

Kiribati Rapid eTrade Readiness Assessment





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This publication has been edited externally.

United Nations publication issued by the United Nations Conference on Trade and Development.

UNCTAD/DTL/STICT/2019/15

eISBN: 978-92-1-004700-5



NOTE

NOTE

Within the UNCTAD Division on Technology and Logistics, the ICT Policy Section carries out policy-oriented analytical work on the development implications of information and communication technologies (ICTs) and e-commerce. It is responsible for the preparation of the Information Economy Report (IER) as well as thematic studies on ICT for Development.

The ICT Policy Section promotes international dialogue on issues related to ICTs for development and contributes to building developing countries' capacities to measure the information economy and to design and implement relevant policies and legal frameworks. It also monitors the global state of e-commerce legislation (unctad.org/cyberlawtracker). Since 2016, the Section has coordinated a multi-stakeholders' initiative entitled eTrade for all (etradeforall.org), which aims to improve the ability of developing countries, particularly least developed countries (LDCs), to use and benefit from e-commerce.

Reference to companies and their activities should not be construed as an endorsement by UNCTAD of those companies or their activities.

The following symbols have been used in the tables:

Two dots (..) indicate that data are not available or are not separately reported. Rows in tables have been omitted in those cases where no data are available for any of the elements in the row;

A dash (-) indicates that the item is equal to zero or its value is negligible;

Reference to "dollars" (US\$) means United States of America dollars, unless otherwise indicated;

Details and percentages in tables do not necessarily add up to the totals because of rounding.

Kiribati national currency is the Australian Dollar (AU\$). For the purpose of this report: US\$ 1 = AU\$ 1.46 and AU\$ 1 = US\$ 0.68 (20 September 2019).



PREFACE

The eTrade for all Initiative, launched at the fourteenth Ministerial Conference of UNCTAD in July 2016, is a practical example of how to harness the digital economy to support the 2030 Agenda for Sustainable Development, notably Sustainable Development Goals (SDGs) 5, 8, 9, and 17, which address, respectively, gender equality, decent work and economic growth, industry innovation and infrastructure, and partnership for sustainable development. The initiative seeks to raise awareness, enhance synergies, and increase the scale of existing and new efforts by the development community to strengthen the ability of developing countries to engage in and benefit from e-commerce by addressing seven relevant policy areas:

- E-commerce readiness assessment and strategy formulation
- ICT infrastructure and services
- Trade logistics and trade facilitation
- Payment solutions
- Legal and regulatory frameworks
- E-commerce skills development
- Access to financing

As part of the initiative, demand-driven assessments are envisaged to provide a basic analysis of the current e-commerce situation in the countries concerned, and to identify opportunities and barriers. The resulting reports will serve as a valuable input to these countries' involvement in various discussions related to e-commerce and digital trade, such as in the context of the UNCTAD Intergovernmental Group of Experts (IGE) on E-commerce and the Digital Economy.

It may furthermore help LDCs to identify areas in which they could benefit from assistance by partners of eTrade for all.

The Kiribati Rapid eTrade Readiness Assessment is the twentieth such assessment conducted by UNCTAD and the fifth for a Pacific Islands Nation, after Samoa in July 2017, Solomon Islands and Vanuatu in 2018 as well as Tuvalu in 2019, thereby, completing eTrade Readiness Assessments for all Pacific LDCs. With this report, UNCTAD contributes to the recommendations of the joint WTO/UNCTAD/PIFS June 2017 Workshop on e-Commerce for the Pacific to have all PIFS members benefit from an eTrade Readiness Assessment as a first step towards developing a coherent regional e-commerce policy. The Kiribati Rapid eTrade Readiness Assessment and action matrix also contribute to the Pacific Aid-for-Trade strategy.

With the eTrade for all partners, UNCTAD is committed to support Kiribati and other Pacific Islands Nations in their resolve to harness the potential of e-commerce for development.

Shamika N. Sirimanne

Director, Division on Technology and Logistics, UNCTAD



PREFACE

Technology plays an indispensable role in accelerating the pace of the global trade integration. For the least developed countries (LDCs), an evidence to policy approach must guide trade led development strategies to harness the full potential of the digital economy. The Enhanced Integrated Framework (EIF) has remained committed in its focus on this successful approach for trade-led development in the digital age.

Kiribati's eTrade Readiness Assessment is the ninth EIF-supported assessment. The completion of this assessment is a milestone for the EIF, as we have now supported assessments in all the EIF Pacific Island LDCs. These assessments provide a significant contribution to the body of knowledge for understanding the practical foundations that enable e-commerce in these LDCs' paths to development.

The Government of Kiribati has realized the growing potential of e-commerce and its importance for development. This is evidenced by the incorporation of ICT components in Ministerial strategies and all development plans over the last three years, including the Kiribati 20-year Vision Development Plan - 2016-2036. These are positive signs; however, there remains room for support to ensure that all plans, strategies and visions are sufficiently funded, implemented, monitored and adjusted as necessary.

This assessment has brought several important points to the fore, some of which are worth highlighting. Digital transformation of specific sectors, such as fisheries and tourism, are high potential areas that are yet to be explored. However, a lack of e-payment and cashless solutions is the main bottleneck faced by the private sector. The assessment has further confirmed that all Pacific Island LDCs face logistical challenges related to geographic distance between national islands. However, this is even more pronounced in Kiribati. Mobile internet penetration of approximately 37 per cent of the population and an even lower total internet penetration (14.67 per cent) presents a real challenge. Broadband data are also expensive. For example, customers in Fiji can purchase two to three times as much data compared to those in Kiribati, indicating opportunities for substantial improvement.

It is encouraging to see that the Government of Kiribati has been working together with development partners to develop basic telecommunications and internet infrastructure. The most significant evidence of this is the major investment by the World Bank and the Asian Development Bank in the submarine cable scheduled to boost internet connectivity and affordability, particularly in the outer islands. These investments in infrastructure will need to be followed up by the right policies, laws and regulations that will boost business confidence for e-commerce to thrive.

The EIF's evidence-based approach to the integration of the LDCs into the multilateral trading system has so far ensured that investments target country specific challenges identified in analytical studies. eTrade Readiness Assessments remain the main basis on which our e-commerce focused interventions are designed and implemented. To this end, the accompanying action matrix in this report will be indispensable.

I thank the authors of the report and our colleagues at UNCTAD for putting together this significant contribution to the evidence base for supporting digital development in Kiribati. I would also like to express my gratitude to the EIF National Implementation Unit in Kiribati, the EIF Focal Point and the Government of Kiribati for their commitment in realizing the country's potential in the digital economy.

The EIF is committed to supporting Kiribati's trade-led development efforts, including leveraging technology for better trade, in any way it can.

Ratnakar Adhikari
Executive Director
Executive Secretariat for the EIF



FOREWORD

It is an honour and privilege for me to present the eTrade Readiness Assessment for Kiribati. The report provides state of the art analysis of where Kiribati stands in terms of e-commerce development and how it can nurture an ecosystem that is conducive to online business activities in Kiribati and across the border.

The use of electronic or digital commerce has grown parallel to increased use of the Internet, allowing buyers and sellers to transact more efficiently. An effective e-commerce ecosystem is expected to provide the business community, and especially small businesses in the small Island state of Kiribati, increased trade opportunities through better access to worldwide markets and business resources. The ability to electronically track and log transactions will also serve to minimize corruption among import-export stakeholders. Developing an enabling environment for e-trade is critical for Kiribati, as it leads to integration of the business community - especially the SMEs - into the global economy through improved business procedures and systems.

UNCTAD's eTrade Readiness Assessment comes at a critical time as Kiribati is seeking to improve its ICT connectivity and is expecting the first international fibre-optic submarine cable in 2021. This is in addition to two Internet service providers, ATHKL and the Ocean Link, which are currently serving Kiribati, and two local companies, Taotin Trading and the MOEL. These will support developments in healthcare, education, business and trade, government and tourism. In the area of e-commerce, the new submarine cable is expected to create more competition, with lower costs and increased speed of Internet access as a result. This will unlock opportunities to increase the productivity and competitiveness of the private sector.

The UNCTAD eTrade Readiness Assessment offers a set of policy actions aimed at seizing opportunities and removing barriers for Kiribati to increase overall competitiveness in e-commerce and in the broader digital economy. These actions will support the government 20 Year Vision Development plan (KV20), which seeks to improve Internet and mobile connectivity on the outer Islands in order to realise key development outcomes associated with the development of trade and e-commerce. The UNCTAD report supports the realization of the policy objectives in the trade policy framework, investment policy and ICT policy.

On behalf of the Government and the people of Kiribati, I am thankful to UNCTAD, through the Ministry and the Enhanced Integrated Framework (EIF), for undertaking this invaluable assessment and report. It will serve as our guide to Kiribati's development agenda in the area of e-trade.

Te Mauri, Te Raoi ao te Tabomoa (Health, Peace and Prosperity).

Hon. Atarake Nataara Minister of Commerce, Industry and Cooperatives



ACKNOWLEDGEMENTS

ACKNOWLEDGEMENTS

This Rapid eTrade Readiness Assessment for Kiribati was prepared by Sven Callebaut, UNCTAD Consultant, in close collaboration with a team comprised of Cécile Barayre, Iris Macculi, Mohamad Fakhreddin and Htet Myat Min, under the overall guidance of Torbjörn Fredriksson. Local inputs, support and guidance were provided by Mr. Martin Tofinga, National Consultant and the Government of Kiribati through the Ministry of Commerce, Industry and Cooperatives.

In Kiribati, the Consultant wishes to express his profound recognition to the Honourable Atarake Nataara, Minister for Commerce, Industry and Cooperatives for presiding over the Final eTrade Readiness Workshop in South Tarawa, and to Mr Toani Takirua, Secretary for Commerce, Industry and Cooperatives for requesting UNCTAD's support in assessing Kiribati's eTrade Readiness. Special thanks to Ms. Roreti Eritai, Director for Business Promotion Centre and Project Coordinator of the Enhanced Integrated Framework and Coconut Sector Development; Ms. Donna Tekanene-Reiher, Senior Trade Officer; Ms. Tokarake Terube Meriia, Trade Officer; and Mr. Samson Odhiambo, National Trade Advisor, Commonwealth Secretariat (Hub and Spokes Programme), all from the Ministry of Commerce, Industry and Cooperatives, for their invaluable support and technical contribution before, during, and after the in-country mission.

Comments and inputs provided by experts from the following eTrade for all partner agencies have substantially improved the final report: ITC, UNCITRAL and UPU.

In Geneva, the assessment was made possible thanks to the timely support of Ambassador Mere Falemaka and Dr. Andrea Giacomelli, Aid-for-Trade Adviser, from the Permanent Representation of the Pacific Islands Forum to the WTO in Geneva.

The assessment benefited from the inputs of more than 80 i-Kiribati institutions from the public and private sectors as well as non-state actors, through the online eT Ready surveys and bilateral interviews in South Tarawa. Further, the Consultant wishes to thank all individuals who participated in the focus group discussions and the final workshop that took place in South Tarawa on 23-26 April 2019.

Desktop publishing was prepared by Keel Chan and the cover was designed by Magali Studer. The document was externally edited by Nancy Biersteker.

Funding for this report was provided by the Enhanced Integrated Framework (EIF), a core partner of the eTrade for all initiative.



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ABBREVIATIONS

ADB Asian Development Bank

AfT Aid-for-Trade

AMAK Aia Maea Ainen Kiribati

ANZ Australian and New Zealand (Banking Group)

APTC Australia Pacific Training Coalition
ASYCUDA Automated System for Customs Data

ATHKL Amalgamated Telecom Holdings Kiribati Limited

ATM Automated Teller Machine

AU\$ Australian Dollar

CCK Communications Commission of Kiribati

CLS Cable Landing System

CSDS Coconut Sector Development Strategy

DBK Development Bank of Kiribati

DFAT Department of Foreign Affairs and Trade

DFS Digital Financial ServicesDP Development PartnerDtF Distance to Frontier

ECC Electronic Communications in International Contracts

ECSCE-Commerce Service CentreEEZExclusive Economic ZoneEFTElectronic Funds Transfer

EFTPOS Electronic Funds Transfer at Point of Sale

EIF Enhanced Integrated Framework

EMC East Micronesia Cable

FATF Express Mail Service Network
Fath Financial Action Task Force
FGD Focus Group Discussion

FITAF Financial Inclusion Technical Assistance Facility

FSM Federated States of Micronesia
FSP Financial Service Providers
G2B Government to Business
G2C Government to Consumer
GDP Gross Domestic Product
GoK Government of Kiribati

ICT Information and Communication Technology
IDA International Development Association

IDPD Industry Development and Trade Promotion Division

IMF International Monetary Fund

IPF National Investment Policy Framework

ISP Internet Service ProvidersIT Information Technology

ITU International Telecommunication Union



KANGO
 Kiribati Association of Non-government Organizations
 KCAE
 Kiribati Customs Administration and Enforcement
 KCCI
 Kiribati Chamber of Commerce and Industry
 KCIS
 Kiribati Computer and Internet Society

KDP Kiribati Development Plan

KIISS Kiribati Inter-Island Shipping Services

KIT Kiribati Institute of Technology
KNSL Kiribati National Shipping Line, Ltd

KPF Kiribati Provident Fund **LDC** Least Developed Country

MCIC Ministry of Commerce, Industry and Cooperatives
MEHR Ministry of Employment and Human Resource

MELAD Ministry of Environment, Lands and Agriculture Development

MFAT New Zealand Ministry of Foreign Affairs and Trade
MFED Ministry of Finance and Economic Development

MFI Micro-finance institutions

MHMS Ministry of Health and Medical Services

MICTTD Ministry of Information, Communication, Transport and Tourism Development

MISE Ministry of Infrastructure and Sustainable Energy
MLPID Ministry of Line and Phoenix Islands Development

MNO Mobile Network Operator

MOJ Ministry of Justice

MSME Micro, small and medium enterprise

MSP Ministry Strategic Plan

MTEC Micronesian Trade and Economic CommunityMWYSSA Ministry of Women, Youth, Sports and Social Affairs

NIPF National Investment Policy Framework

NPGEWD National Policy on Gender Equality and Women's Development

NTAC National Trade Advisory Committee
OAG Office of the Auditor General

OECD Organisation for Economic Co-operation and Development

ORE Operational Readiness for E-commerce

PACER Pacific Agreement on Closer Economic Relations
PFIP United Nations Pacific Financial Inclusion Programme

PICs Pacific Island Countries

PICTA Pacific Island Countries Trade Agreement

PIFS Pacific Islands Forum Secretariat
PMC Pacific Island Member Countries

POS Point of Sale

PPP Public-Private Partnership
PSP Payment Service Provider
PTI Pacific Trade Invest

ABBREVIATIONS

SIDSSmall Island Developing StatesSMESmall- and medium-enterpriseSOEState-Owned Enterprises

SPTO South Pacific Tourism Organisation
 SWP Seasonal Worker Programme
 SXC Southern Cross Cable Company
 TAK Tourism Authority of Kiribati
 TELMOs Telegraphic Money Order

TF Trade Facilitation

TFA Trade Facilitation AgreementTPF Trade Policy FrameworkTSKL Telecom Services Kiribati, Ltd.

