.25 percent to 1.5 percent per 10 percent increase in broadband penetration.[29] However, this assessment considered the benefits from an increase in penetration rate on the total population, but not the qualitative aspects of broadband growth. The new FTTP network will deliver much higher speeds and better quality compared to the current ADSL based broadband that delivers lower speed and on a shorter distance. A study from the OECD also identified significant impacts on GDP when upgrading from a slow copper-based broadband connection to a high speed FTTP connection. It concluded that overall the OECD region grew from a 0.75 Mbps/s speed in 2002 into 12.85 Mbps/s in 2016. The GDP change from this increase is 1.32 percent. The development of a high quality, lower price broadband also includes several social dimensions, including more accessible telecommunication services for both retailers and end users, better access to information resources, education, training, development of electronically-delivered services such as digital government administration (reducing time and effort to carry out administrative procedures) and overall improved productivity.

87. **Rapid increase in fixed and mobile broadband penetration will have a significant effect on economic growth in RMI.** Using data from international studies on the relationship between growth in broadband penetration and GDP growth, it is estimated that by 2027, Marshall Islands GDP would be 6.8 percent higher with the project than it would have been under business as usual—where NTA would have continued to provide inferior services at high prices, suppressing access to broadband. Since the proposed project will both produce economic benefits from increase in broadband penetration in RMI and attract additional grant funding that would otherwise not be available, the total economic return for RMI is very high, estimated to generate an Economic Internal Rate of Return (EIRR) of over 300 percent. Such high macroeconomic impacts are achieved through improved health and education outcomes, better ability to sell goods and services and through reductions in costs of doing business. Given that RMI at present has one of the lowest quality and highest cost telecommunications services in the world, while its physical

[28] Katz and Callorda, *The economic contribution of broadband, digitization and ICT regulation*, ITU Publications https://www.itu.int/dms_pub/itu-d/opb/pref/D-PREF-EF.BDR-2018-PDF-E.pdf. See ibid pages 5-6, and compare economic impact of fixed and mobile broadband penetration in Tables 3 and 5, on pages 11 and 13 respectively.
[29] World Bank study "Economic Impact of Broadband" from Christine Zhen-Wei Qiang and Carlo M. Rossotto with Kaoru Kimura 2009

isolation makes digital connectivity particularly valuable, very significant estimated economic effects from digital transformation to be supported by the project are not surprising and may in fact be exceeded.

88. **Financial sustainability of telecommunications services will be achieved through on-going cost reductions, support for FTTP and neighboring island initial capital investment and assistance with resolution of legacy issues.** Financial modelling shows that a competent international operator could roll out a "clean slate" high quality 4G LTE network and provide competitive and sustainable services at levels of RPU that are affordable to Marshall Island residents and substantially below NTA charges (around $9 vs $23 per month). Similarly, the development of the FTTP backbone on the main islands is likely not only to improve services, but reduce costs, enabling fixed line connection costs to fall to an affordable range of $25 to $40 per month. However, there is currently no institutional basis for such "clean slate" entry. To enable such new sustainable business model to be put in place, it will be necessary to address NTA's residual liabilities, associated with historical investments and employment decisions, and to use private sector capability to roll out FTTP, retire copper and other residual assets and to transition customers to high quality services. Financial modelling indicates that the investment required to transition to a sustainable basis combined with immediate reduction of prices to competitive levels would be financially unviable without external support. Depending on pricing assumptions, a viability gap of between $12 and $18 million is estimated. That is, public sector financing of that magnitude would be necessary under PPP arrangements to enable a private operator to enter the market, undertake all the necessary investments in goods works and services, address historical liabilities and legacy issues and still earn its cost of capital.

89. **Investments in digital government systems comprise financing TA plus targeted investments in information systems, such as software and limited hardware, networking, installation and testing.** Expected benefits may be summarized in terms of cost avoidance, efficiency gains, and welfare improvement. International experience has demonstrated savings for government budgets through the adoption of cloud computing (infrastructure/platform/software as a service) as this provides resources for use by multiple government agencies. 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 $20 billion in cloud computing services to more than 25 of its agencies. The Philippines government has also recently adopted a "cloud first" policy.

90. **The Project will deliver a reduction in Government spending on multi-agency ICT infrastructure and services.** A reduction in transaction costs and processing time for public services is also anticipated, although baseline data is difficult to obtain in RMI and data for quantitatively measuring the impact of digital government services are limited. However, data from Sri Lanka, for example, concretely illustrated the benefit for its citizens. Digital services in Sri Lanka reduced the time that citizens spend to obtain a public service from 371 minutes in 2011 to 124 minutes in 2013. The average amount spent by citizens obtaining a public service before the introduction of e-services in 2011 was LKR1,553 ($13.74) or 0.31 percent of average annual household expenditure. By 2013, this figure had dropped to LKR747 ($5.79) or 0.15 percent of average annual household expenditure, contributing to an annual reduction in household expenditures by 22 percent.

91. **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: (i) 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; (ii) economic benefits through increased efficiency of firms; and (iii) fiscal savings through the reduction of error, fraud and corruption (EFC) and duplication of costs. In 2005, Pakistan was able to disburse more than $350 million to 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 even 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.

92. **Fiscal savings arising from the introduction of a robust identification systems are well established globally.** For example, subsidies and other transfer payments may be more effectively targeted to those in need. Digital ID can potentially generate fiscal savings by reducing error, fraud and corruption. A WB report[30] found numerous examples of savings from the reduction of EFC, including in Argentina where linking 34 social program databases with a Unique Identification Number (UIN) revealed inclusion errors in eligibility of various social programs and led to a reduction in spending of $143 million over an eight-year period. 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 ($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 $30-60 million. Savings are often found through reducing pension and wage bill costs for the civil service.

93. **Digital ID is also critically important for 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 micro-finance 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. This is the case in countries like Brazil, Ghana and Nigeria, for example, where the banking sectors have spent tens of millions of dollars on their own functional ID systems in the absence of a well-functioning ID system.

C. Fiduciary

(i) Financial Management

94. The existing institutional structure in the CIU at the MFBPS established to provide cross-cutting functions, including FM, to all WB-financed Projects will be used to carry out the FM and disbursement

[30] Identification for Development (ID4D). 2018. "Public Sector Savings and Revenue from Identification Systems: Opportunities and Constraints". Report. Washington, DC: World Bank Group.
http://pubdocs.worldbank.org/en/745871522848339938/PublicSectorSavingsandRevenueIDSystems-Web.pdf

functions for the Project. This includes the existing budgeting, accounting, financial reporting, internal controls and external audit arrangements currently in place for all WB Projects. There are three FM staff within the CIU available to manage the Project funds and disbursements, and additional resources are being added (from outside of this project) to support a growing portfolio in RMI. However, the PIU shall ensure sufficient FM resources are maintained for day-to-day FM and disbursement tasks and shall retain overall responsibility for ensuring FM controls and procedures are adhered to. To support the CIU in managing the Project account, focal persons/support staff from the PIU will be assigned to coordinate and carry out day-to-day FM tasks for the Project. Relevant training and guidance on the FM requirements for the Project will be provided to PIU support staff by the CIU and WB. The financial management risk rating is confirmed as Moderate.

95. The main disbursement method used under this Project will be advance while the three other disbursement methods available will be reimbursement, direct payment and special commitments. Funds will flow from the WB directly into a Designated Account (DA). Expenditures will be tracked through the Government accounting system (the 4Gov software) and paid from the treasury account. A new Financial Management Information System (FMIS) is being developed and it is anticipated that there will be a transition period during which both the existing 4Gov system and the new FMIS will be running in parallel after which the 4Gov system will be decommissioned. For fund disbursement, prior to completing a replenishment Withdrawal Application, the equivalent funds expended from the treasury account will be transferred from the DA into the treasury account, and the DA will be replenished by that amount. Adequate documentation will be required to be maintained to ensure easy reconciliation of payments made from the treasury account to payments authorized by the Project. For larger Project payments, the direct payment disbursement method could be chosen for use by the MFBPS under this mechanism the Withdrawal Application enables funds to flow directly from the WB to the supplier.

(ii) Procurement

96. Procurement for the project will be carried out in accordance with the WB's Procurement Regulations for IPF Borrowers dated November 2020, and the provisions stipulated in the Financing Agreement (FA). The Project will be subject to the WB's Anticorruption Guidelines, dated October 15, 2006, revised in January 2011, and as of July 1, 2016. The Project will use the Systematic tracking of Exchanges in Procurement (STEP) to plan, record and track all procurement transactions. Support will be provided by CIU's Procurement Specialist and Procurement Officer. The PIU shall retain overall responsibility for ensuring WB procurement policies and procedures are adhered to. The POM will include a procurement module to guide procurement implementation. The Project Procurement Strategy for Development (PPSD) and the Procurement Plan (PP) have been prepared. The procurement risk rating is confirmed as Substantial.

D. Legal Operational Policies

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

E. Environmental and Social

97. The environmental and social risks and impacts of the project are expected to be moderate and can be managed with standard mitigation measures. The environmental risks are moderate and relate primarily to managing construction and community health and safety impacts during installation and maintenance. Social aspects of equipment installation relate to securing landowner approvals for land access for FTTP. Land access for backbone and outer island infrastructure will use existing land leases and agreement for existing telecommunication infrastructure; no new leases are anticipated. A Land Access Process will be prepared, disclosed, consulted upon and adopted prior to withdrawals under Category 3 and before works for FTTP commence. During operation, the upgraded equipment will reduce greenhouse gas emissions and energy use and reduce the amount of land and buildings required, compared to the existing systems.

98. During operation, the social impacts are likely to result from increased connectivity which may lead to greater cyber-bullying, exposure to illicit material, and risks relating to unequal access based on gender, age or ability. Social benefits, such as access to information, education and employment can be managed through effective social assessment, and stakeholder engagement with a focus on improving and removing gaps to access for all (including the vulnerable groups). The risk of sexual exploitation and abuse/sexual harassment (SEA/SH) is assessed as low. The project is not expected to employ a significant migrant workforce and worker behavior can be informed by appropriate training and code of conduct. SEA/SH service providers are available in RMI and will be consulted during project preparation.

99. A moderate risk rating is proposed primarily because the project is not complex and/or large, does not involve activities that have a high potential for harming people or the environment, and is located away from environmentally or socially sensitive areas. An Environmental and Social Management Plan (ESMP) has been prepared and was disclosed on January 26, 2021. The ESMP provides measures to avoid, mitigate and remedy any social and environmental impacts from installation and operation of new equipment and decommissioning and removal of old equipment, including land access agreement procedures. The ESMP includes a Stakeholder Engagement Plan that provides principles and guidelines for engaging with the public, landowners, telecommunications industry stakeholders and FTTP customers. A Labor Management Plan will be prepared, disclosed, consulted upon and adopted prior to the effective date of the FA and the engagement of Project Workers.

V. 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 WB's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the WB'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 WB Inspection Panel, please visit www.inspectionpanel.org.

VI. KEY RISKS

100. **Overall Risk – High.** The overall risk is rated high due to concerns pertaining to high political and governance, sector strategies and policies, institutional implementation capacity and sustainability, and stakeholders risks; and Substantial fiduciary risks.

101. **Political and Governance – High.** The inherent political and governance risks associated with Component 1 are the weakening of political support due to the following factors: (i) complex and lengthy pathway to implementation—the pathway to implementation is approximately two years, which may give time for doubt and uncertainty to increase, alternative solutions to gain traction, or an early change in Government to lead to new preferences for alternative approaches; and (ii) anticipated redeployment of NTA staff of approximately 42 percent of staff or 57 people (assuming a mid-point estimate within an expected range of between 38-77 staff); and (iii) the requirement for substantial support from minority private sector shareholders in NTA. The Government will prepare a Labor Management Plan which will be adopted prior to effectiveness. Efforts to carry out communications and outreach to increase awareness of Project objectives in the community have been somewhat limited due to the impact of the COVID-19 pandemic. These consultations will be prioritized during the initial phases of Project implementation. It is envisaged that the government will ask the Nitijela (Parliament) to demonstrate support for the execution of the Sector Program for the reform of the telecommunications sector and the key steps necessary to achieve such reform, including the support for the public-private partnership arrangements and subsequent introduction of competition, and the fair value purchase of shares in the form of a buy-out of minority private shareholders of NTA to enable restructuring of NTA. Parliament support will be in the form of a resolution and will provide greater confidence for Government to launch the offer process for the purchase of shares in NTA from the minority shareholders and PPP procurement processes.

102. **Sector Strategies and Policies – High.** There is an inherent risk that the PPP model may lead to the entrenchment of a monopoly provider with limited ability for the Government to control. This risk is most acute during the exclusive (pre-competition) phase of the transaction. This risk will be managed through a number of different mechanisms. The public sector contribution under the PPP contract will only be paid in installments on the supply of specified goods, works and services and the achievement of clearly defined deliverables. The exclusivity period will only cover the PPP build period. The exclusivity period will end after 3 years regardless of the status of the performance milestones specified under the PPP. This will add a further incentive on the Private Operator (beyond the milestone payments) to rollout the new infrastructure quickly. The PPP will also be implemented within the Project period to allow for WB supervision and support. The PPP contract and licensing framework will specify minimum service standards, pricing and coverage obligations, which will be supported by a performance bond and guarantee. In the event of material ongoing non-compliance the Government will retain the option to terminate the PPP and replace the operator. The CAA will provide expert support to help Government manage the PPP contract effectively. The CAA will also be responsible for reviewing and approving the FTTP roll out architecture to ensure the design is appropriate and consistent with open access principles to promote effective competition. The residual risk after these mitigation measures remains High. In addition, the market is very small, which presents the possibility that robust competition may not manifest after the expiration of the exclusivity period.

103. **Institutional Capacity for Implementation and Sustainability – High.** The Project teams within MFBPS and MTCIT have limited implementation capacity, and this Project will be the first PPP transaction for RMI. The Project

will mitigate this risk by investing in good governance frameworks and resources to support project design and implementation activities. The PSC of senior relevant agency representatives has been established, chaired currently by Minister of Education, Sports and Training, with responsibility for the design and implementation of the Digital RMI Project and reporting directly to the Cabinet on key issues and milestones. Additional resources will be provided to support coordination, reporting and stakeholder engagement. The PIU currently includes a project manager and a project director, who will be supported by technical experts advising on each workstream. The PIU will also benefit from the already established CIU which is familiar with WB operations. The CAA will be financed under component 1 of the Project to support the supervision of the PPP contract. The CAA will be procured/mobilized prior to signing the PPP contract. The sequencing is strategic to ensure that the CAA buys into the process and the terms (including supervision, monitoring and performance mechanisms, etc.) set out in the PPP contract. The range of tasks required of InfraCo following the end of the PPP build period will be very limited. InfraCo will be a manager of passive infrastructure assets with only 2-3 customers. These tasks can be carried out locally with relatively minimal outside support. CustomerCo and any other providers that enter the market will have a minority role in the governance of InfraCo to improve transparency and support good corporate decision making. Risks associated with the sustainability of Project related investments is considered moderate.

104. **Fiduciary risk - Substantial.** While the FM risk is assessed as Moderate, the procurement risk is assessed as Substantial. The overall fiduciary risk is therefore assessed as Substantial. There is limited institutional capacity within the IAs with limited expertise in WB procurement processes. Capacity shortages, particularly in procurement, pose a substantial fiduciary risk for the Project. In recognizing that the lack of capacity affects all WB-supported projects, the MFBPS has established a CIU within DIDA to support procurement and financial management functions to proactively mitigate the fiduciary risks. Key risks relating to procurement will be mitigated with resources such as a procurement specialist and a preselected reserve pool of specialists in the CIU. The CIU procurement team are key members of all projects and will provide hands on support and guidance focused primarily on procurement activities identified as complex, high value or prior review. The overall responsibility for procurement tasks will fall on the IAs and the responsibility for managing and coordinating procurement activities under the Project will fall on the Project Manager, whose terms of reference will also include procurement related functions, among other responsibilities.

105. **Stakeholders - High.** The key risks are associated with Component 1 and include the potential for weakening of stakeholder support for the PPP transaction and the implementation of associated market reforms due to political economy challenges and the continued reluctance by the incumbent NTA to embrace market based reforms. However, political and community support has increased significantly in recent years with greater understanding and appreciation of the need to increase dramatically access to high quality digital services in RMI. These risks will be mitigated by improved communications and community engagement to increase stakeholder understanding of the Project objectives, increased buy-in from political leadership and enhanced community appreciation of the Project objectives. Government will also rollout out proposals for the purchase of shares from the minority NTA shareholders and to set out arrangements (including redeployment to positions within the public sector) for staff affected by the restructuring of NTA. Government has also carried out financial and economic analysis which shows the benefits of the reforms strongly outweigh any negatives. Annual fiscal savings alone will amount to around $2m per annum which could finance an extra 80 or 90 jobs nationally in priority sectors, such as health or education. Improved digital services will also generate strong social and economic benefits including higher GDP growth which will create additional formal sector jobs and have an effect of bringing more informal sector activities into the formal sector.

106. **Personal data collection and processing.** Personal data, personally identifiable information and sensitive data are likely to be collected and used in connection with Project activities under circumstances where measures

to ensure the legitimate, appropriate and proportionate use and processing of that data may not feature in national law or data governance regulations. In order to guard against abuse of that data, the Project will incorporate good international practices for dealing with such data in such circumstances. Such measures may include, by way of example, data minimization (collecting only data that is necessary for the purpose); data accuracy (correct or erase data that are not necessary or are inaccurate), use limitations (data are only used for legitimate and related purposes), data retention (retain data only for as long as they are necessary), transparency (informing data subjects of use and processing of data), and allowing data subjects the opportunity to correct information about them, etc. In practical terms, the Project will ensure that these principles apply where practicable through assessments of existing or development of new data governance mechanisms and data standards, data sharing protocols, rules or regulations, revision of relevant regulations, training, sharing of global experience, etc.

VII. RESULTS FRAMEWORK AND MONITORING

Results Framework
COUNTRY: Marshall Islands
Digital Republic of the Marshall Islands Project

Project Development Objectives(s)

To expand access to the internet, promote private sector investment in climate resilient digital infrastructure, and establish the critical foundations for digital government services and the digital economy in the Recipient's territory.