TVET Technical and Vocational Education and Training
UNCDF United Nations Capital Development Fund

UNCITRALUnited Nations Commission on International Trade LawUNCTADUnited Nations Conference on Trade and Development

UNESCAP United Nations Economic and Social Commission for Asia and the Pacific

UPU Universal Postal UnionUS\$ United States DollarVAS Value-added ServiceVAT Value-added Tax

VSAT Very Small Aperture Terminal

WBG World Bank Group

WTO World Trade Organization



EXECUTIVE SUMMARY

As a small island developing state with about 112,000 people spread across 33 atolls and 3.5 million square kilometers of ocean, Kiribati faces significant economic and public service delivery challenges. In addition to being one of the countries most affected by climate change, other challenges stem from a highly dispersed population, remoteness to major markets, a narrow economic base, and the dual problem of sparse, outer island communities and heavy overcrowding in the capital. It is too remote for integrated industry value chains, therefore production of local goods tends to focus on traditional products, with most consumption products and capital imported from abroad. This geography raises the cost of public service delivery and leads to an infrastructure gap. It limits opportunities for private sector development and diversification. Weaknesses in governance, business regulations, and access to credit exacerbate these geographical challenges. The eT Ready Assessment seeks to support Kiribati's effort to identify e-commerce challenges and leverage additional resources from development partners to address these barriers.

E-commerce readiness assessment and strategy formulation

The Government of Kiribati (GoK) has a clear national agenda on e-commerce development: to boost economic sector growth. On the policy front, the Government developed the Kiribati Development Plan 2016-2019, which outlines its economic expansion plans for the medium-term. A Trade Policy Framework (TPF) launched in 2018 recognizes the role of ICT in supporting trade development and further recommends the need to promote the use of e-commerce for the business community. The TPF recommends the need to develop and effectively implement an ecommerce policy and regulatory framework. The TPF takes into consideration their low level of awareness of, access to, and usage of ICT. The GoK has also endorsed a national ICT Policy in June 2019, that includes development targets for improving and expanding digital connectivity and ICT infrastructure in the country including the need for ICT to enact a Cyber-crime legislation, develop data protection privacy and law and review the Evidence Act including elements on ecommerce and cyber security. The National Investment Policy Framework 20182028 has an entire chapter dedicated to investment in e-commerce. All these policies are derived from Kiribati's first long-term development plan, the Kiribati 20-Year Vision 2016-2036, commonly known as KV20. The Vision fosters alignment between policy areas of respective ministries and aims to pave an innovative path for government, stakeholders, donors, and development partners to further collaborate to realize transformative development for Kiribati.

ICT infrastructure and services

The Government's broader development strategy is to improve Internet and mobile connectivity in the outer islands to realize key development outcomes related to the digital economy and, specifically, to trade and e-commerce. However, the geographical challenges are particularly severe in Kiribati, reflecting a greater need for improving the ICT infrastructure in the country. This was recognized already in 2011 and the latest National ICT Policy 2019, which pushes for increased space for e-commerce and e-government initiatives as levers of private sector growth and improved government services delivery. Liberalization efforts, such as the introduction of a second mobile operator, are a step towards these long-term goals, and bode well for the growth of the digital economy. While the application of ICT and e-commerce solutions can only address some structural and infrastructural challenges related to trade partially, it can reduce the administrative barriers that increase costs, delays, and unreliability. This is particularly important for administrative and operational activities linked to investment market entry and economic activities.

While ICT presents a good opportunity for facilitating e-commerce, the low percentage of Internet penetration (at roughly 30 per cent of the population in 2018) and lack of a policy and regulatory framework to support the development of e-commerce is a major challenge. In late 2018, mobile penetration (unique SIM card holders) in Kiribati's major population centre of South Tarawa, nearby atolls, and Kiritimati Islands, was about 48 per cent¹. At the national level (37 per cent), it is about 30 per cent lower than other Pacific countries at a comparable stage of development. Access to fixed broadband Internet (less than one per cent of the population) is also very



¹ Source: World Bank, ITU

limited. The distribution of ICT services is very unequal across Kiribati, especially outside of South Tarawa and Kiritimati Islands. International highly reliable connectivity presently depends on satellite links, which are expensive and offer limited capacity.

Trade logistics and trade facilitation

The limited number of both domestic and international trade opportunities in Kiribati and inadequate basic physical infrastructure are key constraints to the development of e-commerce business opportunities. While not a member of the WTO, the GoK has pursued several reforms for trade facilitation, including accession to Revised Kyoto Convention which is in line with the WTO TFA; benefiting soon from the UNCTAD ASYCUDA Programme, through funding available under PACER Plus, Australia and New Zealand. However, there is lack of mechanism to ensure interagency coordination at the border to facilitate as recommended in the TPF. Transportation and logistics infrastructure are key areas of development sector assistance and should remain so for many years ahead. Delivery of goods, including through postal services, is a serious challenge. Postal services present an alternative way of shipping goods domestically and internationally. In this regard, physical addressing should be improved and the operational readiness of Kiribati Post enhanced.

Payment solutions

The lack of e-payment and cashless solutions is the main bottleneck identified by the private sector hampering the adoption of e-commerce in Kiribati. This scarcity limits growth, especially for the services industry including transport and tourism. It is characterized by the absence of electronic payments solutions in the main commercial bank or the two telecom operators. ANZ Bank is the only commercial bank in Kiribati. ANZ Bank is regulated by the Reserve Bank of Australia. ATHKL, on the other hand, is the only digital financial services (DFS) provider that offers its M-PAiSA mobile money solution as a Value-Added Service (VAS) regulated by the CCK. There is no existing Act on financial services that regulate both providers.

Legal and regulatory framework

Despite the significance of e-commerce in development plans, Kiribati does not have a legislative framework that could facilitate its development. No

laws recognize the validity of electronic documents and transactions and neither are there laws governing electronic contracts to support e-payments and fund transfers. Despite growing consumer concerns, laws on online consumer protection and data privacy have not been drafted yet. Kiribati started to draft an e-transaction bill in 2017 and recently sought support from UNCITRAL to make the draft law compatible with international standards. Kiribati also seeks to enact a Cybercrime legislation in 2020.

Skills & Awareness development for e-commerce

- Limited connectivity and lack of trust in e-commerce in Kiribati also translates into low use of the Internet for business purposes, signaling a general need to support digital adoption and literacy. Higher education and training programs have not yet embraced curricula suitable to develop e-commerce skills. In 2019, Kiribati commenced the process of mainstreaming ICT in Education system at secondary school level. The University of the South Pacific however has developed a regional e-learning platform; students and businesses alike can take advantage of those on the South Tarawa campus. Other challenges include limited awareness among stakeholders about the linkages between ICT and trade, and low levels of digitalization and sophistication of MSMEs.
- In order to promote effective utilization and adoption of ecommerce, there is urgent need to promote awareness on cybersecurity in order to build a safe and secure ICT ecosystem conducive to ecommerce.
- It is recognized that there is a need to collaborate with non-State Actors like Kiribati Computer and Internet Society (KCIS), the Kiribati Chamber of Commerce and Industry (KCCI) in the promotion of the use of e-commerce by the business community and consumers, taking into consideration their low level of awareness and low level of access to and usage of ICT;

Access to Financing

The financial services sector in Kiribati, along with similar sectors in other small island states, is primarily concerned with the facilitation of transactions resulting from the exchange of goods and services, savings mobilization, allocation of capital funds, and other



similar activities. The scope of activities associated with lending for business development remains very narrow. Options to access financing are limited to the services offered by ANZ Kiribati, DBK, the Kiribati Provident Fund, and the loan scheme jointly implemented by the Ministry of Women, Youth and Social Affairs, Ministry and Commerce, Industry and Cooperatives and Kiribati Chamber of Commerce and Industry (KCCI). Finally, money lenders offer another channel to get access to micro loans. While other money lending options are also available, these remain unregulated by the financial sector. However, the TPF has recommended the need to develop a financial sector regulation. No business accelerator or venture capitalists are presently invested in Kiribati businesses, although help is available through the PIFS' Pacific Trade Invest programme that targets only Export ready business, which excludes support to new startups and emerging SMEs (for investors from Australia, New Zealand, China and Japan mainly).

Despite these issues, promising developments are on the horizon. The Government of Kiribati is aware of ICT development trends globally, as well as in the South Pacific region, and recognizes that improved connectivity and better access to information can help address development challenges in the country. The Government has sought World Bank's assistance in this area and has embarked on a comprehensive ICT sector reform program. This program is linked

to the enormous potential brought by the landing of the first international fibre-optic submarine cable, which is expected to reach Kiribati in late 2021. The enhanced capacity from the submarine cable could support developments in healthcare, education, trade and investment, government, and tourism. Moreover, the lower cost and increased speed of Internet access could unlock opportunities in e-commerce to increase productivity and competitiveness of domestic firms.

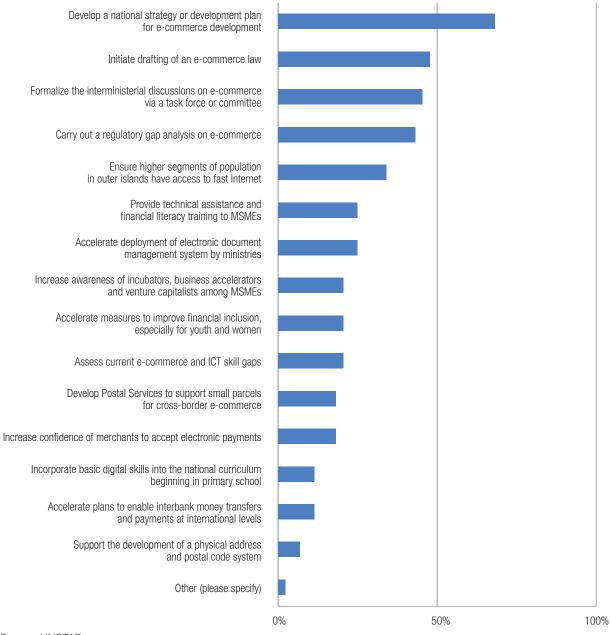
Kiribati has yet to take advantage of the potential of e-commerce. The country could benefit substantially from e-commerce if it is able to accelerate adoption of key measures aimed at supporting the development of an e-commerce ecosystem (e.g., e-commerce strategy, regulatory framework) and private sector investment (in infrastructure and access to finance). Among other benefits, e-commerce could fuel development of the tourism and financial sectors, attract FDI, and increase employment in Kiribati. Despite the potential benefits provided by e-commerce, MSMEs may face barriers such as poor domestic and international logistics and limited access to financing.

The eTrade Readiness action matrix presented in this report proposes steps towards increasing ICT and e-commerce uptake in Kiribati and making sure benefits of digitalization are shared among all.



Figure 1: Priority actions for e-commerce development in Kiribati

Please indicate three key actions from the list below that you believe could enhance e-commerce in Kiribati (88 respondents, public and private sector)



Source: UNCTAD



METHODOLOGY

METHODOLOGY

A four-step approach was used for the Rapid eTrade Readiness Assessment of Kiribati, to ensure a high level of participation and engagement of key stakeholders in the consultative process:

Figure 2: Assessment methodology



- Phase 1 | Stakeholder engagement and literature review, 1-31 October 2018. This phase included official communications between UNCTAD, the Kiribati Ministry of Commerce, Industry and Cooperatives (MCIC), and the Permanent Representative of the Pacific Islands Forum to the WTO in Geneva. Research instruments like Questionnaire were designed and finalized in consultation with MCIC. Literature review and data analysis were made possible through access to up-to-date statistics provided by the International Telecommunication Union (ITU), the Universal Postal Union (UPU) and the World Bank, in addition to data compiled by UNCTAD on behalf of the eTrade for all initiative.
- ✓ Phase 2 | Online survey customization and dissemination, 15 February to 30 April 2019. Two (2) customized surveys for the public, state and non-state actors on the one hand, and representatives of the private sector on the other, were distributed by Mr. Martin Tofinga, UNCTAD National Consultant and MCIC. A total of 91 complete surveys were used for this report - 66 from public sector and 24 from private sector stakeholders.
- ✓ Phase 3 | Focus group discussions, semi-structured interviews, and bilateral meetings were organized by MCIC and the local consultant to faciliate the in-country mission to South Tarawa conducted on 23-26 April 2019. Three (3) one-day focus group

- meetings were held and six (6) bilateral meetings with interested parties were organized during the mission with the Australia and New Zealand Banking Group (ANZ), the Kiribati Post, Air Kiribati, DHL Kiribati, the joint ADB/WB country office and the Australian High Commission in South Tarawa.
- ✓ Phase 4 | Report writing and finalization with UNCTAD, Government of Kiribati and eTrade for all partners, 15 May to 30 November 2019. As with all other Rapid eTrade Readiness Assessments, the seven policy areas used in the eTrade for all initiative were applied as entry points for this assessment. These are:
 - ✓ E-commerce readiness assessment and strategy formulation
 - ✓ ICT infrastructure and services
 - ✓ Trade logistics and trade facilitation
 - ✓ Payment solutions
 - ✓ Legal and regulatory frameworks
 - ✓ Skills development for e-commerce
 - ✓ Access to financing

The information provided in this report is based on review of existing Government policies, development strategies and reports, data collected from respondents to the surveys conducted for both the public and private sectors, as well as feedback from the stakeholders' meetings during the in-country mission.



SUMMARY OF MAIN FINDINGS AND MAIN RECOMMENDATIONS

MAIN FINDINGS

MAIN RECOMMENDATIONS



e-Commerce Readiness Assessment and Strategy Formulation

Over the past three years, all development plans and Sector Plans have included a vision for ICT and e-commerce development. The GoK has realized the immense potential of ICT for its needs as well as for the private sector development. The fishery and tourist sectors are ripe for digital transformation initiatives. This is mainly because of the policy and developmental focus as envisaged in the KV20, the inherent potential of the sectors, and the fact that the bulk of private sector activities in Kiribati is occurring in these sectors.

Ensure all plans, strategies, and visions are sufficiently funded, implemented, monitored, and adjusted as necessary. Continue mainstreaming ICT and e-commerce in future development strategies and Sector plans. Make sure the vision for e-commerce development is coherent and widely shared with all segments of the population. In support of the TPF endorsed by the Government in 2018, develop an e-commerce policy building on the findings of the eTrade Readiness report.



ICT Infrastructure and Services

The government has sped up the telecommunications sector reform. Recent liberalization efforts have involved the establishment of the Communications Commission of Kiribati (CCK) as a telecommunications regulator, and the reform of a state-owned Mobile operator into a private mobile operator (ATHKL) and licensing OceanLink as a second operator. Expensive satellite connection will be progressively replaced by a submarine cable, which is operated by BwebwerikiNet Ltd, a state-owned enterprise. The entry of a second operator has improved service and reliability even while huge connectivity gaps between South Tarawa and outer islands persist. Currently, the Internet is used mainly for social media, with minimal use for productive means due to low digitalization of MSMEs.

Prepare business development scenario for the operation of the submarine cables to South Tarawa and Kiritimati. Ensure management and technical capacity are in place to ensure efficiency in the implementation.

Develop and implement policy measures to provide broadband access to reduce digital divide.

Avoid rent-seeking approach to ensure that benefits of connectivity reach all stakeholders. Continue deployment of broadband Internet and the development of new services by mobile operators.



Trade Logistics and Trade Facilitation

Limited infrastructure development and difficult connections with outer islands make logistics challenging for both businesses and individuals. While Kiribati abolished import duties and adopted the VAT system, costs relating to the shipment and clearing of goods are still considered high barriers to international trade. With the support of UNCTAD Business Facilitation Programme, Kiribati is currently in the process of improving its business registration system, cross-border paperless trade and description of trade regulations. The country is also harmonizing customs procedures through its accession to the Revised Kyoto Convention and recently adopted with ICT policy 2019 to facilitate online application and e-transactions, which will soon be supported by UNCTAD's ASYCUDA. Additionally, Kiribati Post's readiness for e-commerce is slowly improving.

The business environment for e-commerce will need to be significantly strengthened before e-commerce/e-business enterprises can emerge.

Ensure that the recently adopted Trade Policy and Investment Policies are effectively implemented to all initiatives to improve trade facilitation and reduce trade costs.

Enhance the role of Kiribati Post for e-commerce pick-up and delivery, both domestically and internationally. Seek means to continue digitalizing business and government procedures for improved fulfilment services and logistics.

Consider accession to UNESCAP Framework Agreement on Facilitation of Cross-Border Paperless Trade in Asia and the Pacific.

Develop a mechanism through Single Window to ensure that all authorities and agencies involved in border and other import and export control booints cooperate and coordinate in order to facilitate trade.

MAIN FINDINGS

MAIN RECOMMENDATIONS



Payment Solutions

Movement of money and payments is understandably a major challenge in the country, influencing financial inclusion as well as ease of doing business, especially given that mobile money and mobile banking in the country are in the very early stages of development. Digitalization of payment (M-PAiSA) is constrained by the lack of solutions provided by Mobile Network Operators (MNOs) and banks. The demand for electronic payment solutions is also weak, as the services offered are either expensive or the market is considered too small for investments. A disconnect between business needs and offers of providers remains. Payment in cash to outer islands is associated with risks, delays, and transport costs.

Encourage Mobile Network Operators (MNO) and ANZ Kiribati Bank, and other potential institutions to provide modern payment solutions to businesses. Assess capacity and needs of the private sector to use electronic payment solutions. Help tourism businesses in both South Tarawa and Kiritimati to integrate payment solutions in websites for room reservations and other tourism services. Increase business awareness of payment solutions. Develop advocacy campaign on costs and dangers of using cash transactions.



Legal and Regulatory Framework

Kiribati lacks a legislative framework to facilitate the development of e-commerce. No laws exist to recognize the validity of electronic documents and transactions. Similarly, no laws govern electronic contracting, which underpin electronic payments and e-funds transfers.

Accelerate adoption of law on e-transactions and of key e-commerce provisions in line with UNCITRAL model law and conventions. Deploy massive awareness campaigns about consumer protection and increase existing regulations to boost the confidence of both merchants and consumers. Accession to ECC noting that the draft Electronic Transactions legislation is already in line with the Convention.



e-Commerce Skills Development

Low levels of digitalization and sophistication of MSMEs, due partly to a lack of and access to training opportunities. There is a lack of awareness in both the public and private sectors of the different channels of e-commerce and corresponding requirements in terms of skills and knowledge; this has led to the Internet being used mostly for social media and video access. Online educational programmes across primary, secondary, and tertiary levels will be immensely important in ensuring human capital growth.

Invest in massive education and awareness-raising programmes for both government and businesses in anticipation of the landing of the submarine cable. Seek assistance from eTrade for all partners to access skills development programmes (on ICT for government, ICT for businesses, operational readiness for e-commerce, business development plans and legal aspects of e-commerce). Build a strong model for the use of the extra bandwidth that will be made available through the submarine cable.



Access to Financing

Access to affordable finance, particularly for the outer island communities and businesses, remains a considerable challenge. The small Kiribati banking system is not well-positioned to cater fully to the needs of the private sector through business lending. Access to alternative types of finance especially for SMEs is not yet available in Kiribati (e.g., venture capital, fintech, business incubators, etc.). Access to finance has been prioritized in development plans and strategies. Absence of a regulator is a cause for concern when it comes to innovation and risk-taking.

Accelerate formalization of businesses, financial literacy, and digital financial inclusion. Seek assistance from regional or international organizations for alternative types of finances including SMEs Grants and guarantee schemes (e.g., PFIP, ADB, UNCDF). Encourage ANZ Kiribati to invest in new services sectors, by providing up-to-date know-how to bank personnel. needs a tailored Develop a customized Access to finance scheme that will support the new start-ups and emerging SMEs in order to develop inclusive trade and private sector in line with the Wealth Pillar of the KV20.



FINDINGS UNDER THE SEVEN ETRADE FOR ALL POLICY AREAS

1. E-COMMERCE READINESS ASSESSMENT AND STRATEGY FORMULATION

The Government of Kiribati (GoK) has a clear national agenda on e-commerce development: to boost economic sector growth. E-commerce is clearly mentioned in several policy documents as a way to boost economic diversification, including through exports. While other Pacific LDCs focus their development on the broader adoption of ICT in all spheres of the economy, Kiribati has singled out e-commerce. On the policy front, the Government developed the Kiribati Development Plan 2016-2019, which outlines its economic expansion plans for the medium-term. A Trade Policy Framework (TPF) has been implemented for the trade sector, which recognizes the role of ICT in supporting trade development recommends the need develop and effectively implement on e-commerce policy and regulatory framework; the need to promote the use of e-commerce for the business community. The TPF takes into consideration their low level of awareness of and access and usage of ICT. The GoK has also a national ICT Policy that includes development targets for improving and expanding digital connectivity and ICT infrastructure in the country. The National Investment Policy Framework 2018-2028 has an entire chapter dedicated to investment in e-commerce. All these policies are derived from Kiribati's first long-term development Plan, the Kiribati 20-Year Vision 2016-2036, commonly known as KV20. The Vision fosters alignment between policy areas of respective ministries and aims to pave an innovative path for government, stakeholders, donors, and development partners to further collaborate to realize a transformative development for Kiribati.

1.1 National policies related to ICT, e-government, e-commerce

Kiribati's national development agenda is encapsulated in the Kiribati 20-year Vision Development Plan known as the KV20. The KV20 is Kiribati's long-term development blueprint for the period 2016-2036, which aims to transform Kiribati into a wealthier, healthier, and peaceful nation. The KV20 is founded on four pillars: Wealth, Peace and Security, Infrastructure, and Governance. The KV20 also recognizes Kiribati's vulnerability to climate change as a key constraint to its development². It asserts that better utilization of ICT in the public service, including through innovation and creativity, will strengthen the capability of the public service to achieve high efficiency, cost-effectiveness, and productivity. It is envisaged that better utilization of ICT in the public service will reduce inefficiency costs of the Government's operations by 15 per cent in 2019 and 80 per cent in 2036.

A National ICT policy was approved in 2011, which sets out the vision and roadmap for developing a robust, stable, market-driven ICT sector. The policy paved the way for many important changes in the way communications services are provided. While the short-term goals focus on reforming the former TSKL and giving a leg up to liberalization efforts, the long-term objectives include emphasis on e-commerce, e-government, education, and health. Since 2011, substantial progress has been made in creating a competitive market, enacting enabling legislation, privatising the national telephone company, radically improving the quality of services, and initiating innovative financing solutions for extending network coverage to the outer islands.

The 2019 update of the National ICT policy gives priority to filling the gaps in service coverage with three main targets, namely:

- 1. 80 per cent for mobile telephone service;
- 2. 100 per cent for Internet; and
- 3. 90 per cent for broadband services.

² This adheres to the SAMOA pathway (https://sustainabledevelopment.un.org/sids/samoareview) that identified ways and means for Pacific nations to mitigate the effect of climate change, including a better use of ICT [or to better use ICT] at the national level and for regional cooperation.



The three targets are expected to be met well before the 2036 end-year of the KV20 timeframe.

The policy also maps out the plan to develop a digital economy in line with the broader objectives of the KV20. As indicated in Pillar 3 of the KV20, improving ICT access and development will play an important role in facilitating connectivity and accessibility to economic infrastructure. Improving the national ICT infrastructure will support and enhance other drivers of growth. The 2019 ICT policy includes a roadmap for e-government, legal, and regulatory frameworks but contains little on the use of ICT by businesses and entrepreneurs. The 2019 National ICT Policy and corresponding Regulatory Framework provide a solid foundation for private sector participation in the ICT industry to improve ICT connectivity.

Various policies and strategies of the government and of several ministries and agencies are affected by and linked to this National ICT Policy. For example, under Section 15 of the Government Manifesto, ICT is recognised as a vital part of the social and economic development of Kiribati, and one whose absence may hinder desired improvements. The Manifesto defines the following objectives: (i) Develop ICT services on all the islands, (ii) Use of e-Government, (iii) National Internet security, (iv) Capacity-building of IT/ICT local experts, and (v) Manage ICT reforms.

Box 1: E-Commerce Related Strategies in the ICT Policy (2019)

The 2019 ICT Policy details the strategies and plans needed to achieve the identified goals. Four (4) have direct implications for the country's readiness for e-commerce:

E-Government Project and Government ICT

Restructuring of ICT workforce in all of Government so that the (limited number of) resources are fully utilized to support the
e-Government initiative. Capacity-building opportunities for ICT officers to be encouraged.

Cyber security and Cyber safety

- Establish a new cyberlaw based on model law developed by ITU for Pacific Island countries.
- Raise the level of knowledge about cybersecurity and identify ways to protect the children, citizens, and businesses of Kiribati against cyberthreats to the highest level.

E-Commerce

- Government will enact e-transaction legislation to facilitate electronic transactions and the broader objectives of e-commerce.
- Develop and adopt data protection and privacy policies and laws in accordance with international best practices.
- Review the Evidence Act to create provisions specifying the actions, e.g., determine the amount of electronic data to search and which should be seized, to ensure consistency with the larger body of the law of evidence and international best practices, and to permit the use of electronic records as evidence for judicial purposes.
- Educate consumers about electronic commerce to enhance the decision-making process on e-commerce and to promote awareness of the consumer protection framework that will apply to online services.
- Promote the use of e-commerce by the business community, taking into consideration current low levels of awareness, access, and usage of ICT.
- Government will promote online payments and e-Money services. Government will push for mobile money services to be introduced in rural areas for those who have no bank accounts. Government will promote awareness amongst vendors, users, and service providers on the need for compliance with banking laws and approval to operate e-commerce services.

Skills and capacity development for ICT

• The Government will ensure proper skills development across the ICT sector. It will develop a Human Resource Development Plan to help the sector grow. It will collaborate with academic institutions to bridge the gap between academic curricula and what is required in the field.

Source: ICT Policy (MICTTD, 2019)3



³ https://www.micttd.gov.ki/publications/ministry-strategic-plan-2020-2023.

1.2 National policies related to trade and private sector development

In terms of international trade, Kiribati has very limited exports of goods and services, largely a consequence of its remoteness, limited productive capacities, and lack of resources such as land or freshwater. Kiribati's limited exports merchandise consist almost exclusively of fish and coconut products. Coconut products are primarily exported to various Asian and Oceanian economies. Fish products are mainly exported to the Australia, Japan and the United States, and other regional economies. The two products could possibly in the long run benefit from E-commerce Services Centre (see Box 1) if they could be developed for export to "neighboring" markets.

In line with other PMCs, Kiribati has experienced a significant and recurring trade deficit due to the high import dependency resulting from the weak capacity of the private sector to cater to the consumers' demand. Resulting high demand for imports to satisfy consumption needs is partly covered by income from Kiribati nationals working abroad (as seafarers and participants in seasonal worker schemes in Australia and New Zealand), proceeds from sovereign saving funds, and donor support.⁴ Kiribati's main source of external financing is international fishing licenses, which have significantly increased with the introduction of the Vessel Day Scheme (VDS) in the Pacific.