Project Development Objective Indicators

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
To expand access to the internet							
People provided with access to the Internet (CRI, Number)		15,000.00	20,000.00	25,000.00			30,000.00
Number of people that benefitted from new access to Internet service. (CRI, Number)		0.00					15,000.00
Number of people that benefitted from the improved Internet service. (CRI, Number)		0.00					15,000.00
People provided with access to the Internet - Female (CRI, Number)		7,500.00					15,000.00

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Expanded access to internet services on neighboring islands (Percentage)		0.00	10.00	25.00	40.00		50.00
Mobile broadband penetration (Percentage)		0.00	10.00	20.00	30.00		40.00
To promote private sector investment in climate resilient digital infrastructure							
Private sector capital investment in RMI (Amount(USD))		0.00	3,500,000.00	6,000,000.00			7,500,000.00
Reduction in hours lost per year by end users due to climate events (percentage decrease) (Percentage)		0.00	2.00	4.00	6.00	8.00	10.00
To establish the critical foundations for digital government services and the digital economy							
Digital government strategy adopted (Yes/No)		No	Yes				Yes
Regulatory framework for digital services adopted (Yes/No)		No	Yes				Yes

Intermediate Results Indicators by Components

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Component 1: Market Structure Reform							

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Availability of fiber services in the deployment areas (homes passed) (Percentage)		0.00	50.00	75.00			95.00
Premises with a fiber connection (Percentage)		0.00	5.00	10.00	15.00		25.00
Cost of entry level fixed broadband service (Amount(USD))		50.00	40.00	35.00	30.00		30.00
Speed (Mbps) of entry level fixed broadband service (Number)		1.00	25.00	50.00			100.00
Base-stations installed on neighboring islands (Number)		0.00	2.00	4.00	7.00		17.00
Project beneficiaries reporting satisfaction with improved internet services (Percentage)		0.00	15.00	20.00	25.00	40.00	50.00
Project beneficiaries reporting satisfaction with improved internet services - Female (Percentage)		0.00					50.00
Reduction in CO2 emissions per end user (Percentage)		0.00	40.00	45.00			50.00
Component 2: Digital Government Platforms, Cybersecurity and Digital Skills							
Digital government strategy developed (Yes/No)		No	Yes				Yes
Digital services implemented by government (Number)		0.00	1.00				2.00
People reached through digital literacy and entrepreneurship programs (Number)		0.00	500.00	1,000.00	1,500.00	2,000.00	2,500.00

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
People reached through digital literacy and entrepreneurship programs - Female (Percentage)		0.00					50.00
Youth awareness sessions (online safety) held (Number)		0.00					35.00
Parent/caregiver online safety workshops conducted (Number)		0.00					14.00
Government's Cybersecurity Program developed (Yes/No)		No	Yes				Yes
Component 3: Enabling environment for Digital Government and Digital Economy							
Passage of harmful digital communications bill (Yes/No)		No	Yes				Yes
Passage of digital transactions bill (Yes/No)		No	Yes				Yes
Passage of data protection bill (Yes/No)		No	Yes				Yes
Component 4: Project Implementation Support							
Grievances responded and/or resolved within the stipulated service standards (Percentage)		0.00	50.00	65.00	70.00		75.00

Monitoring & Evaluation Plan: PDO Indicators					
Indicator Name	**Definition/Description**	**Frequency**	**Datasource**	**Methodology for Data Collection**	**Responsibility for Data Collection**
People provided with access to the Internet		Annual	MTCIT report to ITU on measure of internet users (%) in RMI. Baseline is latest available ITU data (2016)	ITU methodology for measuring Internet users (number of people who have used the Internet within the last 12 months) in RMI implemented by MTCIT. Note percentage of Internet users is reported to ITU.	MTCIT
Number of people that benefitted from new access to Internet service.		Annual	MTCIT survey of internet users	Number of people connecting to the first time to the internet. Measured as the increase in number of internet users (within last 12 months).	MTCIT
Number of people that benefitted from the improved Internet service.		Annual	MTCIT	MTCIT will identify and add together the number of people benefiting from fiber and mobile broadband services. It will collect: (1) Number of premises connected to	MTCIT

				fiber multiplied by average number of persons per household; and (2) Number of 4G/LTE mobile broadband subscribers	
People provided with access to the Internet - Female		Annual		This indicator will track the parent indicator of people provided with access to the Internet, disaggregated by gender. Survey data will be used to provide gender information.	MTCIT
Expanded access to internet services on neighboring islands	Measure of neighboring islands with a basic 4G/LTE mobile service which are eligible for coverage under the Project (comprising inhabited islands with a population of approximately 100 people or more). The term neighboring islands, previously referred to as 'Outer Islands', refers to the atolls and islands excluding Majuro and Ebeye.	Annual	MTCIT (relying on the O&M system of the private sector partner operating the network on the neighboring islands)	MTCIT will obtain information from the private sector partner operating the network on the outer islands that each 4G/LTE site is operating	MTCIT will be responsible for monitoring and reporting on the performance of the private partner that will install and operate the 4G/LTE network on the outer islands.
Mobile broadband penetration	This indicator will measure percentage of the	Annual	Mobile operators	ITU data	MTCIT

	population using mobile broadband services as reported to the ITU.				
Private sector capital investment in RMI	Private Sector Capital Invested to be measured as follows: --Cumulative capital expenditure by the Concessionaire in RMI; --Cumulative capital expenditure outside RMI for the purpose of fulfilling obligations under the Concession contract and either expended by the Concessionaire, or allocated to the Concessionaire by its owner(s); --less Cumulative viability gap funding provided to the Concessionaire	Annual	Concessionaire (as part of Concession agreement) to annually report on cumulative capital expenditures.		MTCIT
Reduction in hours lost per year by end users due to climate events (percentage decrease)	This indicator will monitor hours lost per year by end users due to climate events. Much of the existing infrastructure (copper network and basic mobile services) has become hardened and resilient over the limited coverage area. The Project supports climate-resilient telecoms	Annual	MTCIT	Hours lost during first year will be measured and will constitute the baseline. End target represents a 10% net reduction in hours lost compared to the baseline.	MTCIT

	infrastructure from the outset with more modern equipment covering a wider coverage area. This indicator is intended to ensure new infrastructure is resilient to climate events as the existing service.				
Digital government strategy adopted		Annual	MTCIT		MTCIT
Regulatory framework for digital services 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	MTCIT	MTCIT will report on whether the law(s) comprising the framework for digital services has been passed by Cabinet and signed into law by the President.	MTCIT

Monitoring & Evaluation Plan: Intermediate Results Indicators					
Indicator Name	**Definition/Description**	**Frequency**	**Datasource**	**Methodology for Data Collection**	**Responsibility for Data Collection**
Availability of fiber services in the deployment areas (homes passed)	The indicator will measure the availability of the fiber network in the deployment area. The deployment area means Project areas appraised for roll-out of fiber services under the	Annual	Two data sources: (1) GIS mapping of premises; and (2) GIS mapping of fiber	GIS system will map location of all premises in the deployment area. InfraCo will determine how many of these premises are within technical and	MTCIT

	Project. The determination of availability will measure the number of homes passed (as a percentage of total number of homes) that have the technical and commercial means to connect by drop wire to the network.		infrastructur e	commercial reach of drop wires to connect fiber network.	
Premises with a fiber connection	Percentage of premises in the deployment area connected to the fiber network	Annual	GIS for total number of premises in the deployment area. InfraCo for total number of premises connected.	InfraCo will report to MTCIT on premises connected as a percentage of the total number of premises in the deployment area.	MTCIT
Cost of entry level fixed broadband service	The indicator will measure the cost (US$ per month) of the entry level (lowest cost) residential fixed broadband service. The per unit cost is expected to fall substantially over the Project implementation period as the amount of bandwidth (Mbps) offered under an entry level package increases. The indicator is	Annual	Internet Service Providers	ITU data showing the cost (US$ per month) of the entry level (lowest cost) residential fixed broadband service.	MTCIT

	designed to monitor overall affordability of basic fixed broadband services in absolute terms.				
Speed (Mbps) of entry level fixed broadband service	This indicator will measure in Mbps the speed of an entry level residential fixed broadband service.	Annual	Internet Service Providers	ITU data on fixed broadband speeds.	MTCIT
Base-stations installed on neighboring islands	Number of base stations installed on neighboring islands	Annual	Mobile Operators		MTCIT
Project beneficiaries reporting satisfaction with improved internet services	Percentage of persons identifying improved internet services	Two beneficiary satisfaction surveys of nationwide internet users during Project implementation at Project tentatively planned at mid-term and towards the end of Project implementation	MTCIT	Nationwide survey of internet users	MTCIT

Project beneficiaries reporting satisfaction with improved internet services - Female	Persons identifying improved internet services (disaggregated by gender)				
Reduction in CO2 emissions per end user				Methodology to be confirmed and taking account of inputs and data to be provided by Marshall Islands Energy Company regarding CO2 per Kwh.	MTCIT
Digital government strategy developed					
Digital services implemented by government					
People reached through digital literacy and entrepreneurship programs	This measures the implementation of outreach activities relating to digital literacy and entrepreneurship designed to increase participation in the digital economy (disaggregated by gender, youth and parents/caregivers)	Annual	Gender Development Office within the Ministry of Culture and Internal Affairs	Counting attendance at events (disaggregated by gender)	Gender Development Office within the Ministry of Culture and Internal Affairs
People reached through digital literacy and entrepreneurship programs - Female					
Youth awareness sessions (online safety) held					

Parent/caregiver online safety workshops conducted					
Government's Cybersecurity Program developed					
Passage of harmful digital communications bill		Annual	MTCIT		MTCIT
Passage of digital transactions bill		Annual	MTCIT		MTCIT
Passage of data protection bill		Annual	MTCIT		MTCIT
Grievances responded and/or resolved within the stipulated service standards	The project's grievance mechanism (GM) defines services standards for responding to and ideally resolving complaints (High/Medium/Low priority 5/10/30 working days respectively)	Continuous	Government website	The indicator checks if the grievance mechanism (GM) fulfills, annually on average, the defined services standards for responding to and ideally resolving complaints considering: High/Medium/Low priority to be 5/10/30 working days respectively.	CIU and PIU

ANNEX 1: Implementation Arrangements and Support Plan

COUNTRY: Marshall Islands
Digital Republic of the Marshall Islands Project

1. Digital RMI will be implemented over a seven-year period. The PSC will provide oversight, coordination and support for Project implementation and will be responsible for reporting to Cabinet on Project implementation. The Project Steering Committee is currently chaired by the Minister of Education, Sports and Training, and comprised of, *inter alia*, the Chief Secretary, the Secretary of Finance, Banking and Postal Services of MFBPS, the Secretary of Transportation, Communications and Information Technology of MTCIT, the Secretary of Culture and Internal Affairs of MOCIA and the Chief Executive Officer/President of NTA. It is envisaged that the composition of the PSC, which will always be chaired by a Minister, will evolve as Project implementation progresses. The PCS composition will be determined and appointed by the Cabinet and set forth in the Project Operations Manual. The MFBPS will implement Component 1. The MTCIT will implement Subcomponents 2.1-2.6 and Components 3 and 4. The MOCIA, through its Gender Development Office, will implement Subcomponent 2.7, which is focused on strengthening actions and initiatives on gender. The MFBPS and MTCIT will work closely with the Office of the Attorney-General (AG) in implementing Subcomponent 1 (PPP transaction and associated market structure reforms) and Subcomponent 3.2 (legal and regulatory framework for Digital Government and the Digital Economy). The Office of the AG will maintain a Project focal point to support MFBPS and MTCIT on such implementation. The MTCIT will eventually host the PIU, as further described below. The Project will also be supported by the CIU within the MFBPS. The CIU is operational, and has experience regarding procurement, financial management (FM), budgeting, disbursements, environmental and social risk management, among others. The CIU will also be responsible over the medium term for monitoring and evaluation (M&E).

2. A PIU will carry out day to day management of the Project and coordinate overall Project implementation. The PIU will initially be established within MFBPS, and upon the execution of the PPP contract or the achievement of other milestone(s) agreed by the Recipient and the Bank and set forth in the Project Operations Manual, the PIU will be transferred to be hosted within MTCIT. A Project Manager will be hired to lead the PIU, supported by additional project officers as needed. The Project Manager will also be supported by a local Project Director who has been hired to coordinate local stakeholder engagement. The PIU will facilitate collaboration among the IAs and other Project stakeholders. The Project Manager will work with the Project Director to coordinate with the CIU program manager to ensure timely provision of services and support to the Implementing Agencies on FM, procurement, audit, environmental and social risk management, and M&E. The PIU and IAs as appropriate, may recruit additional specialists to help with fiduciary matters where additional support is needed beyond the capacity available from the CIU. All contracts with consultants, contractors and suppliers will be signed by the responsible IA. Each IA will sign off on all consultant and contractor invoices prior to submitting a request to MFBPS to make payment. These arrangements, including the composition and other details of the PIU, will be further detailed in the Project Operations Manual (POM).

3. Strong engagement across Government ministries and stakeholders will be critical to facilitate effective implementation of the national connectivity infrastructure and build consensus around the “whole of government” approach to digital government. The Government will need ensure effective communications with stakeholders, particularly as the restructuring steps are completed and new infrastructure is rolled out. The PSC

will play a critical role. Additional ad hoc working level committees will also be established involving a wider group of stakeholders as needed to support Project implementation activities.

Financial Management

4. The FM assessment was conducted in accordance with the *"Principles-Based Financial Management Practice Manual"* issued by the Board on March 1, 2010. Under the Bank's Directive: Investment Project Financing, the borrower and IAs are required to maintain financial management systems, including accounting, financial reporting, and auditing systems, adequate to ensure accurate and timely information regarding project resources and expenditures. Overall, the assessment found that the proposed project FM arrangements meet relevant FM requirements. The MFBPS has gained some experience with managing WB projects and has established the CIU with experienced and qualified staff. The Project Operations Manual (POM) will include a section on budgeting, disbursement, auditing, financial management arrangements, contracts management and asset management. The sharing of services with other WB projects will require processes to ensure that expenditures are properly recorded and documented, and associated funds flows closely monitored. Training on the FM requirements of the Project will be conducted and monitoring of compliance to FM processes will be a regular part of the review missions.

5. **FM Implementation Arrangements**. The CIU under MFBPS maintains the financial accounts and provides FM support to WB projects and hence will be responsible for the fiduciary aspects of this project. The CIU is headed by a Program Manager, a Finance Supervisor and Finance Officer/Assistants. The CIU has adequate resources to meet the FM requirements of WB-financed projects, including Digital RMI.

6. **Budgeting.** The IAs will be responsible for preparing and monitoring the budgets for their respective activities with support from the CIU in the preparation and regular reviews of the Project budget.

7. **Annual work plans and budgets.** The IAs will prepare annual work plans and budgets with appropriate levels of detail (for example, Component or Category, whichever is deemed most relevant and useful). The first annual work plan and budget will be submitted to the World Bank for review and no-objection by not later than 2 months after the effective date of the financing agreement for the Project, and thereafter an annual work plan and budget will be submitted by not later than July 1 of each year during project implementation. The CIU will support the IAs by reviewing this document and reporting on the analysis of budget versus actual expenditure, consolidate and incorporate this into the Project reports for each calendar semester for Digital RMI. MFBPS via the CIU will submit the Project reports for each calendar semester along with the annual work plans and budgets to the WB.

8. **Accounting Arrangements**. The Government of RMI currently maintains financial accounts in 4Gov, a software with the following fully integrated modules: accounts payable, accounts receivable, payroll and general ledger. The chart of accounts enables segregation of project transactions and classification by component. While it is envisaged a new financial reporting system will be introduced by Government during the life of Digital RMI, this will not reduce the capacity of the current reporting requirements. A new chart of accounts will be developed for the new Financial Management Information System (FMIS) and the Project accounts will be incorporated in the new system. A separate cost center will be opened to account for transactions under the components to be implemented under this project. The new FMIS will include capability to account for WB-financed projects and it is anticipated that there will be a transition period during which both the existing 4Gov and the new FMIS will be running in parallel after which the 4Gov system will be decommissioned. Project transactions will be entered by the CIU directly into the Government's accounting system.

9. **Internal Controls.** The Government's internal control framework provides adequate segregation of duties, asset controls, and approval and authorization controls. The POM will include a section on budgeting, disbursement, and financial management arrangements that will reference relevant government legislation and procedures. The POM will provide guidance on project internal controls either specifically required for the Project or not covered in sufficient detail in the Regulations. The CIU will also prepare a guidance note to be included in the POM on the role and responsibilities of the CIU for the areas of FM and procurement to ensure consistency across the WB portfolio. For the FM section, this will include a template for performance reviews, process for approving operating costs, monitoring and management of travel advances as well as general processes for transactions.

10. **Funds flow.** Funds will flow from the WB directly into a segregated designated account (DA) to be opened in US$ at a financial institution or commercial bank acceptable to the Bank. Initially this will be from the Project Preparation Advance which on refinancing will become the project DA. PPA and Project expenditures will be tracked through the government accounting system and paid from the treasury account. Prior to completing a replenishment Withdrawal Application, the equivalent funds expended from the treasury account will be transferred from the DA into the treasury account, hence the DA will be replenished by that amount. Adequate documentation will be required to be maintained to ensure easy reconciliation of payments made from the treasury account to payments authorized by the project. For larger project payments, the direct payment disbursement method can be chosen by MFBPS and the Withdrawal Application enables funds to flow directly from the WB to the supplier. Where direct payments are used as the disbursement method, the transactions must be incorporated into the project accounts. To facilitate the tracking of multiple projects, and the associated funds management aspects, it is proposed that the 'statement of expenditure' (SOE) be used when documenting eligible project expenditures and replenishing the DA. A template of SOE is attached as a reference to the Disbursement and Financial Information Letter.

11. **Periodic financial reporting.** Financial reporting will be fully integrated into the Government's accounting system. The Project will be allocated a cost center, and sub-accounts will be created to reflect the specific activities. Reports will initially be generated from the 4Gov accounting system and will ultimately be generated by the new FMIS. The financial reports will include an analysis of actual expenditure for the current period, year to date, and for the cumulative to date, plus outstanding commitments, compared against total project budget. The Project will prepare Interim Financial Reports (IFRs) in USD and in the format agreed with the Bank, to be submitted no later than 45 days after the end of each semester.

12. **External audit.** The audit of project funds will be incorporated in the National Accounts and hence will be disclosed as a note to the accounts of the National Accounts, with submission due nine (9) months after the end of the fiscal year. There is a risk that through an oversight the project information is not included in a note to the accounts. To reduce the risk, each year the Bank will formally write to MFBPS advising them of the projects that need to be included in the disclosed WB project note. Currently, the audit of the National Accounts is sub-contracted by the Public Auditor to a private contractor. MFBPS, the Public Auditor, and the Bank will agree on the information required to be disclosed. The National Accounts will be published on the Office of the Auditor General's website.

"Note ***X***. World Bank Financing

(a) Government of RMI received financial support from the World Bank IDA Grant ***No. D879-MH dated mm/dd/yy*** to support implementation of [describe].

Table A1.1. Summary information on transactions taking place during the year is as follows:

	Current Year	Preceding Year	Cumulative
	US$	US$	US$
Amounts received during the year	X	X	X
Expenditures during the year	(X)	(X)	(X)

(a) The total amounts received from World Bank IDA Grant ***No. D879-MH*** since its commencement were [xx] as at September 30 [xx].
(b) The proceeds of the World Bank grant have been expended in accordance with the intended purposes as specified in the Financing Agreement."

Disbursements

13. **Disbursement Methods and Supporting Documentation Arrangements.** Disbursements under the Project may be under any of the following methods: (a) advances into and replenishment of the DA; (b) direct payment; (c) reimbursement; and (d) Special Commitment. Direct payments will be used solely for large contracts.

14. The disbursement table showing categories of expenditure and amounts eligible for financing are shown below and are also to be found in the legal agreement. Please note in the case of discrepancy, the version referred to in the legal agreement takes precedence over the table shown below.

Table A1.2. Disbursement Categories[31]

Category	Amount of the Grant Allocated (Expressed in SDR)	Amount of the Grant Allocated (Expressed in USD equivalent)	Percentage of Expenditures to be Financed (Inclusive of Taxes)
(1) Goods, works, non-consulting services, consulting services, training and Operating Costs for Parts 1.1, 2, 3 and 4 of the Project	8,860,000	12,600,000	100
(2) Purchase of NTA shares under Part 1.2 the Project	1,200,000	1,700,000	100
(3) Goods, works, non-consulting services, consulting services for Part 1.3 of the Project	10,330,000	14,700,000	100
(4) Refund of Preparation Advance	710,000	1,000,000	Amount payable pursuant to Section 2.07(a) of the General Conditions
Total Amount	**21,100,000**	**30,000,000**	

[31] As in Section III.A of Schedule 2 of the Financing Agreement

15. **Programmatic Preparation Advance.** A Programmatic Preparation Advance is in place for RMI and SDR710,000 ($1,000,000) has been utilized to support the preparation of Digital RMI by financing TA for the preparation and implementation readiness of the Project.