At present, the private sector is relatively underdeveloped in Kiribati compared with other countries, although it has seen some growth in recent years. A key feature of the sector is that its activities are unevenly distributed across the country, with almost 80 per cent of businesses registered in South Tarawa and a further 10 per cent in Kiritimati (Christmas Island). Businesses in Kiribati are primarily comprised of Micro, Small and Medium Enterprises (MSMEs). While there are approximately 2,000 businesses in the country, only two employ more than 200 persons and there is no e-commerce business per se. Intraisland movement barriers exert further pressure on an already small and weak private sector, due to the associated costs and logistical burden. In response, the government has extensively addressed the areas

of MSMEs supply capacity, producer market-linkages, and inter-island connectivity as part of its KV20 vision.

Apart from inherent business environment challenges that typically affect a Pacific Island country, Kiribati competitiveness is affected by the important presence of state-owned enterprises (SOE), rendering the environment uncompetitive for MSMEs.5 The government has recognized this challenge, hence private sector development and SOE reforms are emerging areas of focus. In this regard, the Government has adopted a policy of transferring less strategic SOEs to private ownership, while simultaneously improving the efficiency of the remaining ones through SOE reforms. The reforms of SOE have yielded impressive results in the past years, including in the ICT and distribution sector, which paved the way for more competition. Most of the current SOEs now plays a strategic role to address the market failure especially in those sectors where the private sector considers unprofitable, while at the same time the public requires such services.

The Government, through the Trade Policy Framework (TPF 2017-2027) and the Investment Policy Framework, recognizes how the use of information and communication technology (ICT) in commercial activities serves to enhance trade and investment.

The Trade Policy Framework (TPF) adopted in 2017 is the policy instrument guiding the country's external trade competitiveness. The overall mission of the Framework is to facilitate the transformation of Kiribati into a competitive economy and strengthen its participation in both domestic and international trade with the ultimate objective of creating wealth and prosperity. The TPF is the first integrated trade policy document on trade related matters in Kiribati. It fills an important gap in the country's overall policy framework for economic transformation, which has so far relied on a horizontal treatment of trade issues coupled with some selected trade-specific measures.

The TPF reiterates the need to increase access to and use of ICT and advocates for e-commerce adoption by the private sector, in addition to the need

The weak business environment is reflected by the World Bank Doing Business annual rankings in which Kiribati was ranked 158 of 190 surveyed economies faring relatively poorly within the PMCs (only scoring above FSM and significantly below the regional average). Starting a business, access to credit, getting electricity, and resolving insolvency are the areas that are particularly weak.



In a bid to combat the high unemployment rate, the Government has engaged in strategic partnerships with some countries to expand local employment through the overseas employment markets such as Australia. The impact of these schemes is seen in the level of remittances via overseas workers and seafarers, which in recent years have been higher than aggregate national exports.

to develop and effectively implement an e-commerce policy and regulatory framework. A significant gap exists in terms of the regulatory and legal structures related to the digital economy, an expected situation given that government, business, and citizens' levels of awareness on related aspects is growing from a low base. Other identified gaps are e-transactions, cybercrime, consumer protection, and data protection⁶.

The TPF recommends the following specific policy measures to facilitate the development of e-commerce;

- Promotion of the use of e-commerce by the business community, taking into consideration their low level of awareness and low level of access to and usage of ICT;
- Implementation of measures to improve the quality of the Internet and connectivity in the outer islands; and
- Development and effective implementation of an e-commerce policy and regulatory framework.

Finally, at the sub-sectoral level, the Kiribati Coconut Sector Development Strategy launched in 2019 and the Kiribati National Fisheries Policy 2013-2025 both recognize that an efficient ICT system accessible to all stakeholders is pivotal for developing an efficient and responsive industry. An effective ICT system would enable strong and compelling social marketing

messages to be conveyed to consumers, and the country as a whole, that would assist in promoting products to high-end markets.

The KV20 has prioritised Fisheries And tourism as key productive sectors .The KV20 through the wealth pillar seeks to develop inclusive trade and private sector. It seeks to increase the level of FDI, exports, contribution of the private sector to GDP .KV20, in particular, recognizes the importance of increasing the level of investment to support private sector development, particularly for the outer Islands. It also seeks to ensure effective implementation of the **National Investment Policy Framework** (IPF 2018-2028) and complementary policies to create an enabling environment that supports the development of the fisheries, tourism, and related sectors through trade and investment.

The Investment Policy Framework contextualizes the challenges confronting Kiribati with respect to various areas that impact and interplay with investment. The IPF aligns the proposed investment policy actions with the broader national development objectives as articulated in the KV20 and the Kiribati Trade Policy Framework (TPF). The IPF affirms that "E-Commerce leverages advanced technologies to influence cross border trade. It can enable SMEs, especially in small Island states like Kiribati, to access worldwide business resources and reach new markets."

Table 1: Selected measures in TPF 2017-2027 for ICT, E-Commerce, and Trade

Actions	Timeframe	Performance indicators	Means of verification	Lead agency	Potential source of funding
Promote the use of e-commerce by the business community, taking into consideration their low level of awareness	Medium-Term	Perception survey	Ministry of Commerce, Industry and Cooperatives (MCIC) reports	MCIC	Government of Kiribati
Implementation of measures to improve the Internet and connectivity in the outer islands	Medium-Term	Per cent of penetration	Ministry of Information, Communication, Transport and Tourism Development (MICTTD) reports	MICTTD	Government of Kiribati
Development and efficient implementation of an e-commerce policy and regulatory framework	Medium-Term	E-commerce policy endorsed by the Cabinet	Ministry of Commerce, Industry and Cooperatives (MCIC) reports	MCIC	Government of Kiribati

Source: TPF 2017-2027, MCIC

⁶ All of these gaps could be part of the "law of the digital economy". There is no definition of "law of the digital economy" but it encompasses pretty much everything that has to do with electronic means and trade.



1.3 National coordination

Despite the number of references to ICT and e-commerce development in several overarching government and sector development policies, there is currently no single institutional mechanism involving the public and private sectors for the coordination of initiatives and dialogue on e-commerce. However, the National Trade Advisory Committee (NTAC) oversees the implementation of the Trade Policy Framework, which includes e-commerce. The Business Promotion Center, under the Trade Division, is also key in supporting the e-commerce strategy development. The broader issues related to e-transactions and e-commerce, which are part of the actions identified in Section of the Investment Policy Framework, fall under the coordinating responsibility of the Ministry of Commerce, Industry and Cooperatives (MCIC).

The Ministry of Information, Communication and Transport and Tourism Development (MICTTD) is tasked with the development, implementation and monitoring of the country's ICT Policy. More specifically, the ICT Policy and Development Division of the MICTTD is leading this process with the aim of effectively utilizing ICT for sustainable development, governance and improving the livelihood of Kiribati people.

The Communication Commission of Kiribati (CCK), formerly the Telecommunication Authority of Kiribati, was established in 2013 under the Communication Act of 2013 to oversee and implement the Act. The main function of the Commission is to regulate the telecommunications industry in Kiribati. In addition, CCK manages the country domain name, dot KI, and the country code, 686.

The Government should accelerate and prioritize the implementation of ICT-related policies in the different strategies mentioned above. Integrating and prioritizing ICT development in national strategies requires strong public mobilization. This could be achieved by delegating a national body, such as the ICT Policies and Development Division of the MICTTD, with the coordination of international efforts. It is important also that national efforts in ICT development are coupled with public-private dialogue to ensure representation of the needs of private sector, especially MSMES. The high-level political support was noted as being the most mature aspect in favor of e-commerce development in Kiribati (Figure 4).

Figure 3: Preferred solutions providers for e-commerce related technical assistance In case you need technical assistance to start developing e-commerce solutions, how likely are you to turn to (19 responses, private sector only) Highly likely 100% Likely 90% Unlikely Very unlikely 80% 70% 60% 50% 40% 30% 20% 10% 0% A business A bank A government A development A private sector association/chamber partner including partner such as a ministry consulting firm a UN agency of commerce

Source: UNCTAD



1.4 Current e-commerce and e-commerce marketplaces activity

E-commerce activity in Kiribati is very limited. Vendors and marketplaces are non-existent and the bulk of online transactions are for the importation of consumer goods. Several businesses have started to sell online, integrating payment solutions, as shown in Table II below:

The survey conducted among private sector representatives prior to the assessment confirmed that very few sectors currently benefit from e-commerce. The widespread perception among businesses is that an uptake in e-commerce transactions will not occur until more products and services "made in Kiribati" can be exported. As a result, only tourism, banking, and trading are currently seen as benefiting from e-commerce. In the future, it is expected that the services sectors – tourism, domestic transport, airlines – could be the main beneficiaries.

Figure 4: Level of maturity of key e-commerce areas in Kiribati

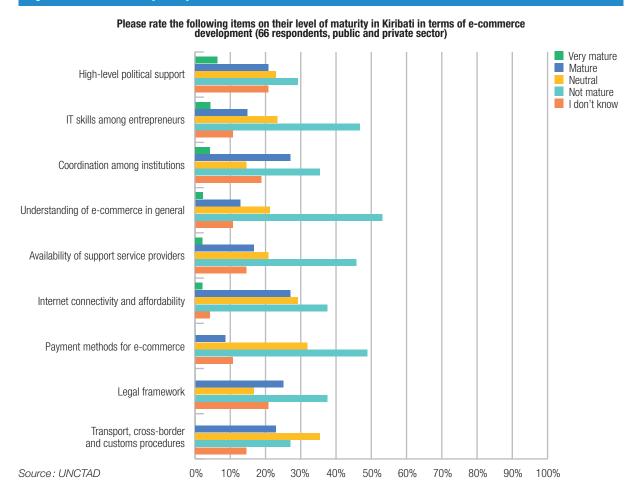


Table 2: Kiribati websites and marketplaces with integrated payment options

Business name	Website / Marketplace	Sector
Tobaraoi	https://tobaraoi.com/	Travel agency / DHL representative
ANZ Kiribati	https://www.anz.com/kiribati/en/personal/	Commercial Bank
Fema Lodge	https://www.femalodge.com.ki/en/	Tourism
Betio Lodge	https://www.betio-lodge.com/reservation	Tourism
Utirereimotel	https://www.utirereimotel.com/en/	Tourism



Box 2: Facilitating cost effective access to e-commerce and services: the Rwanda e-Commerce Service Centre (ECSC) Model

In November 2019, ITC and the Government of Rwanda will launch a new e-commerce marketplace in Rwanda, for domestic and international trade. Accompanying the platform is a dedicated hub for e-Commerce in Kigali, referred to as an "e-Commerce Service Centre", which combines the services of storage and fulfilment with consolidation of shipments for local and international transport, offers value added services such as packaging and photography, runs training and showcases the products of local firms.

The ECSC negotiates with transport partners and is thus able to offer local firms more competitive rates (and potentially a better service) than they could achieve acting alone. The ECSC will be run under a public-private partnership – under a multi-year contract which the partner benefits from an upfront subsidy in the form of building costs, equipment and technology. In return the partner agrees to offer support services to local firms at a highly economical rate.

The design of the ECSC is particularly suited to markets such as Rwanda, which have an underdeveloped domestic e-commerce market and consequently lack competitive logistics and services suitable for MSMEs.

The ECSC is just one of the outputs of a two-year effort to train service providers in the sector, with project partners DHL and GIZ. The project has also worked with the Rwanda Post Office (IPOSITA) to develop crowd logistics solutions and offer innovate approaches to last mile delivery with local partners, suitable for serving domestic e-commerce.

Source: International Trade Centre (ITC)



2. ICT INFRASTRUCTURE AND SERVICES

The ICT sector in Kiribati is undergoing substantial reforms, triggered by the on-going overhaul created by the investments in a major submarine cable. The cable links the main atoll of Tarawa, where most of the nation's population is located, and Kiritimati Island to existing cables in the Pacific. The work on the submarine connectivity via a number of cables has commenced, boding well for high-speed Internet access and potential deployment of value-added services. While the current ICT infrastructure is incomplete, unreliable especially in the outer-islands, and still perceived as costly, the upcoming submarine cable will be a game-changer, if managed properly. In addition, the development of the ICT sector should ensure the harmonious development of ICT in the outer islands, especially those with growth potential (e.g., Christmas Island). Over the past eight years, competition has stimulated growth, improved services and standards, and has resulted in remarkable improvements in connectivity, reliability and affordability. The ICT sector reform is underway, there are now two Mobile Service Providers, with CCK playing its regulatory role.

2.1 Sectoral and Institutional Context

The main challenge facing Kiribati is overcoming its international remoteness and geographic distance among the national islands. In this regard, the Government is working towards developing the basic infrastructure - particularly telecommunications and Internet - to connect its people domestically and internationally. The Government views ICT as a key enabler of more equitable growth and improved access to essential social services: education, health, disaster management, and national security.

The KV20 objectives for ICT infrastructure are to:

- Increase mobile cellular subscription
- Increase percentage of Internet penetration (access to Internet)
- Enhance national gateway bandwidth capacity
- Increase number of islands with access to submarine cable bandwidth
- Increase number of ministries and offices connected to the Government Wide Area Network
- Increase number of online services available to public
- Improve radio broadcasting reliability
- Introduce TV broadcasting service

As mentioned, the Communications Act of 2012 has liberalized the ICT sector and has led to the establishment of the Communications Commission of Kiribati (CCK) as sector regulator in 2013. Since 2012, major improvements have been registered:

- a. Introduction of a new telecommunications policy, completed in 2012, and new telecommunications legislation, enacted in 2013.
- b. Reform of the monopoly of Telecom Services Kiribati, Ltd. (TSKL), through a major sale of its assets, which was completed in 2015. Through a competitive process, two new mobile operators and several other Internet and gateway providers were also licensed. The purchaser of TSKL's assets, Amalgamated Telecom Holdings Kiribati, Ltd. (ATHKL), owned by the Amalgamated Telecom Holdings (ATH) Group in Fiji, is now well-established and expanding the local market. ATHKL is expanding coverage of services to some outer islands and is proposing further extensions. The second mobile services licensee, Ocean Links, which started operations in 2017, has become a true competitor, especially for mobile Internet.
- c. Establishment of a sector regulator, the Communications Commission of Kiribati (CCK), and preparation of a new regulatory framework that includes: operator licensing, type approval, radio communications licensing, Kiribati Radio Frequency Spectrum Plan, numbering rules (providing for eight-digit based services and number portability), and universal access. MICTTD has recently introduced amendments to the Telecommunications Act to improve its effectiveness as well as the accountability of the regulator.