Table A1.3. Funding Sources

Source	Amount (expressed in SDR)	Amount (expressed in USD equivalent)	Share of Total (%)
WB – National IDA grant	21,100,000	30,000,000	100

16. Disbursement conditions. No withdrawals should be made:

(a) for payments made prior to the Signature Date;

(b) under Category (2) unless and until the Association is satisfied that acceptances sufficient in number of shares for the Recipient to hold directly or indirectly at least 90 percent of the shareholding in NTA have been received, in a manner acceptable to the Association;

(c) under Category (3) unless and until the Association is satisfied that:

(i) (A) the Recipient and the private partner have entered into the PPP Contract in accordance with Section I.B.3 of Schedule 2 to the financing agreement for the Project, and the PPP Contract has become effective in accordance with its terms; and (B) the Association has received a legal opinion or opinions satisfactory to the Association of counsel acceptable to the Association, or if the Association so requests, a certificate or certificates satisfactory to the Association of a competent official or officials, attesting that the PPP Contract has been duly executed and delivered on behalf of the parties thereto, ratified by all necessary governmental or corporate action, is legally binding upon the parties thereto and has become effective in accordance with the terms thereof;

(ii) the Recipient's primary laws required to support the execution and implementation of the PPP Contract, the introduction of competition upon the completion of the PPP Contract and the establishment of the telecommunications regulator position have been enacted and come into force and effect in accordance with their terms, all in accordance with details set forth in the Project Operations Manual;

(iii) the Recipient has prepared, disclosed, consulted upon and adopted the Land Access Process, in form and substance satisfactory to the Association; and

(iv) all other implementation arrangements required for Part 1.3 of the Project, as agreed between the Recipient and the Association and reflected in the Project Operations Manual, have been completed as satisfactory to the Association.

Procurement

17. **Institutional arrangement for procurement.** The IAs will be responsible for the procurement implementation of their respective parts under the Project. The CIU will provide additional procurement support, as necessary.

18. **Applicable procurement regulation.** Procurement for the proposed project will be carried out in accordance with the WB Procurement Regulations for IPF Borrowers dated November 2020, and the provisions stipulated in the FA. The Project will be subject to the WB's Anticorruption Guidelines, dated October 15, 2006, revised in January 2011, and as of July 1, 2016. The Project will use the Systematic tracking of Exchanges in Procurement (STEP) to plan, record and track procurement transactions. Procurement activities will use the Bank's Standard Procurement Documents (SPD) where required or templates developed for the Project. A Project Implementation Guidance (ProcGuide) prepared for fragile and small states in the Pacific will also provide useful references and documents for use in the procurement implementation.

19. **Procurement risk assessment**. A procurement risk assessment has been carried out, and key procurement risk areas include:

- Limited capacity hinders procurement and contract management;
- Staff turnover in small team leads to loss of momentum;
- Poor response to market approaches for PPP package;
- Poor performance by individual consultants causes implementation delays;
- Recipients lack capacity to deal with noncompliance or poor performance by suppliers; and
- Investments not supported by effective maintenance.

20. To help mitigate these risks, the following mitigation measures have been agreed:

(a) The Project Manager and Heads of the Implementing Agencies will work closely with the CIU Procurement Specialist and other procurement support staff. Major contracts listed in the Project Procurement Strategy for Development (PPSD) will have a focused procurement arrangement and approach and Contract Management Plan.

(b) The CIU is developing a contract monitoring and recordkeeping system to ensure continuity of processes, and which will be used by all implementing agencies. The CIU will provide additional training, and hands-on implementation support, in procurement and contract management. The PIU will retain overall responsibility and accountability for contract monitoring.

(c) Contract opportunities will be advertised internationally in UNDB and other relevant websites including direct invitation to known vendors. Particular care will be taken to ensure correct Category Codes are used in STEP to enable accurate market targeting.

(d) MTCIT will undertake periodic performance review of individual consultant contracts. Recipients to have procedures for dealing with shortages/damages. CIU will provide awareness training to PIU/IAs and others, on International Commercial Terms (INCOTERMS), insurance, securities etc. Each implementing agency will undertake annual performance reviews of individual consultants. Implementing agencies to have procedures to deal with poor performance, damage, delay or non-delivery of goods, works, consulting and non-consulting services.

(e) Sustainability of investments training will be included in capacity building activities.

21. **Frequency of procurement supervision.** In addition to the prior review to be carried out by the WB, implementation support missions will be undertaken at least twice per year. One in five procurement packages not subject to WB prior review will be examined *ex post* on an annual basis.

22. **Summary of PPSD to Inform the Bank's Preparation of the Procurement Plan.** Procurement under the project will be carried out in accordance with WB Procurement Regulations for IPF Borrowers dated November 2020. The Project will be subject to the WB's Anticorruption Guidelines, dated October 15, 2006, revised in January 2011, and as of July 1, 2016. The Project will use the Systematic tracking of Exchanges in Procurement (STEP) to plan, record and track procurement transactions. The PPSD document presents how major procurement activities under the project will support the development objectives of the project and deliver the best value for money under a risk-based approach. In addition, the PPSD includes the rationales for procurement decisions including the selection of the approach to market and procurement methods. The PPSD and the procurement plan of the project will be regularly updated as appropriate during the project implementation. The PPSD has observed that there is limited capacity of contractors/suppliers and service providers on the local market, and as such, an international market approach is being preferred/recommended, in order to allow for increased participation by attracting foreign firms. The PPSD recommends publication of procurement opportunities in the Local media, Local websites and Regional Websites, so that local and Regional providers have an opportunity to identify and participate either through collaborations or as sub-contractors.

23. **Procurement Plan**. A draft Procurement Plan for the project has been prepared. Once the Project is effective, the Procurement Plan will be updated and will be regularly updated at least once every 12 months. This is consistent with the arrangement detailed in the PPSD.

Table A1.4. Procurement Plan[32]

Description	Category	Selection Method/ Approach	Estimated Amount ($)	Review Type	Planned Start Date
FTTP Infrastructure Design	CS	CQS/Open International	250,000	Post	2021/10/01
Physical Network Inventory System	NC	CQS/Open International	100,000	Post	2021/10/01
Contract Administration Agent for supervision of PPP	CS	CQS/Open, International	350,000	Post	2021/12/01
Public sector financing under PPP contract	NC	PPP	14,700,000	Prior	2022/06/01
Chief Information Officer	CS	INDV/Open	500,000	Prior	2021/09/01
Development of legal framework for digital government, digital economy and digital ID	CS	CQS/Open, International	400,000	Post	2021/09/01
Process mapping, design and implementation of priority digital services	CS	CQS/Open, International	250,000	Post	2022/01/01
Development of standards, assurance, monitoring, audit, and cyber security	CS	CQS/Open, International	200,000	Post	2022/01/01
Communications specialist	CS	INDV/Open	250,000	Prior	2022/01/01
Gender officer	CS	INDV/Open	250,000	Prior	2022/01/01
Project officer	CS	INDV/Open	35,000	Post	
Project officer	CS	INDV/Open	35,000	Post	
Local agent	CS	INDV/Open	50,000	Post	
Videography, graphics, web	CS	CQS/Open	15,000	Post	

[32] For first 18 months

Description	Category	Selection Method/ Approach	Estimated Amount ($)	Review Type	Planned Start Date
development and brand collateral		National			
Strategic governance adviser	CS	INDV/Open	350,000	Prior	PPA
International Transactional Adviser	CS	CQS/Open, International	500,000	Prior	PPA
International Legal Adviser	CS	CQS/Open, International	450,000	Prior	PPA
Local Legal Adviser	CS	INDV/Open	100,000	Post	PPA
Digital RMI Project Manager	CS	INDV/Open	100,000	Post	PPA
Project Director	CS	INDV/Open	50,000	Post	PPA
Stakeholder Engagement and Safeguards Documents	CS	INDV/Open	75,000	Post	PPA
International Gender Consultant	CS	INDV/Open	100,000	Post	PPA

Environmental and Social (including safeguards)

24. **The environmental and social risks associated with the project are considered moderate.** The environmental risks are moderate and relate primarily to managing earthworks during infrastructure installation and managing the waste from decommissioning of infrastructure. Earthworks for trenching can require tree trimming or vegetation removal, exposes sediment to erosion and run off and can disturb cultural heritage. There will be a variety of equipment and buildings to decommission which will require sorting, separation and storage prior to offshore recycling and disposal. During operation, the upgraded equipment will reduce greenhouse gas emissions and energy use and reduce the amount of land and buildings required, compared to the existing systems. The risks to the community and workers during installation and maintenance relate to health and safety disruptions to access to properties and businesses and traffic hazards when working on or near roads. These types of risks are readily manageable with good construction practice. The ESMP provides measures to inform the route selection and design of infrastructure required the Project to avoid sensitive receptors, measures to control impacts in the installation of new infrastructure and decommissioning of old infrastructures, training of workers and supervision and oversight of mitigation measures. A Land Access Process will be prepared, disclosed, consulted upon and adopted prior to withdrawals under Category 3 and before works for FTTP commence. During operation, the upgraded equipment will reduce greenhouse gas emissions and energy use and reduce the amount of land and buildings required, compared to the existing systems.

25. **The Project is likely to result in social benefits through increased connectivity and access to information, particularly in terms of education, employment opportunities and health.** However, increased connectivity can also result in an increase in cyber-bullying, addiction and exposure to illicit material. There are also risks relating to unequal access based on ability to pay, gender, age or ability. Project impacts during construction and land access are expected to be limited and can be managed through stakeholder engagement and project design/choice of technology and siting. The risks associated with the development of a digital government platform are limited as individuals will have the ability to volunteer for this process, it will not be mandatory. Social aspects of equipment installation relate to securing landowner approvals for land access for FTTP. Land access for backbone and outer island infrastructure will use existing land leases and agreement for existing telecommunication infrastructure; no new leases are anticipated. The Stakeholder Engagement Plan provides principles and guidelines for engaging with the public, landowners, telecommunications industry stakeholders and

FTTP customers. A Labor Management Plan will be prepared, disclosed, consulted upon and adopted prior to the effective date of the FA and the engagement of Project Workers.

Monitoring and Evaluation

26. Project M&E will be conducted via periodic monitoring through semi-annual reports that track progress in terms of distribution of inputs, disbursement of funds, and achievement of targeted indicators as outlined in the Results Framework (Section VI). The Bank will provide implementation support for the Project on an on-going basis and visit RMI every 3 to 6 months to monitor and evaluate progress. The Project will undergo a mid-term review no later than four years after the effective date of the Finance Agreement.

Strategy and approach for implementation support

27. Digital RMI will receive ongoing and regular implementation support. The support plan is based on previous experience from other projects in RMI as well as the Project's risk profile. The Government has had experience with WB projects and is familiar with the procedures and requirements. Additional support will be provided through the CIU.

28. MTCIT, in consultation with the other IAs, will determine the appropriate timing of semi-annual reviews, taking into consideration the availability of participants. The WB implementation review will cover technical and non-technical aspects of the support including: (a) FM; (b) procurement; (c) implementation arrangements; and (d) safeguards. In addition, field visits will also be undertaken to project sites. To the greatest extent possible, the WB team will accommodate any written request for 'as-needed' support for the Project, including fiduciary aspects.

29. Each implementation review mission will result in the production of a joint aide-memoire that will be discussed at a wrap-up meeting to be chaired by MTCIT and attended by all IAs. The aide-memoire will provide an overall view of the current situation relating to project implementation, including findings and observations from the WB. Representatives from the relevant government departments will be invited to attend the wrap-up meetings. Any adjustment requiring more frequent reviews will be discussed, agreed upon, and documented in the Aide-Memoire.

30. A mid-term review mission will be held not later than four years after the effective date, or such other period as may be agreed, and will provide an opportunity to review the Project and take stock of implementation progress. The Recipient shall prepare and furnish to the Bank, at least one month before the date of the mid-term review, a report, integrating the results of the monitoring and evaluation activities performed and, on the progress, achieved in the carrying out of the Project during the period preceding the date of such report and setting out the measures recommended to ensure the efficient carrying out of the Project and the achievement of the objectives.

31. Following the mid-term review adjustments to project support may be required, including a project restructuring and/or possible additional financing from any other sources based on the implementation experience. The WB task team will work with MFBPS and MTCIT to clarify the requirements necessary to effect any changes. Any changes to the Project that require amendments to the Financing Agreement will require a formal request from the Government's signatory to the legal agreement.

32. Six months prior to the closing date of the Project, the Government will commence the preparation of its Implementation Completion and Results Report (ICR). The WB ICR author will participate in the final implementation review and will gather the necessary information to help prepare the ICR.

Implementation Support Plan and Resource Requirements

33. Missions to support Project implementation will be carried out every 3 – 6 months. At least once per year the missions will include technical, fiduciary and safeguards team members, who will provide input into infrastructure design and implementation, carry out post reviews on contract management, review safeguards compliance, and provide formal training where required. The implementation support plan will be reviewed annually to ensure that it meets the support needs of the Project. The estimated level of annual support needed to implement Digital RMI is identified in the table below.

Table A1.5. Estimated level of annual support needed

Skills Needed	Number of Staff Weeks (per year)	Number of Trips (per year)	Comments
Task Team Leader	10 per year	3 per year	Assumed TTL and DD lawyer combined
Operations Officer	6 per year	1 per year	
Lawyer (digital development)	6 per year	3 per year	
PPP Specialist	4 per year	1 per year	
Telecom Engineer	4 per year	2 per year	
Digital Govt Specialist	4 per year	2 per year	
Procurement Specialist	4 per year	2 per year	
Gender Specialist	4 per year	2 per year	
Financial Management Specialist	3 per year	2 per year	
Environment Specialist	1.5 per year	2 per year	Environment and social safeguards combined
Social Specialist	1.5 per year	2 per year	
Administrative Support	3 per year	0 per year	

ANNEX 2: Gender Assessment

COUNTRY: Marshall Islands
Digital Republic of the Marshall Islands Project

1. **The purpose of this assessment is to elaborate on gender considerations.** The assessment identifies gaps between the experiences and status of women and men relevant to the above project, identifies activities to address these gaps, and suggests suitable indicators to track progress. This assessment is based on information from: desk-based document review including gender literature, regional policy and guidance notes and international best practice standards; and stakeholder consultations conducted in February/March 2020, as well as follow up remote consultations conducted in the wake of the COVID-19 pandemic. The ability to conduct community consultations and focus group discussions was limited due to the impact of the COVID-19 pandemic.

2. **Traditional Marshallese custom historically included defined roles for men and women that were largely complementary, highly valuing the contributions of each sex.** Traditionally, RMI is a matrilineal society with land rights passed down through a mother to her daughters. However, modernization and shifts from a subsistence-based rural society to an urban, cash-based economy has seen the erosion of some of these traditional practices. As a result, these traditional beliefs now coexist with a range of gender stereotypes, assumptions about gender roles and responsibilities and harmful social norms. As a result, leadership and decision-making are now largely thought of as men's roles which is reflected in most aspects of political, civil and family dynamics and reinforced by stereotypical beliefs around men as primary breadwinners and women bearing responsibility for domestic duties. Similarly, while primary rights to land parcels are collectively held by members of the mother's clan, men are usually delegated the authority to exercise and control these rights. Furthermore, young women in particular tend to be less aware of their land rights as population growth and migration make the tracking of lineage and land ownership comparatively complex.

3. **Rates of violence against women and girls are high in RMI, with 51 percent of women experiencing intimate partner violence and/or sexual violence int heir lifetime.**[33] Furthermore, approximately 58 percent of men and 56 percent of women accept that violence is a normal part of intimate relationships.[34] 23 percent of women believe that factors such as denying sex to their husband, or burning food were justifications for violence.[35] Furthermore, many women who experience abuse prefer to keep this matter private for fear of shame and/or retribution.[36] Throughout RMI violence has been historically dealt with through family or clan avenues. Although westernization and urbanization has contributed to the breaking down of these traditional conflict resolution mechanisms, with an increasing reliance on legislative and institutional mechanisms for addressing conflict and justice. RMI enacted the *Domestic Violence Prevention and Protection Act* (DVPPA) in 2011, despite significant political opposition on the grounds that such legislation was 'unnecessary'. The DVPPA legislates provisions for temporary protection orders, with judges available 24/7 to consider applications for protection orders.[37] Between 2012-2017 a total of 26 permanent protection orders have been issued.[38] In support of this,

[33] Republic of Marshall Islands. Family Health and Safety Survey. 2014.
[34] Ibid.
[35] Ibid.
[36] Republic of Marshall Islands & UNICEF. A Situation Analysis of Children, Youth and Women. 2003.
[37] Republic of Marshall Islands. Gender Equality Where Do We Stand? 2018.
[38] Ibid.

the Marshall Islands Police Department (MIPD) established a Domestic Violence Unit (DVU) and a series of first response protocols for officers responding to domestic violence calls.

4. **RMI has a relatively equitable ratio of girls to boys in primary and secondary education (at 1:0.97 and 1:1.02 respectively).**[39] Data from the 2011 Census reveal that 70 percent of boys, compared to 75 percent of girls aged 14-18 attended school However, high dropout rates for girls at secondary and tertiary level have been identified as a problem, linked to the nation's high teenage pregnancy rate and associated increase in childcare and domestic family responsibilities. This should be viewed in the context of high secondary school dropouts for male students as well. Overall, women's highest level of education completed is lower than that of men.[40] At a tertiary and vocational level, typically more men enrol in vocational and trade-related programs with young women making up the majority in basic education and life skills program offered at institutions such as CMI, USP and APTC.[41] While there is no apparent gender disparity in overall enrolment rates for CMI, the institution has identified a lack of appropriate childcare as an obstacle for students completing their studies.

5. **Women's participation in RMI's workforce is 28 percent, compared with 51 percent for their male counterparts.**[42] Similarly, men are more likely to work for wages or salaries than women, with women more likely to work in the production of goods for sale than men. This is also reflected in unemployment rates, which are 37 percent for women and 28 percent for men. Youth unemployment is especially high (at 63 percent), with female youth experiencing a 67 percent unemployment rate.[43] In 2017, 93 percent of women worked in service industries, such as wholesale and retail, public administration and education, with a higher proportion of women employed in wholesale and retail trade than men.[44] There are also differences in income and wages earned by women and men with women's averages wages measured at USD$7,595 annually compared with USD$10,772 for men in the same jobs. Similarly, average household income for women headed households is 41 percent lower than for male headed households.[45]

6. **In 2015, RMI became the first independent Pacific Island Country to elect a female president in an election which saw three women elected to parliament (out of a total 33 seats) and three out of 24 members of RMI's Local Councils women.**[46] There are currently two out of 33 seats held by women in RMI's parliament. Participation of women in leadership and decision-making positions remains low throughout RMI. Traditional gender norms, stereotypes surrounding women's roles and responsibilities and a lack of public awareness limit women's opportunities to be appointed to leadership positions at a national level. During the 2015 election, women comprised 5 percent of the total candidates.[47] In addition to low rates of participation in political leadership, in the public service 43 percent of women are employed, but comprise 38 percent of management positions.[48] Women are also underrepresented on boards of statutory bodies and state-owned enterprises, comprising 25 percent of board members.[49]

[39] ADB. Country Performance Assessment: Marshall Islands. 2007.
[40] Republic of Marshall Islands. Gender Equality Where Do We Stand? 2018.
[41] Republic of Marshall Islands. Gender Equality Where Do We Stand? 2018.
[42] Republic of Marshall Islands. RMI Census of Population and Housing. 2011.
[43] Republic of Marshall Islands. Gender Equality Where Do We Stand? 2018.
[44] Ibid.
[45] Republic of Marshall Islands. RMI Census of Population and Housing. 2011.
[46] Republic of the Marshall Islands. National Review for the Beijing Platform for Action BPfA+25. 2019.
[47] Republic of Marshall Islands. Gender Equality Where Do We Stand? 2018.
[48] Republic of the Marshall Islands. National Review for the Beijing Platform for Action BPfA+25. 2019.
[49] Ibid.