To date, Kiribati has benefited from these developments in several ways. The introduction of ATHKL as a large operator with access to greater finance, technological, and managerial expertise has resulted in a more extensive network that is able to deliver 3G and 4G services to a greater portion of the population. Its use of O3B Networks satellite services for Internet and its rationalization of geostationary satellite capacity ensures a more resilient network.

In terms of policy, as described in Chapter 1, the Government, through the ICT Division of the MICTTD, is committed to bridging the 'digital divide' between urban centers and the remote under-served islands. This is reflected in the provision of telecommunications infrastructure to these remote communities. Through the World Bank funded Telecommunications and ICT Development Project, the Ministry is actively working to bring much-needed infrastructure (towers and buildings) to all outer islands, with the goal of providing the infrastructure to any mobile operator who wishes to offer services on these islands. This will ensure that mobile operators do not need to spend significant capital outlay on expensive telecommunications infrastructure, which usually translates into expensive services. Hence, this plan aims to provide a more welcoming environment to potential investors.

Currently, it is estimated that around 70 per cent of the population is covered by mobile network and around 63 per cent of the population has access to 3G services. Additionally, mobile Internet penetration of approximately 37 per cent of the population and an even lower total Internet penetration (14.67 per cent) present a real challenge. The Government's goal -as indicated in the KV20- is to increase mobile penetration to more than 90 per cent and mobile coverage to 98 per cent of the population in the next four years, e.g., by 2023. This goal ensures that everyone has equal access to telecommunication services and, therefore, equal access to the immense opportunities and benefits that ICTs can bring to the population.

The Government has identified the following persisting challenges that slow down ICT sector development:

 Delays in rollout of mobile and Internet services due to various reasons including costs of extension to outer islands, limited purchasing power, late entry of a second telecom provider;

- Maintenance costs for submarine cable for Tarawa, particularly within the first five years, are unclear;
- Sustainability of satellite communications on the outer islands may be a challenge in the long run;
- Difficulty in estimating costs related to eGovernment infrastructure due to lack of experience; and
- Inadequate sustainable power source to support ICT development on outer-islands.

To address these challenges, the MICTTD has developed a four-year strategic plan aligned with the KV20. Objective 30 of the strategy highlights proposed actions to ensure improved communications infrastructure, including Internet connection⁷:

- Establishment of telecommunications infrastructure (tower, building) in the outer islands to support mobile rollout i.e., the infrastructure is intended to be used by any mobile operator who wishes to operate on the other islands. Multiple operators can also use the same infrastructure since the sharing of the telecommunication infrastructure is encouraged and provided for in the National ICT Policy.
- Improved ICT Infrastructure at the MICTTD.
- A submarine cable connected to Kiribati will provide citizens with much more affordable and faster Internet services, which in turn has the potential to improve social and economic development in the country.
- Establishment of e-Centers for schools in the outer islands. These e-Centers will allow students and teachers to access the wealth of information available on the web. They will also be able to use the Internet to access resources that are otherwise difficult to obtain through traditional means of communication.

2.2 Broadband/Mobile/smartphone penetration

Kiribati's remote situation has precluded connection to undersea fibre-optic cables. Instead, it relies solely on satellite for international Internet connectivity, which has affected the supply and growth of the Internet

⁷ Source: MICTTD Strategic Plan 2016-2019



market due to high costs. The Government aims to improve the Internet and mobile connectivity on the outer islands. Most of the outer islands are expected to have Internet and mobile services by the end of 2019. To improve connectivity, the international gateway connectivity needs to be upgraded for the major hubs of South Tarawa in the Gilberts Group and Kiritimati in the Line Group to a more reliable and efficient connection.

Currently, 4G services are available in South Tarawa, Abemama, Tabiteuea North, and Onotoa, while 3G services are available in South Tarawa, North Tarawa, Abaiang, Marakei, Maiana, and Kiritimati. Other islands have Very Small Aperture Terminal (VSAT) systems set up at Island Council premises, which the people on the islands can access.

The KV20 proposes the following coverage objectives (Table 4).

Table 3: Key ICT indicators for Kiribati

Indicator	Units	Kiribati performance
Mobile connection penetration: - non unique, 2018	Per cent penetration	37.63%
Number of cellular subscriptions, 2018	Total number of cellular connections	56,000
of which Prepaid, 2018	Percentage of total cellular subscriptions	93%
Unique subscribers, 2018	Number of unique subscribers who may possess more than one SIM card (total population of Kiribati is 112,000)	22,000
Cellular subscriber penetration (unique), 2018	Unique subscribers/population	18.5%
SIM penetration, 2018	Percentage of cellular connections in overall population	47%
Percentage of individuals using the Internet, 2017	Per 100 inhabitants	14.58%
Active mobile-broadband subscriptions as percentage of population, 2015	Per 100 inhabitants	0.3
Active mobile-broadband subscriptions as percentage of total cellular subscriptions, 2018	As percentage of total cellular subscriptions	26%
Fixed broadband subscriptions, 2017	Per 100 inhabitants	0.07%
Internet access-households, 2015	Household Internet access (%)	7.1%
Secure servers, 2018	Per 100,000 people	4.24
Mobile operators, 2019	Number of operators	1 (+1 licensed but not operational)
Share of web traffic by laptops and desktops, Jan 2018	Each device's share of web pages served to all web browsers / year-on-year growth rate	26%, -27%
Share of web traffic by mobile phones, Jan 2018	Each device's share of web pages served to all web browsers / year-on-year growth rate	67%, +24%
Share of web traffic by tablet devices, Jan 2018	Each device's share of web pages served to all web browsers/ year-on-year growth rate	7%, -34%
Active social media users, 2018	% of population	27%
Active mobile social media users, 2018	% of population	26%
Facebook members, 2017	Total	30,000

Sources: ITU, GSMA, NMDI, WDI, Hootsuite

Table 4: Key ICT connectivity targets for Kiribati in selected years

		2019	2023	2027	2036
To develop and improve the ICT Infrastructure	% of mobile subscribers	49	60	70	80
	% of Internet penetration	47	60	85	100
	% of broadband users	45	60	80	90

Source: KV20



Current international connectivity is provided through ATHKL's international satellite bandwidth for Internet on Tarawa and nearby islands. This provides medium reliability and medium technology costs. Connectivity through Speedcast Pty, Ltd. provides access to high reliability-high cost technology for telephony, private lines and services to outer islands. The affordability and quality of the service limits Internet usage. The use of satellite connections provides some interim relief, but limited bandwidth capacity and weather disruptions are major constraints.

The current market structure, while still developing, comprises five (5) individually-licensed operators and twelve (12) class-licensed operators that are typically small, local, and niche services providers that rely on the infrastructure of individually-licensed operators. These are:

- ATHKL (part of the Fiji-based ATH Group) a full services operator.
- Ocean Links (owned by China-based Acclinks)
 a new mobile network company that started operations in 2017.
- Tenicom (owned by the local Moel Trading Group) - offers Internet services through a Wi-Fi network.
- Speedcast (an Australia-based satellite equipment and services firm) - offers satellite services in Kiribati.
- WIS Inc (a US-based network design and build firm) - licensed to operate a satellite gateway predominantly for broadcast services.

2.3 Reliability, affordability, speed of Internet connection (broadband)

There is widespread agreement that costs and quality of Internet services have increased drastically in Kiribati in the last few years. Voice and text messaging (SMS) services have significantly improved and the price of local and international calls have fallen. International SMS services to many countries are now available. Prepaid services and offerings are mirrored from Fiji (text top-up, text marketing, etc.) while mobile money will be established in the near future. The concern now is that the rapidly rising market demand is beginning to outpace service providers' capacity. Moreover,

now that speed is higher and more attractive to users, consumers are concerned about high costs associated with data usage.

The most significant gap in the Government's ICT program and industry is in the availability of low-cost international connectivity that is resilient to circumstances in Kiribati. At present, all operators in Kiribati depend on high-cost satellite links. Since satellite capacity is sold as single direction links, more is required for it to be comparable to the submarine cable's (or microwave link's) capacity. Additionally, satellite capacity available in this sparsely populated region of the Pacific represents a fundamental constraint on satellite services as a solution for Kiribati.

Kiribati has fixed-broadband prices that are unaffordable for the majority of the population. This is partially due to the difficult geography for fixed-broadband network deployment. As a result, residential customers have to rely on mobile-broadband services for Internet connection.

Following the privatization of TSKL, mobile voice service prices were extensively restructured. One of the main benefits of this restructuring was that the per minute price for calls is now uniform throughout the country, whereas previously there were higher charges for calls across greater distances. There were also significant international call price reductions to popular destinations. For example, calls to Australia and New Zealand were reduced from AU\$ 2.80 to AU\$ 1 per minute.

With OceanLink's entry into the market as a competitor to ATHKL, prices of some mobile services have become more competitive. Since OceanLink declared its pricing table for data use, there has been some downward price movements for data services from both OceanLink and ATHKL. The power of competition to bring better prices to customers is now evident, as shown in Table V. The retail Internet prices are still significantly above those achievable with service provision based on a fiber-optic cable. Affordability of access to Internet is ranked as the top factor conducive to e-commerce development in Kiribati (Figure 5).



For comparison purposes, Vodafone Fiji's customers are getting two to three times as much data for their dollar compared to Kiribati rates (when the Fiji prices are converted to Australian dollar equivalents). Kiribati is certainly still in the early period of Internet and mobile services competition, but this comparison indicates that competition is a healthy stimulus and that there is room for Kiribati prices (particularly those

of ATH) to come down further. For broadband data, customers in Fiji can purchase two to three times as much data compared to those in Kiribati, indicating opportunities for substantial improvement. It is worth noting though that Fiji has access to the international submarine cable network, whereas this is not yet the case for Kiribati.

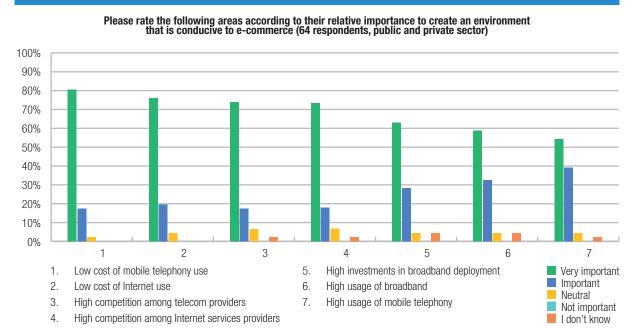
Table 5: Recent data plan prices for the two mobile operators

ATHKL					
PLAN	PRICE	DATA - (MB)	Bonus MB	VALID for	
Daily	\$2	200	100	1 day	
	\$4	600		as above	
Weekly	\$5	450	100	7 days	
	\$6	800	100	as above	
	\$7	1,000	300	as above	
Monthly	\$20	2,800		1 month	
	\$30	4,096		as above	

OCEAN LINK LTD PLAN **PRICE** VALID for DATA - (MB) Daily \$2 300 1 day \$3 450 as above Weekly \$5 750 7 days \$6 1,024 as above \$9 1,536 as above Monthly \$15 2,048 1 month 3,072 \$19 as above \$30 5,120 as above

Source: ATHKL and Ocean Link websites, accessed on April 22, 2019

Figure 5: ICT Infrastructure factors important for e-commerce



VS

Source: UNCTAD



2.4 Major infrastructure projects

Infrastructure connectivity is crucial for Kiribati's economic development. However, the country is confronted with relatively high cost of accessing international gateways, which constrains development and expansion of its exports base. This also adversely affects the integration of local MSMEs into global value chains.

Infrastructural development is also vital in linking the outer islands to markets and strengthening the development of tourism in Kiribati. Improving access to the outer islands is essential to enhancing development opportunities in these areas, thereby reducing inequalities. However, as mentioned in earlier sections of this assessment, current Internet connectivity relies primarily on satellite technology due to the lack of submarine cables that could improve this.

The cost of international bandwidth affects the availability of funds for investment in improving outer islands connectivity. The majority of the population in Kiribati resides on a few islands around the main island of Tarawa that hosts 73,000 individuals, representing more than 66 per cent of the total population. This is important because it implies that a submarine optical fibre service to Tarawa, combined with existing microwave links, can deliver high capacity ICT and broadband services to the majority of Kiribati's population. The reduction in international bandwidth costs could then also free up service provider funds to reach the more distant outer islands.

The Government, in partnership with the World Bank and the Asian Development Bank (ADB), intends to address this by connecting South Tarawa and Kiritimati to a fibre-optics submarine cable by 2022. This is necessary to meet demand in long-term traffic, to increase resilience of Internet infrastructure in the country, and to lessen the risk that communications will be interrupted by tropical storms or other severe weather events. Located on the equator, Kiribati rarely encounters cyclones but experiences several tropical storms and storm surges associated with 'king tides' (caused by moon and sun alignment) each year.

The decision of key stakeholders to opt for submarine cable connectivity was based on studies reviewing potential cable solutions and considering available satellite technology, such as O3B, as well as the

different routes and connection points for a submarine cable solution. O3B satellite solutions are workable for the near-term and part of the medium-term but cannot support capacity needs in the long-term. The tropical location of Kiribati and associated weather events also dictate that a more robust solution is required for network resilience and continuity of services, especially when disaster management is considered.

Once the submarine cable has been installed, connection in Tarawa will increase Internet penetration in the island to 67 per cent. Improved connectivity in the Line and Phoenix Islands will support Internet penetration for six per cent of the population in Kiritimati, thus contributing to about 72 per cent of the total Internet penetration by the second quarter of 2019. The Government intends to improve ICT connectivity in Butaritari, Abemama, and Tabiteuea North through fibre-based submarine cable, which can further be used to connect the neighbouring islands of Makin, Aranuka, Kuria, and Tabiteuea South. This additional connectivity is expected to increase Internet penetration to 87 per cent through submarine cable capacity. The percentage of Internet penetration is expected to increase to 47 per cent by 2021 and up to 100 per cent by 2036. While it is important to aim for 100 per cent connectivity, high operational and maintenance costs of submarine cables will pose a considerable challenge, considering the number of remote islands and corresponding costs in reaching

To support the above goals, two infrastructure projects have been approved:

 The ADB has approved a total of AU\$ 36.6 million in grants to help fund the delivery of low-cost, high quality Internet service in Kosrae in the Federated States of Micronesia (FSM); Tarawa and Kiritimati Island in Kiribati; and Nauru, which in total will benefit around 75,000 people. The assistance, comprised of a AU\$ 21.6 million grant to Kiribati, is part of its Improving Internet Connectivity for Micronesia Project. In Kiribati, the project will finance the (i) submarine cable connection between Kiritimati island to a proposed trans-Pacific cable system connecting Australia and Hawaii, and (ii) Nauru's share of the East Micronesia Cable (EMC) system. ADB, together with the World Bank, will co-finance the EMC system, which

will connect Pohnpei, FSM to the State of Kosrae, FSM as well as to Tarawa (Kiribati) and Nauru. The Kosrae and Tarawa segments of the EMC system will be financed by the World Bank. The project will complement the ongoing and existing cable systems connecting all the major islands in the North Pacific region. In addition, the Southern Cross Cable Company (SXC) announced in 2017 that a new cable system, the Southern Cross NEXT (NEXT), will pass within approximately 400 km of Kiritimati. This provides an opportunity for Kiritimati to connect via a spur and branching unit.

 The World Bank's "Pacific Regional Connectivity Program Phase 4: KI: Connectivity Project" is part of a larger regional program that is a strategic partnership between FSM, Nauru and Kiribati. The overall program is partitioned into International Development Association's (IDA) national and regional financing equivalent to US\$ 20 million will be allocated to the project to support Kiribati's participation in the EMC system, associated technical assistance (TA), and Project management support. The project seeks to address two (2) of Kiribati's key challenges to enhanced Internet connectivity: (1) its remote location, and (2) the high cost of connectivity that affects Kiribati's broader economic and social development. The project builds on the momentum generated by ongoing reforms in the ICT sector that have significantly improved access to basic telephony and data services over the last year. It will finance the deployment of an optical fibre submarine cable to connect Kiribati (Tarawa and nearby islands) to the HANTRU-1 submarine cable system that links to Guam in the United States, and onto global telecommunications networks.

KIRIBATI AND NAURU

IMPROVING INTERNET CONNECTIVITY FOR MICRONESIA PROJECT

Noticed Capital

ADB-Pranced

ADB-Pranced

County Groupings

Boundaries are not necessarily authoritative.

MARSHALL ISLANDS

MARSHALL ISLANDS

MARSHALL ISLANDS

FEDERATE S TATES

OF MICRONESIA

NAURU

NEW GUINEA

NAURU

Source: ADB

Box 3: Component of the Pacific Regional Connectivity Program Phase 4: KI: Connectivity Project

The project's main outcome: low-cost and high-quality Internet service in Tarawa by 2020 measured by (i) decline in the retail price of fixed Internet service for 2 Mbps connections by at least 20 per cent against 2017 levels, (ii) bandwidth availability increased at least 20 per cent against 2017 levels, and (iii) availability of service at 99 per cent, in accordance with industry standards.

Component 1. Submarine Cable System (US\$ 17.0 million)

- Subcomponent 1a: Submarine Cable System. The Project will finance construction of the EMC, a regional submarine cable system connecting Tarawa, in Kiribati, with Nauru as well as Kosrae and Pohnpei in the FSM.
- Subcomponent 1b: Cable Landing Station (CLS) and Ancillary Equipment (Subcomponent 1 (b)(i)). This entails construction of a CLS and ancillary works and facilities in Tarawa, including acquisition and installation of onshore equipment.

Component 2. Technical Assistance (TA) (US\$ 2.0 million)

- Subcomponent 2a: Provision of legal, financial, technical, and transactional assistance in connection with the drafting and negotiation of an arrangement among Kiribati, Nauru, and FSM, for the construction, ownership, and management of the EMC.
 Implementation will be through respective national cable operators of each country on the one hand, and the construction company and possibly other parties on the other hand.
- Subcomponent 2b: Provision of legal advisory assistance for the establishment of a Kiribati national cable service operator, with capacity and resources to operate the EMC and manage all national aspects of service provision in the Recipient's national territory.
- Subcomponent 2c: Provision of TA to the CCK in the areas of licensing, interconnection and access, and landing party agreements, including any implementing or ancillary regulatory instruments ensuring cost-based, non-discriminatory, and open access to the capacity.
- Subcomponent 2d: Provision of ICT policy and legal technical assistance in connection with electronic transactions (such as e-government and e-commerce) to facilitate citizens' access to and use of broadband services, including development of the legal and regulatory frameworks to support safe electronic transactions, cyber security, data protection, and confidentiality.

Component 3. Project Management and Administration (US\$ 1.0 million)

Component 3 supports a program of activities designed to strengthen the capacity of the Recipient.

- Component 3a Project Management and Administration: activities to strengthen capacity of the Recipient.
- Component 3b Program of Activities to strengthen the capacity of the project implementing entity to process project transactions, implementation, and management.

Source: World Bank

To manage the projects in Kiribati, the GoK has set up Bwebweriki Net Limited (BNL), a state-owned enterprise (SOE) that will be the implementing agency and wholesale provider of the submarine Internet bandwidth. Established as an SOE, BNL will manage the EMC cable as well as other state-owned assets. At the time of preparation of this report, it has yet to develop a business plan, governance rules and operating procedures.



3. TRADE LOGISTICS AND TRADE FACILITATION

The vast ocean that stretches across the inhabited areas (33 islands and four time-zones) presents considerable challenges for day-to-day life, governance, and business. Transportation infrastructure is one of the key areas of development sector assistance. Delivery of goods, including through postal services, is a serious challenge. Physical addressing is also an issue, with only 15 per cent of the population able to receive mail at home via postal services. These challenges are currently being addressed by the following initiatives and projects: (i) the bulk of donor-supported infrastructure projects is on transport - roads, ports, and aviation; (ii) the recent contract signed between Embraer and the Government of Kiribati for the provision of a maximum of four passenger jets - expected to augment the future capability of the flagship carrier, with important implications for tourism; and (iii) a pilot project between What3words and Kiribati Post has recently commenced testing an alternate low-cost, but reliable mechanism for facilitating reliable address identification for consumers. Regarding cross-border trade facilitation, the Trade Policy Framework 2018 recommends that "a mechanism be developed to ensure that all authorities and agencies involved in border and other import and export control points cooperate and coordinated in order to facilitate trade in the country". The forthcoming implementation of the ASYCUDA programme should support this, while a National Singe Window System could help enhance cooperation among agencies. This has important implications for future e-commerce development. Moving forward, logistics and accompanying infrastructure will remain a key area of the government's and donors' focus.

Trade facilitation is an important area requiring reform. Results of a recent trade facilitation survey shows that only one measure, 'Acceptance of paper or electronic copies of supporting documents required for import, export, or transit formalities' has been fully implemented. Several factors such as establishment of a Taxation Trade Facilitation Committee and a single customs window remain partially or fully pending. Ongoing improvements do exist in the business registration system and harmonization of customs procedures with policies to facilitate online application and e-transactions.

Kiribati is poised to benefit from these on-going initiatives. The operationalization of the UNCTAD Programme on customs automation, ASYCUDA, could accelerate adoption of e-commerce-friendly reforms at the border points. Kiribati is not a member of the WTO but is a member of the revised Kyoto Convention which is aligned to the TFA. The TPF also seeks to implements Customs procedures that are aligned to the TFA. Implementation of the Convention could be catalytic in introducing trade facilitation reforms, such as electronic payments, which support e-commerce development. In terms of postal services, Kiribati has benefited from the Universal Postal Union (UPU) Operational Readiness for E-commerce (ORE), which is currently being implemented (see 3.1 below).

3.1 Mode of delivery, last mile delivery

The fragmentation of the Kiribati Islands across a vast ocean and its isolation from international markets results in a high demand for shipping services and connectivity in Kiribati for domestic (i.e., inter-island) and international travel, distribution of cargoes, supplies, medicines, and access to education, among others, particularly in the more isolated islands, where shipping services are irregular at best. Air Kiribati provides an alternative solution for goods that can be delivered through airfreight, although this is still limited due to high costs.

For international trade, costs incurred by local exporting companies reduce their profitability and the amount they can pay local producers. Trade costs incurred by importers are ultimately borne by the consumer at the store. While Kiribati abolished import duties and adopted the VAT system, costs pertaining to the shipment and clearing of goods are for now considered prominent barriers to international trade.

Postal services present an alternative way of shipping goods domestically and internationally. Postal authorities around the world are involved in telecommunications, logistics, financial services, and other business areas. In Kiribati, postal operations include domestic and international postal services



receipt, transport and delivery of mail, specialized mailing services, operations of postal facilities, and sale of postal, philatelic, and mailing supplies.

The Kiribati Postal Services Division of MICTTD is the only national postal service provider in the country, providing universal postal services to the Kiribati community under the Postal Services Act (Cap 74 of Kiribati Law) and universal postal service commitments as a member State of the Universal Postal Union (UPU). The Division is involved in the receipt, transport, and delivery of domestic and international mail and packages, provision of domestic money orders (i.e., telegraphic money order services or TELMOs), and the production and sale of philatelic products.

Kiribati Post is steadily improving its e-commerce related delivery services and as per the strategies included in the MICTTD Strategic Plan 2016-2019, further improvements are expected in the short- and medium-term:

- Express Mail Services (EMS) network: Kiribati Post has recently joined this worldwide postal network provided by the UPU and available in more than 175 countries. The service is comparable to a courier service in its costs and operations; hence, it is competing with other courier service providers available in the Kiribati market. EMS could target international outward items, where customers require a higher level of service, including additional features such as tracking and faster delivery, generally to the customer's home and/or place of business.
- UPU Direct Mail: this direct mail and marketing module (also called advertising mail) involves a physical mail item delivered to an individual or household/business address, containing information aimed at eliciting a response from that individual. It is anticipated that Kiribati Post could derive revenues from this activity and plans to join this service are now underway.
- Home delivery services for international posts: this is one of the service features for international parcels set out in the Parcel Post Regulations that Kiribati Post needs to meet. Kiribati Post plans to provide home delivery services beginning in the urban areas, in its pilot phases. This service will extend to rural areas once the pilot phases in the urban areas are fully operational.

- Tarawa Business Express: Kiribati Post is expected to provide express courier (bike and motorbike) delivery services in the central business district of Tarawa, focused on providing a timely and efficient service.
- Fast Domestic Mail Butiroko Mail: Kiribati
 Post is expected to provide fast domestic
 mail service (branded as Butiroko) within the
 rural districts of Kiribati, focusing on making
 timely service delivery available to Government
 Departments, individuals, and SMEs.
- Development of an Addressing System and Postcode: At the national level, the aim of implementing the addressing system and postcode is to enhance rationalization of postal sorting, transmission and delivery activities. Implementation of this system will likewise reduce problems due to incorrect addressing or the omission of essential address elements. It is anticipated that this will decrease postal costs, improve quality of services, and increase handling capacity.

3.2 Trade Facilitation Performance

For many years, the limited flows of international trade have limited the incentives for modernization and trade facilitation. In recent years, increased cooperation with the UN Economic and Social Commission for Asia and the Pacific (UNESCAP), UN Conference on Trade and Development (UNCTAD), the World Bank, and the International Monetary Fund (IMF) has triggered renewed interest in improving cross-border trade procedures.

The lead Government agency involved in the clearance process is the Kiribati Customs Administration and Enforcement (KCAE), a division under the Ministry of Justice (MOJ). While KCAE is regarded as the key organization involved in trade facilitation, individual agencies also have their respective regulatory environments and border agencies have their own systems and processes to enforce their regulatory requirements. The Trade Policy Framework 2018 seeks to "develop a mechanism to ensure that all authorities and agencies involved in border and other import and export control points cooperate and coordinate in order to facilitate trade", a mechanism which could be best achieved by a single window system. To date, Kiribati does not have a single window system for trade clearance and trade facilitation. This lack of a single window system continues to be an impediment to trade, as it creates unnecessary red tape and duplication of processes.

The key logistical challenges are related to inefficiencies in trade facilitation due to the lack of integrated and efficient trade clearance processes, procedures, and systems, which inevitably increases the country's trade costs. Since Kiribati is a party to regional free trade agreements (FTAs), such as the Pacific Agreement on Closer Economic Relations Plus (PACER Plus) and the Pacific Island Countries Trade Agreement (PICTA), it needs to adjust its domestic policy to effectively implement its obligations under the customs procedures related to these agreements. Though not a member of the WTO Trade Facilitation

Agreement (TFA), Kiribati's policy objective is to align its customs procedures with the WTO TFA.

The Government's overall policy is to implement measures aimed at reducing the complexity and costs of the trade transaction process, streamlining trade procedures to reduce the risks and transaction costs, and enhancing the efficiency, transparency, and predictability of international trade as measured in time and money. Trade facilitation efforts should focus on availability of information (establishing a national customs website) and formalities (simplification and harmonization of documents as well as automation and streamlining of procedures). The process of introducing regulations should be made more consultative and transparent.

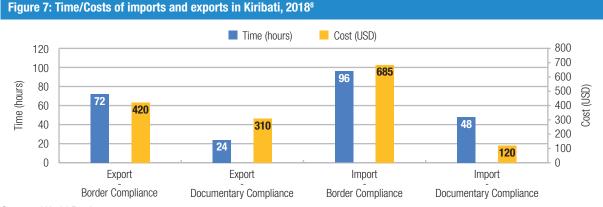
Box 4: The Kiribati National Online Trade and Investment Portal

As part of the Trade and Transparency Component of the regional Pacific Agreement on Closer Economic Relations (PACER) Plus and with financial support from Australia and New Zealand, an online national trade and investment portal has been set up in cooperation with the Government of Kiribati and UNCTAD. This freely accessible online platform aims to make import and export procedures, trade-related legislation, and tariffs more transparent and easier to understand for the national and global business communities. It gives a step-by-step, practical guidance to assist MSMEs, women entrepreneurs, foreign investors, as well as other importers/exporters in their trade operations. In particular, the online national trade portal provides clear guidance on institutions, opening hours, contact persons, requirements, results, underlying legislation and regulations, costs, and time indications of specific trade and investment procedures (e.g., on the importation of animal products).