7. **RMI's fertility rate is high with an average of 4.1 births for each woman of reproductive age.**[50] Rates of teenage pregnancy are particularly high in RMI, with a teenage pregnancy rate of 20.6 percent of total live births higher than most Pacific Island Countries.[51] While there has been some reduction in this rate, decreasing by one third since 2014 high rates of teenage pregnancy are still identified a limiting factor for young women pursuing further education, as well as contributing an added care burden within family units. Provision of sexual and reproductive health is well established, but issues associated with access to these services remain a challenge. In 2017, it was reported that only 16 percent of women aged 15-44 were utilising free family planning services, with a reliance on traditional family planning methods and abstinence.[52] 73 percent of men and 60 percent of women report having sex before they turn 18, yet rates of condom use for these first sexual encounters are low (10 percent for men and 16 percent for women).[53] Women in RMI bear the primary responsibility for healthcare within the family unit and, as such, are significantly impacted by increasing rates of NCDs, which account for 74 percent of the leading cause of death (70 percent for men and 79 percent for women).[54] Access to equitable and affordable health care remains a challenge in RMI, with 94 percent of rural women and 79 percent or urban women reporting problems accessing healthcare.[55]

Table A2.1: Snapshot of gender inequality in RMI[56]

GBV	Rate of women who have experience physical/sexual violence by a partner over the course of their lifetime. Rate of women currently experiencing physical/sexual violence	51% 18%
Education	Ratio of girls to boys in primary education Ration of girls to boys in secondary education	1:0.97 1:1.02
Employment	Labor force participation rate (women) Labor force participation rate (men)	28% 51%
Leadership & Decision-Making	Number of women represented in parliament Women's representation in public service management positions. Women's representation on boards of statutory bodies/state-owned enterprise.	2 of 33 28% 25%
Health	Fertility rate (births per woman of reproductive age) Teenage pregnancy rate	4.1 20.6% of total live births

Priority Areas for Digital RMI Project

(i) **The Gender Development Office is housed within the Community Development Division of the MOCIA.** The work of this office is guided by RMI's National Gender Mainstreaming Policy 2015-19. This policy includes the following five priority areas: (i) strengthened capacity across government to deliver programs and services that focus on closing key gender gaps; (ii) secure family wellbeing; (iii) elimination of gender-based violence and the protection and care of survivors; (iv) enabling environment for an equitable participation in and benefit from economic development; and (v) equitable participation of women and men in decision-making.

[50] Republic of Marshall Islands. Gender Equality Where Do We Stand? 2018.
[51] SPC, Stocktake of Gender Mainstreaming Capacity of Pacific Island Governments: Republic of the Marshall Islands. 2012.
[52] Republic of Marshall Islands. Gender Equality Where Do We Stand? 2018.
[53] Republic of Marshall Islands. Leading Facts & Figures from RMI Census of Population and Housing. 1999.
[54] Republic of Marshall Islands. Gender Equality Where Do We Stand? 2018.
[55] Republic of the Marshall Islands. National Review for the Beijing Platform for Action BPfA+25. 2019.
[56] SPC, Stocktake of Gender Mainstreaming Capacity of Pacific Island Governments: Republic of the Marshall Islands. 2012; Republic of the Marshall Islands. National Review for the Beijing Platform for Action BPfA+25. 2019; Republic of Marshall Islands. Family Health and Safety Survey. 2014.

8. **Affordable, high-speed internet is known to be associated with socio-economic empowerment by increasing users' access to services, including education, employment and health.** As such, access to digital services can be particularly beneficial to marginalised and vulnerable populations to help improve their voice in decision making processes, engagement with government services and inclusion within the digital economy. For women, in particular, this represents an important opportunity to address existing barriers, as outlined above. However, analysis shows that while the Government has been engaging on gender issues, including across the ICT sector, there is poor coordination across a national and state government level and weak integration of policies that address gender equality issues and programming across a 'whole of government' approach in accordance with gender mainstreaming obligations. This represents a risk for the potential benefits of increased availability and use of ICT services to not be equally shared among men and women, particularly if new policies are developed without adequate consultation and engagement in this space.

Priority Area 1: Sex disaggregated data on internet access & use

9. **Analysis:** Women and men access the internet and use digital services at similar rates. Globally, as of 2019, the global Internet user gap is 17 percent[57], and over 300 million fewer women than men access the internet on a mobile phone. The gender gap is even larger in the world's Least Developed Countries (LDCs) at 31 percent. However, there is no evidence of a current gender gap in RMI for access to the internet or digital services. While sex-disaggregated data is unavailable for mobile phone and internet subscriptions, 2020 data on the advertising audience for social media platforms in RMI (which is considered a reasonable proxy for RMI in this context) indicates a relatively equal distribution of accounts between men and women[58] which offers a strong insight into the gendered nature of ICT uptake more broadly. These preliminary insights were validated through stakeholder consultations in early 2020, which elicited little evidence of a gendered divide in digital access and/or use. While available evidence suggests that the increased availability of digital services are equally shared by men and women, persistent inequalities in terms of economic opportunity violence against women and girls, and participation in leadership and decision-making can impact women's ability to take full advantage of the socio-economic impacts of improved digital infrastructure and services. Expanded access to internet services for neighboring island citizens can enhance adoption and social connectedness, and there is a need to collect disaggregated data to monitor gaps, if any, that may arise as digital infrastructure and penetration increases. Currently, there is a dearth of sex disaggregated telecommunications data in RMI, with no legal or regulatory provisions for the collection of disaggregated data, and inconsistent uptake across sectors.

10. **Action:** The Project is expected to respond to these concerns through Subcomponent 2.7 (Gender Development Office support). The Project will support this office to contribute to M&E on gender issues throughout the program and provide support and guidance to MTCIT and others to ensure collection of sex-disaggregated statistics around telecommunications subscriptions, access and use.

11. **M&E:** The Project includes mechanisms to monitor gender impact and facilitate sex disaggregated analysis. Of relevance to this priority area are the following indicators: (i) people provided with access to the

[57] ITU. 2019. https://www.itu.int/en/mediacentre/backgrounders/Pages/bridging-the-gender-divide.aspx#:~:text=In%202019%2C%20%E2%80%8Bthe%20proportion,the%20CIS%20countries%20and%20Europe.
[58] Women comprise a slightly greater proportion of the advertising audience on Facebook at 52.4 percent of the population. While data is available for other social media platforms, the limited number of users renders them less representative than the Facebook sample *https://datareportal.com/reports/digital-2020-marshall-islands*

internet - Female; (ii) project beneficiaries reporting satisfaction with improved internet services - Female; (iii) people reached through digital literacy and entrepreneurship programs - Female.

Priority Area 2: Harmful digital communication and cyber safety

12. **Analysis:** Women experience the internet differently to men. International studies have found that women are more concerned about privacy risks online than men, with the issue of online safety emerging as a key concern, particularly in the wake of increasing instances 'revenge porn', cyberstalking and online sexual harassment. Women are disproportionately affected by this harmful digital communication due to the shame and stigma associated with women's sexualization and the 'taboo' nature of discussing sexual activity. Young women and girls have been further identified as a particularly vulnerable group for harmful digital communication. There is a complete absence of publicly available material addressing experiences or perceptions of online behavior in this way and, in the absence of legislative protections and clear reporting processes, there is no data available on the instances of reporting of these cases. Online gender- based violence is a barrier to women and girls' adoption of digital platforms and services, and can stifle their freedoms of expression, association and assembly. At a regional level, recent surveys of Pacific youth, in preparation for Pacific Women Shaping Pacific Development's Pacific Girls Program identified bullying (including cyberbullying) as a major challenge for Pacific girls, recommending the need to develop cyber safety skills and promote online safety as a result.[59] Furthermore, work undertaken by the Talitha Project in Tonga identified a range of cybersecurity concerns for young women including: (i) impersonation and misrepresentation online (ii) image-based abuse including pressure to send pornographic imagery and circulation of these images without consent, (iii) hacking and unsolicited sharing of information online by acquaintances and strangers. Young women are disproportionately affected by these actions due to societal expectations and stereotypes around shame, promiscuity and sexuality. A recent report from Kiribati, PNG and Solomon Islands emphasized the fact that children's use of digital a technology (particularly social media) presents risk to their safety amid concern over sexualized and violent content as well as cyberbullying.[60] This report also highlighted the presence of dominant gender norms that mean girls are simultaneously both more vulnerable to these risks, as well as less able to manage and navigate them.[61] Parents and caregivers reported children's access to digital content as a significant concern both from a safety perspective, as well as an association with the eroding of cultural values and practices, noting they felt ill-equipped to control or protect their children online – often turning to prohibitive strategies in the absence of other guidance.[62] It has been identified that when children have limited opportunities for digital engagement this negatively impacts their capacity to identify and manage these digital risks. It is also noted that women bear a higher burden for monitoring children's use of technology.