The portal also provides information on all required actions along the full import/export life cycle - from starting a business, obtaining a business license at the city council, obtaining required permits/licenses up to the Customs and Quarantine clearance, and final release of goods at the port or airport. Further, the national trade and investment portal will also be connected through a regional trade portal (https://pacific.tradeportal.org/?lng=en), which will be launched in the short-term.

Kiribati's Trade and Investment Portal https://kiribati.tradeportal.org include additional import and export procedures to/from Tarawa as well as to/from Kiritimati/Christmas Islands, another important national entry point. During the National Validation Workshop in October 2019 it has been highlighted to include additional investment procedures (e.g., work and resident visas, requirements for foreign investors, etc.) to make full use of the portal as platform for information sharing with national and international stakeholders. Further, it is envisaged to cover Trade in Services (e.g., Tourism sector) and provide an additional translated version of the trade portal in Gilbertese language.

Source: UNCTAD



Boing Business Report, Kiribati, 2019

Source: World Bank



Table 6: Time/Costs to import and export in Kiribati, compared with best regional and OECD average

Indicator	Kiribati	East Asia & Pacific	OECD high income	Best Regulatory Performance
Time to export: Border compliance (hours)	72	54.7	12.5	1 (19 Economies)
Cost to export: Border compliance (USD)	420	382.2	139.1	0 (19 Economies)
Time to export: Documentary compliance (hours)	24	57.6	2.4	1 (26 Economies)
Cost to export: Documenary compliance (USD)	310	109.4	35.2	0 (20 Economies)
Time to import: Border compliance (hours)	96	69.2	8.5	0 (25 Economies)
Cost to import: Border compliance (USD)	685	415.8	100.2	0 (28 Economies)
Time to import: Documentary compliance (hours)	48	57.0	3.4	1 (30 Economies)
Cost to import: Documentary compliance (USD)	120	109.5	24.9	0 (30 Economies)

Source: World Bank, Doing Business Report, 2019

Box 5: UNESCAP Framework Agreement on Facilitation of Cross-Border Paperless Trade in Asia and the Pacific

The Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific, a UN treaty deposited with the Secretary General of the United Nations in New York, aims at accelerating the implementation of digital trade facilitation measures for trade and development. Designed as an inclusive instrument accessible to countries at all levels of development to develop their capacity to engage in cross-border paperless trade, the final treaty text was adopted by the Economic and Social Commission for Asia and the Pacific in May 2016.

Trade cost reductions expected from full implementation of cross-border paperless trade are estimated at 10-30% of existing transactions costs, depending on the current state of paperless trade development in the participating countries. Significant benefits in terms of trade compliance are also expected.

To help countries benchmark and reduce the time and cost of trading across border, the UN Regional Commissions jointly conduct the UN Global Survey on Digital and Sustainable Trade Facilitation. The Survey currently covers 128 economies around the globe, and 53 measures related to the WTO's Trade Facilitation Agreement (TFA), as well as emerging regional and global initiatives on paperless trade or e-trade, such as the recent Framework Agreement on Facilitation of Cross-Border Paperless Trade in Asia and the Pacific (FA-CPT).

The Survey leads to the production of a regional report which aim at providing insightful information for policy makers to harness trade as a key means of implementation of the 2030 Agenda for Sustainable Development. The Survey is conducted in collaboration with growing number of global and regional partners, since 2015 and every two years. The results presented below for Kiribati are extracted from the 2019 survey report for Asia Pacific prepared by UNESCAP (https://untfsurvey.org/region?id=ESCAP).

The implementation of the Cross-border Paperless Trade agreement in Kiribati will reduce costs and increase efficiency. The establishment of relevant regulations and recognized certification authority will provide legal and institutional foundation for invigorating cross-border paperless trade and ensure future actual exchange of specific trade-related data and documents across borders in order to achieve a fully integrated paperless transformation.

Source: UN ESCAP Website (https://www.unescap.org/resources/framework-agreement-facilitation-cross-border-paperless-trade-asia-and-pacific).



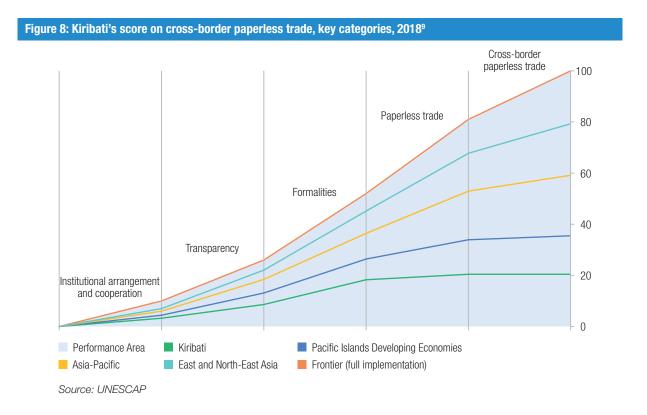
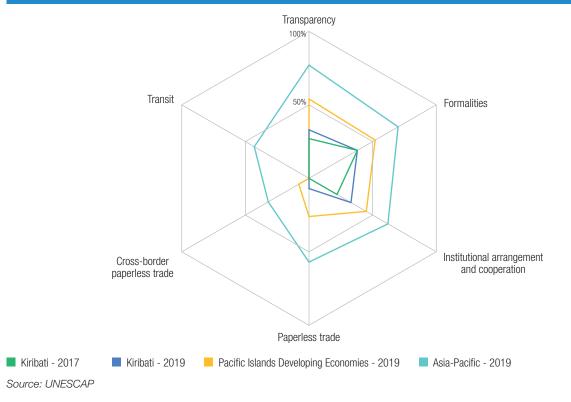


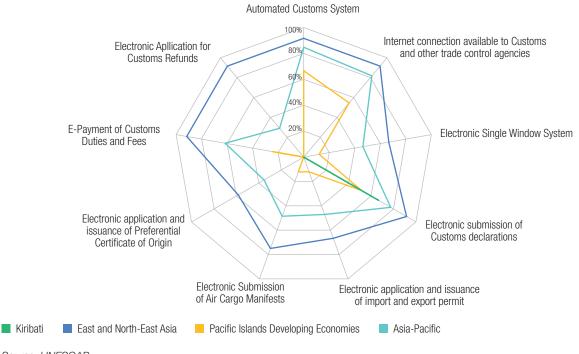
Figure 9: Kiribati's score on cross-border paperless trade, evolution 2017-2019, key categories



The figures 8, 9, 10 and 11 are extracted from the UN Survey on Cross Border Trade, 2019. Data for Asia and the Pacific are collected, compiled and published by UNESCAP, every two year and can be found here: https://unnext.unescap.org/content/un-global-survey-digital-and-sustainable-trade-facilitation-2019

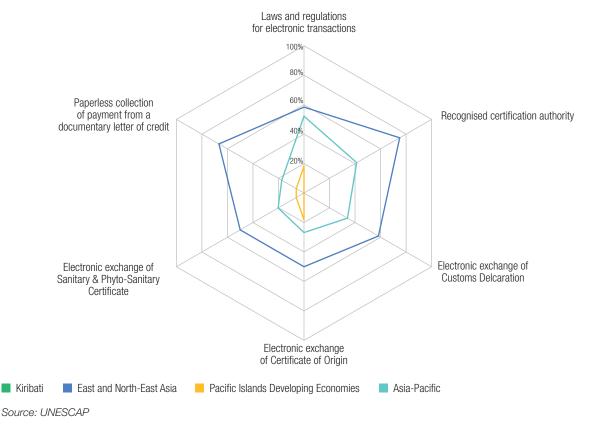


Figure 10: Kiribati's score on paperless trade, evolution 2017-2019, key measures



Source: UNESCAP

Figure 11: Kiribati's score on cross-border paperless trade, evolution 2017-2019, key measures



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4. PAYMENT SOLUTIONS

The lack of e-payment and cashless solutions is the main bottleneck identified by the private sector hampering the adoption of e-commerce in Kiribati. The lack of payment and e-payment solutions limits growth, especially for the services industry, including transport and tourism (See Figure 12). This is characterized by the absence of electronic payments solutions in the main commercial bank or the two telecom operators.

Figure 12: Factors constraining investments in e-commerce If you have not yet invested in e-commerce solutions, how important have been the following factors in your decision to invest to e-commerce solutions? (18 respondents, private sector only) 100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% 2 3 5 6 4 Lack of e-commerce skills in Kiribati Lack of e-payment and cashless solutions 4. Very important Neutral Unsupportive legal and regulatory framework for Lack of ICT infrastructure 5. Not very important e-commerce (Internet access, power supply) Not important at all Lack of dedicated logistics solutions Lack of finance to develop online services for e-commerce

for e-Source: UNCTAD

4.1 Banking penetration

ANZ Bank is the only commercial bank in Kiribati that complies with the regulations of the Reserve Bank of Australia. ATHKL, on the other hand, is the only digital financial services (DFS) provider, which offers its M-PAiSA mobile money solution as a Value-Added Service (VAS) regulated by the CCK. There is no existing Act for financial services that regulate both providers. It is important to note that the Development Bank of Kiribati (DBK), credit unions, cooperatives, and money lenders are regulated by Acts governing their respective operations and to which these financing institutions and mechanisms must comply.

Financial services in the country are characterized mainly by deposit and withdrawal services. Only ANZ Bank offers a savings product while all other providers largely provide loan services. The DBK, credit unions,

and Village Banks rely primarily on the Government for funding. This business model presents a major challenge to enabling these providers to recover bad loans, raise adequate capital to lend, and it ultimately increases dependence on the Government for funding support. Currently, the majority of financial service providers are already unable to meet demand for credit from their customers.

Current mobile money services only offer cash-in and cash-out services. A better understanding of and agreements on the commercial banking terms before bill payment to the Public Utilities Board can be made available online is needed. The responsiveness of the current suite of financial services to meet the needs of the customers and to introduce the improvements necessary to the existing products to drive adoption and usage is also required.

Access points to financial services are largely set up in South Tarawa and the Christmas Islands. In the outer islands, island councils are used as access points for collections and disbursements, such as copra subsidy payments, tax collection, and TELMOs. Approximately 50,000 individuals in Kiribati (i-Kiribati) have accounts, largely registered with M-PAiSA, followed by ANZ bank accounts, and the rest offered by DBK. Activities remain centered around basic financial services (deposits and withdrawals), though these remain low in volume. This highlights a need for financial services providers to adopt a more customer-focused product development and invest in consumer education.

As telecommunication infrastructure and services improve and spread across Kiribati, remote access to financial services will create economic benefits for rural users. ATH's mobile money service, M-PAiSA, is available to customers with 3G-enabled mobile phones. Merchants with Internet access are able to use the ANZ Bank's electronic funds transfer at point of sale (EFTPOS) service and full-service Internet banking. A supporting mobile app will also be made available for customers with mobile Internet access. The extension of mobile networks, especially with 3G or 4G capabilities, and improvement of the quality of and access to the Internet, will facilitate making these

services available to the entire population of Kiribati. Despite this development, and as shown in Figure 13 below, massive efforts are still needed to enhance the regulatory framework that will enable a widespread adoption of digital payment solutions and overall build the users' confidence.

4.2 Digital payments

Like most LDCs in the world, cash is still the main mode of payment in Kiribati. This is particularly challenging, especially in ensuring liquidity in the outer islands. Cash (in AU\$) is transported regularly in boats to the outer islands, entailing significant risks. The international debit card system was introduced in 2016 but is seldom used due to constraints in meeting the banks' required deposit level as well as consumer fears of cybercrime associated with the use of debit and credit cards. Credit cards, managed by international companies that are not present in Kiribati are not used in Kiribati, with the exception of a few corporate cards issued for high-level Government officials. Automated Teller Machines (ATM) are available in Betio, Bairiki and Bikenibeu, all on Tarawa atoll. Mobile money services have not yet been launched in Kiribati, though the M-PAiSA platform is ready for deployment, following ATH Kiribati Ltd.'s takeover of TKSL. This might be

Figure 13: Main regulations needed for the adoption of electronic payment solutions Please rate the following areas according to their relative importance to create an environment that is conducive to e-commerce (64 respondents, public and private sector) 100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% Awareness of international good practices in the Very important 1. Regulations that protect consumers online area of electronic / mobile payments Important 2. Regulations that allow for electronic payments Neutral Regulations that allow for mobile payments 6. Understanding of anti-money laundering and Not important Interoperability of different online and mobile counter-terrorism financing legislation I don't know payment modes Educational initiatives on security and trust building

Source: UNCTAD



explained by the lack of a sizeable market base for these products.

Kiribati is one of the beneficiary countries of UPU's recently launched Financial Inclusion Technical Assistance Facility (FITAF) aimed at advancing financial inclusion by providing accessible DFS through the postal network. In the past decade, Kiribati Post has been the leader in international money transfers. However, in 2012, the operation and management of this fund transfer facility ceased to be within Kiribati Post's purview and has since been taken up by private operators. An estimated 10,000 or more I-Kiribati reside overseas, and international remittances make up a significant portion of the financial flows. International money transfer has been a major source of revenue for many postal administrations. Kiribati Post has received some proposals from suppliers of computer software for international money transfers. The Post will continue and may require support to explore the feasibility of international money transfers that will be in the best interest of the enterprise.

Although close linkages with the Australian financial system has lent stability to Kiribati's national financial system, the absence of a central bank or national currency in the country may also add challenges in terms of risk exposure in the future. AU\$ is legal tender and interest rates are effectively set by the Reserve Bank of Australia. The ANZ Bank is a majority shareholder of ANZ Kiribati, the only bank in the country that provides retail banking services. With limited innovations and a lack of competition, there is little incentive for ANZ Kiribati to change the status quo.

4.3 Financial and digital financial literacy

Formally, less than 15 per cent of the population is financially included ¹⁰. This segment of the population can access financial services at over 100 points across Kiribati. These access points are mainly in South Tarawa and Christmas (Kiritimati) Island. The rest of the outer islands rely heavily on the island councils as financial access points to make payments and act as collection centres as well. Payments made at the island council offices include tax collections, business licenses, copra subsidy payments, social welfare payments (elderly fund), among others. TELMO transactions offered by the Kiribati Post Office are the

major money transfer service between South Tarawa and the outer islands, conducting an average of 100 transactions per day.