13. In an RMI context, stakeholders identified Twitter as an emerging platform for these type of activities. An increasingly popular site for younger users, Twitter is often considered as the platform through which the majority of bullying, harassment and vilification occurred. There was also a strong concern among stakeholders that increased access to, and use of, digital technologies (and associated increases in social media use) may facilitate an increase in harmful digital communication – particularly the circulation of sexualized and violent imagery. Stakeholders emphasized a 2019 incident during which a video 'went viral' featuring a young Marshallese woman being raped by multiple men. Consultations highlighted that RMI currently has very limited capacity to deal with concerns over online violence, the circulation of 'revenge porn' or harmful digital communication. Currently there

[59] Pacific Women. Pacific Girl Program Overview. 2019.
[60] Online Safety in the Pacific: A report on a Living Lab in Kiribati, Papua New Guinea and Solomon Islands. 2020.
[61] Ibid.
[62] Online Safety in the Pacific: A report on a Living Lab in Kiribati, Papua New Guinea and Solomon Islands. 2020.

is no legislation or policy framework on cyber safety or harmful digital communication in RMI.[63] Stakeholders also indicated a lack of support services or reporting pathways at a national level. This results in: (i) a knowledge gap on safe digital behavior, (ii) the inability to view these harmful digital practices as 'criminal' or 'illegal', and (iii) a lack of knowledge about avenues for reporting complaints or seeking redress.

14. **Action:** The Project is expected to reduce gender disparities through specific actions to address the distinct needs of females in the Project's activities, namely Subcomponents 2.7 (Gender Development Office support), 3.2 (legal and regulatory framework for digital government) and 2.2 (creation and roll out of a government cybersecurity program). As part of this action, the Project will also facilitate legislative reform criminalizing harmful digital communications. Targeted awareness campaigns to bridge knowledge gaps at a community level, with a particular focus on the youth population who have been identified by stakeholders as a vulnerable group for issues relating to harmful digital communication, will be conducted. Further, the project will support the development of a cybersecurity policy framework and ensure that gender perspectives are included in its development, through support to the Gender Development Office to participate in consultations leading up to the drafting of this policy framework.

15. **M&E:** The Project includes mechanisms to monitor gender impact and facilitate sex-disaggregated analysis. Of relevance to this gap are the following indicators: (i) Government's cyber security program developed (Y/N); (ii) Passage of harmful digital communication bill (Y/N); (iii) Number of youth awareness sessions (online safety) held (target: 5 per year) (iv) Number of parent/caregiver online safety workshops conducted (target: 2 per year).

Priority Area 3: Economic empowerment & entrepreneurship

16. Analysis: Women's economic empowerment is a key feature of RMI's gender policy and planning. As noted earlier, Women's participation in RMI's workforce is 28 percent, compared with 51 percent for their male counterparts.[64] Similarly, men are more likely to work for wages or salaries than women, with women more likely to work in the production of goods for sale than men. This is also reflected in unemployment rates, which are 37 percent for women and 28 percent for men. Data obtained from the Marshall Islands Society Security Administration indicate that similar patterns are replicating in the business registration space, with men registering businesses at a rate of 17 percent higher than women. Stakeholder consultations highlighted potential applications for improved digital technology and infrastructure to increase women's economic empowerment and/or entrepreneurship opportunities. Digital technologies are viewed as an enabler of entrepreneurship by: (i) facilitating the provisions of new services, access to goods and eCommerce, (ii) linking demand for goods and services to supply in efficient ways – including through online retailers with lower overheads than traditional shopfronts, (iii) facilitating access to international marks and improved information sharing facilities, (iv) increased awareness through digital marketing and promotions, as well as access to online networks and communities of practice. Indeed, ESCAP's 2017 Report *Fostering Women's Entrepreneurship* highlighted greater access to and use of ICTs as one of the two key drivers of change in this space.[65] In particular, access to the internet has the potential to transform retail and service activities.[66] There is an increasing focus on, and appetite for, women's

[63] The lack of formal legislative or regulatory framework means that there is no avenue for individuals to lodge complaints of harmful digital practices, or database by which to formally track the number of instances. This results in a complete absence of quantitative data by which to assess this gap, hence the reliance on qualitative and anecdotal data in this instance.
[64] Republic of Marshall Islands. RMI Census of Population and Housing. 2011.
[65] UNESCAP. Women's Entrepreneurship: Lessons and Good Practice. 2018.
[66] Ibid.

entrepreneurship and economic empowerment in RMI, including the recent reinvigoration and launch of the Women's Entrepreneurship Network – with a membership list of over 80 entrepreneurs. This network, launched in 2020, has a focus on targeted capacity building activities and training opportunities for its members.

17. An area of crucial importance for women's economic empowerment is the production of goods, including handicrafts. Women are more likely to work producing goods for sale than men, with 30 percent of women working in craft-related occupations.[67] However, it is also noted that while there are a range of training programs focused on the practical skills associated with handicrafts and/or sewing, there is comparatively little attention paid when it comes to subsequent business training to help turn these skills and activities into a viable business model.[68] Consultations with a number of women entrepreneurs suggested digital technology has a potentially valuable role to play, both in terms of encouraging women to start their own business, as well as providing access to international marks and networks. For example, Elefa Handicrafts in Majuro (with two shopfront locations) has been using social media for the past few years to showcase their products and fulfil international orders. This includes allowing international customers to place an order through Facebook or Instagram, as well as facilitating electronic payments through PayPal. Consultations with these businesswomen highlighted a substantial increase in sales resulting from their social media presence, enabling them to reach a large customer base in the US. This increase in revenue has enabled them to employ six women in Majuro in order to keep pace with demand, as well as continuing to source handicrafts from women in neighboring islands. This preliminary finding was echoed in subsequent stakeholder consultations, with digital platforms such as social media identified as a crucial business platform due to the convenient and time efficient nature of posting online content, and the ability for businesswomen to engage in these online activities alongside their other paid work and family care commitments, in a way that would not always be possible with a physical shopfront presence, and with the need for less investment in physical infrastructure. Through platforms such as social media, producers of Marshallese goods were able to tap into the Marshallese diaspora in the US and elsewhere who were detached from their traditional cultural practices and products and wanted to maintain a connection to their Marshallese rituals and practices. These preliminary findings have taken on a renewed significance in the wake of the COVID-19 pandemic and associated downturn in tourist trade through physical shopfronts at locations such as the airport.

18. **Action:** The Project is expected to reduce gender disparities through specific actions to address the distinct needs of females in the Project's activities, namely Subcomponents 2.2 (digital skills development) and 2.7 (Gender Development Office support). The project will support digital entrepreneurship training workshops generally, with a particular emphasis on reaching women through the RMI's Women's Entrepreneurships Network. As part of this action, the Project will also facilitate increased capacity building for women employed in RMI's retail and trade sectors.

19. **M&E:** The Project includes mechanisms to monitor gender impact and facilitate sex-disaggregated analysis. Of relevance to this gap are the following indicators: (i) Digital services implemented by government (Target: 2); (ii) People reached through digital literacy and entrepreneurship programs - Female (target: 50 percent)

[67] Republic of Marshall Islands. Gender Equality Where Do We Stand? 2018
[68] Republic of Marshall Islands. National Review for the Beijing Platform for Action (BPFA+25). 2019

ANNEX 3: Climate Co-Benefits Assessment

COUNTRY: Marshall Islands
Digital Republic of the Marshall Islands Project

1. This assessment elaborates on climate change considerations which have been incorporated under the Digital RMI Project. The following table elaborates on specific design considerations that were included in the project, organized by component, to enhance climate change adaptation and mitigation in the RMI context.

Component 1: Public Private Partnership and Market Structure Reform ($28M, of which $20.5M IDA and $7.5M private capital)			
Sub-components / Activity	**IDA Financing ($ million)**	**Adaptation Measures**	**Mitigation Measures**
Supporting high-quality, low-cost digital infrastructure and services under PPP arrangements	$14.7M	Under this activity, the project will finance disaster and climate resilient digital infrastructure which will consider weather-resistant materials, waterproof coverings, and underground infrastructure with climate-resilient design which would allow the digital infrastructure to withstand extreme weather events which are increasing under climate change. Under this activity, the project will develop performance standards that consider service delivery at the onset of climate disasters. In addition, it will establish measures aimed at improving the climate resilience of infrastructure.	Under this activity, the investments in new digital infrastructure, and especially the migration from a copper access network with legacy PSTN to a fiber optic access network, will reduce energy consumption and CO2 emissions. The project will support the decommissioning of inefficient legacy equipment. For new equipment, best practices for energy efficiency and international standards, such as ITU-T recommendations with respect to energy efficiency, will be followed.
Component 2: Digital Government Platforms, Cybersecurity and Digital Skills ($6.5M IDA).			
Development of a Digital Government Strategy (DGS).	1.0	The development of a DGS will establish digital service delivery platforms and digital ID-enabled payment systems, which would strengthen continuity of operations during weather-related events. If physical office locations are inaccessible in the event of natural disasters, digital platform would allow to provide business/service continuity.	N/A

Digital ID	1.0	The development of the Digital ID would enable relief and strengthen disaster response during climate disasters and events. For instance, digital ID will enable citizens to access disaster relief services and programs in the aftermath of a disaster, and authentication for financial services would allow to transfer funds to areas affected and inaccessible in the event of a climate disaster. In addition, a Digital ID can enable accurate identification of and access to patient healthcare records by emergency responders and healthcare workers.	N/A
Secure Government Network, Disaster Recovery/Business Continuity and Government Cloud (G-Cloud).	1.0	Under this activity, the project will finance design and procurement of Digital Government Infrastructure and Platform taking into consideration climate change impacts, disaster risks, and continuity of business operations. This includes a feasibility study for cloud	N/A