In the absence of a regulator and regulatory framework, financial services, especially banking and digital financial services, are currently offered with the oversight of the Ministry of Finance and Economic Development (MFED). ANZ Kiribati complies with the Reserve Bank of Australia regulation, while Amalgamated Telecom Holdings (Kiribati) Limited (ATHKL), the only digital financial services (DFS) provider, offers their own financial services. However, there is no financial services Act under which both providers are regulated. It is important to note, that the DBK, credit unions, cooperatives, and money lenders all have Acts, to which they must comply.

It is also worth mentioning that, while the MFED should provide oversight of the financial sector, it lacks the necessary structure or skills needed to effectively regulate it. Thus, the lack of a regulatory framework in the sector is considered to be one of the important barriers to its development and also to an extent, to consumer welfare. Current efforts of development partners supporting Kiribati are aimed at improving financial inclusion through postal network related DFS services. The absence of a central bank also presents some regulatory challenges, which are likely to be more pronounced in the future when more complex and interlinked payment services will emerge.



¹⁰ Financial Sector Gap Analysis – Kiribati, Pacific Financial Inclusion Programme (PFIP), 2018

5. LEGAL AND REGULATORY FRAMEWORKS

The e-commerce legal framework of a country plays an important role in enabling and facilitating e-commerce transactions within the country and across its borders. Such legislation creates the much-needed sense of certainty that traditional business transactions can be carried out electronically – a requirement for the development and strengthening of a modern digital economy.

Kiribati lacks the legislative framework to facilitate the development of e-commerce. No laws recognize the validity of electronic documents and transactions. Similarly, no laws govern electronic contracting, which is a necessary underpinning for electronic payments and electronic funds transfer transactions. Thus, cybercrimes are yet to be concretely established as a criminal offence. Finally, despite growing consumer concerns, laws on online consumer protection, financial sector regulatory framework and data privacy have not been drafted yet.

5.1 Adoption of e-commerce legislation

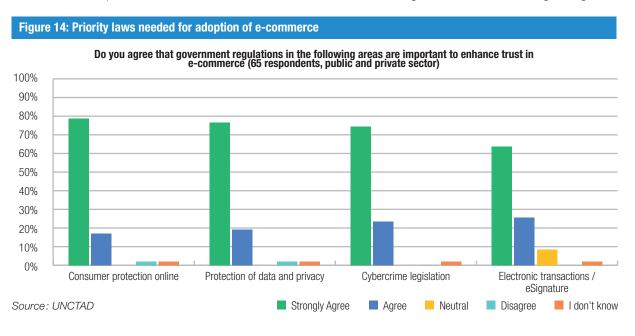
While the TPF recognizes the role of e-commerce in eliminating barriers between marketplaces, Kiribati lacks the legislative framework to facilitate the effective use of e-commerce. No laws recognize the validity of electronic documents and transactions and similarly, no laws have been enacted in Kiribati governing electronic contracting to support electronic payments and electronic funds transfers.

The policy environment also lacks the legislative framework establishing and/or governing encryption standards and applications. The core principles of data privacy and integrity are not statutorily provided for within the domestic legislative system. A framework that establishes electronic crimes as an offence is also absent. Other e-commerce regime challenges include the lack of a comprehensive framework for consumer

protection regarding electronic transactions and the absence of a bank regulator.

The four key laws recommended by UNCTAD for a robust e-commerce ecosystem commerce or e-transaction law, consumer protection law, data privacy, and cybercrime – to sustain robust development of e-commerce are not in place. However, it should be noted that considerable progress has been made in the past three years. For example, the National ICT Policy and Investment Policy Framework contains provisions in preparation for a data protection and privacy law, electronic transaction bill, review of evidence act, and the establishment of Internet banking.

In response to these many challenges, Kiribati has been implementing certain measures to enhance the e-commerce legal framework. A strong recognition



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Source: UNCTAD

exists about the need to update the legal and regulatory framework, and to increase confidence in and security of buying and selling online.

Further developments with respect to e-transactions and overall e-commerce legal framework will require improved Internet/ICT connectivity and enhanced complementary regulatory frameworks to facilitate e-commerce.

5.2 Recent and on-going legal reforms

The legal framework for enabling an e-commerce and e-government environments requires provisions regarding e-transactions and contracts negotiated at a distance, geared at establishing a minimum level of protection for consumers. Provisions covering the formation and the performance of contracts need to be re-examined in an electronic environment. This is mainly because existing laws may not be directly applicable to electronic transactions and are therefore likely to generate uncertainties regarding the validity and enforceability of electronic contracts. For example, written documents may require handwritten signatures. Rules of evidence need also adjustment when relating to electronic documents.

The Communications Act of 2013, amended in 2017, contains a number of measures that supported the first set of proposed policy reforms, including

restructuring the Regulator's Office, privatization, and opening markets to competition. Some parts of this legislation were short-term measures in the absence of other needed support legislation. Such measures included rules for fair competition, cyber-crimes (including pornography), privacy, and copyright. The only privacy rules in the existing legislation cover protection of information on customers' usage of the telecommunication systems. More measures are needed to protect citizens' rights when their personal data is stored in private and/or government databases. It was understood at the time that the stop-gap provisions would eventually be replaced with their own specific Acts, as is generally the practice in other countries. So far, none of these replacement statutes have been developed. And the need for other laws, such as an Electronic Transactions Act and the more comprehensive data privacy provisions, has become more apparent.

Another significant issue that must also be addressed is the security of e-transactions. Parties to e-transactions need to feel secure that the sender and receiver in the electronic transactions are those whom they purport to be and that the electronic record can be authenticated and not forged in transit. Provisions regarding secure technologies, such as digital signatures and digital certificates, will be needed to help address some of these challenges.

Box 6: The Electronic Transaction Act of 2019 (still in draft form at time of publication of this report)

The global nature of the Internet and e-commerce means that harmonization is essential to the development of electronic transactions and the establishment of a predictable legal environment. In their reform efforts, countries worldwide have been giving due consideration to the United Nations Commission on International Trade Law (UNCITRAL) legislative texts since the 1990s. Many developing countries have enacted laws to this end since 2000. Over the past fourteen years, provisions in the UNCITRAL model law have been expanded, refined, and proven to be fit for all legal systems, including common law. In the Pacific, there is no other legislative model for e-transactions and e-signature but UNCITRAL's. This means that no country, including Kiribati, needs to "reinvent the wheel" but instead, can look at the provisions that have already been developed and refined in different jurisdictions and have withstood the test of time.

Kiribati started to draft an e-transaction bill in 2017 and recently sought support from UNCITRAL to make the draft law compatible with international standards. The bill is based on several national laws designed to enact UNCITRAL texts, including the Electronic Transactions Act of Singapore, the Electronic Transactions Act 2002 of New Zealand, and the Electronic Transaction Act 2015 of St. Vincent and the Grenadines (ITU HIPCAR Model Law on Electronic Commerce / Electronic Transactions: https://caricom.org/documents/16583-e-transactions_mpg.pdf).

The UNCITRAL Secretariat has recommended several provisions that would ensure that the Bill adheres to best international practices (i.e., United Nations Convention on the Use of Electronic Communications in International Contracts (ECC), Model Law on Electronic Transferable Records). Similarly, drafting suggestions were made so that the Bill would be sufficient to implement provisions of the ECC in Kiribati law. It may be desirable for Kiribati to also consider formal adoption of the ECC, which is already in force in Fiji and has been enacted domestically in Australia, among other jurisdictions.

Source: UNCTAD, with inputs from UNCITRAL



The new National ICT Policy 2019 includes key policy areas for upgrading the e-commerce legal and regulatory framework, which seeks to support the following objectives:

1. Establish a comprehensive cyber law

The establishment of a comprehensive cyber law can help provide legal safeguards for users of electronic transactions and databases and ensure that Kiribati does not become a haven for cyber-criminals. It is envisaged to cover crimes such as computer hacking and the use of the Internet for fraud and theft.

2. Establish a data protection and privacy law

This will give citizens the right to know the following information: who holds their personal data; what data are held; the purposes for which data are held; and the right to see data upon request, and to have that data corrected should there be any errors. This will also protect and enable citizens to assert their rights regarding information and photos that are posted online without their consent.

3. Establish an electronic transactions law

This is necessary to give legal recognition to electronic transactions, signatures and contracts

4. Review of the Evidence Act

The Evidence Act will require amendments to support the new Electronic Transactions Law by enabling electronic records to be admissible in court proceedings.

On the trade side, the TPF 2017-2027, under its "Breaking Down Barriers to Private Sector Development in Kiribati" agenda, proposed two (2) sets of reforms that, if implemented, could generate an uptake of e-business solutions by the private sector. These are: (1) Company law and business registration reform, and (2) Strengthening competition regime and consumer protection.

On the investment side, the Investment Policy Framework 2019 includes the following policy measures:

- Enact a cyber-crime legislation to equip law enforcement agencies with the necessary legal and forensic tools to tackle cybercrime and computer related crime.
- Review the Evidence Act to create provisions specifying the actions, which amount to search, and which amount to seizure of electronic data, to ensure consistency with the larger body of the law of evidence and international best practices.
- Develop and implement a Data Protection and Privacy Policy and law in accordance with international best practice.
- Enact and implement a personal Property Security Legislation to facilitate access to finance for SMEs with movable assets.
- Review and revise the Company Ordinance and Business Names Act in order to simplify business registration system especially for SMEs.

Financial regulations

Kiribati has no financial laws and few banking-sector laws. One banking law is the Banking (Special Provisions) Act of 1984, which provides for the transfer of assets and liabilities from Westpac to the proposed new Bank of Kiribati, Ltd. It further established the Bank of Kiribati, Ltd. to carry out banking activities and to maintain support for existing businesses in the name of and by the new Bank. Legislative instruments that govern and regulate development banking are also in place. These include the Development Bank Act, subsequent amendments, and the Village Banks Act. In Kiribati, the legal framework for financial institutions is therefore directed by policies. These policies govern the financial services sector, which in turn dictates the administrative and operational guidelines.

Table 7: Improving Company Business registration system targets in TPF 2017-2027

Improving Company Business Registration System	Actions	Period	Output	Source of Verification	Lead agency	Donor support
Company Law and Business registration Reform	Review companies Ordinance 1979 and the Registration of Business Names Act 1988	Short-term	New Business Names and Company Act enacted	MCIC reports, PACLI	OAG, MCIC	ADB, GoK
	Consider the implementation of an online business registration system, bearing in mind the development of ICTs	Short-term	Online registry established	MCIC website	MCIC	ADB, GoK
	Establish a single window business registration system	Medium-term	Single window registration system in place	MCIC reports	MCIC	ADB, GoK
	Develop an e-commerce Policy and e-transaction legislative framework to support e-filling based on e-commerce, e-evidence	Medium-term	E-transactions enacted	MCIC reports	MCIC	ADB, EIF, GoK
			E-commerce Policy endorsed by Cabinet	MCIC reports	MCIC	UNCTAD

Source: TPF 2017-2027, MCIC

 Table 8: Competition and Consumer Protection targets in TPF 2017-2027

Competition and Consumer Protection	Actions	Period	Output	Source of Verification	Lead agency	Donor support
Strengthening Competition Regime and Consumer Protection	Review prince control regime with a view to ensuring consistency with trade policy objectives while meeting intended public policy objectives	Short-term	Number of price- controlled products in line with the Trade Policy objectives	MCIC records	MCIC	GoK
	Implement policy measures to strengthen the implementation and monitoring of Price Order	Short-term	Reduced number of consumer complaints	MCIC records	MCIC	GoK
	Consider adoption of a comprehensive competition policy framework	Short-term	Competition assessment undertaken and report endorsed by Cabinet	MCIC website	MCIC	GoK
	Review and strengthen consumer protection enforcement legislative framework in line with the National Quality Policy (2017-2023)	Short-term	New consumer protection Act enacted	MCIC website	OAG	GoK
	Implement consumer protection and awareness programmes for effective implementation of legislation	Short-term	Consumer perception survey reports	MCIC website	MCIC	GoK

Source: TPF 2017-2027, MCIC



6. E-COMMERCE SKILLS DEVELOPMENT

The KV20 provides special impetus for educational reform in support of the tourism and fishery sectors, among others. Notably, it mentions the importance of technical and vocational education and training (TVET) in the context of broad economic development. There are four (4) tertiary education providers in the country. Although a severe skills mismatch does not exist, there is weak private sector activity, especially in the ICT sector, rather than strong coordination between policymakers, skills providers, and the private sector. An important weakness in the skills curriculum is the lack of entrepreneurship training - in the form of courses or incubation opportunities. It is important to ensure that as private sector activity increases in volume and sophistication, a feedback mechanism exists between these stakeholders' groups. ICT education initiatives may have an important role to play in meeting the skills requirements across the islands. The KV20, TPF, and MCICTTD's Ministry Strategic Plan (MSP) all highlight the importance of ICT literacy gaps, noting that 'entrepreneurs also lack skills and know-how to grow their businesses, including how they can branch out into new products and services.

6.1 Identification of skills gaps

Overall, skills development relating to the digital economy in general and e-commerce in particular is still weak. A prerequisite to resolving this would be to improve private sector development activity, which would inform policymakers and skills-providers on areas of reform.

The surveys conducted to prepare this assessment all confirmed the dire lack of information as well as opportunities to get ICT-literate as a first step towards becoming eTrade ready. A persistent low awareness of the digital economy, e-commerce, and e-government among the public, private, and non-state actors can be observed. Similarly, MSMEs, with the exception of a few guesthouses and lodges, are faced with low levels of digitalization. Businesses have experienced a critical lack of information dissemination on major initiatives that could boost digital adoption: investments in a submarine cable, e-government initiatives, minimized dangers of doing business online, increased online consumer protection, and online intellectual property.

As a consequence, or perhaps as a cause, no readily available and adapted curricula presently exists in schools, tertiary institutions, education bodies, universities, or with business associations. There is need to integrate ICT and ecommerce in Education curriculum at all levels. In the medium-term, the submarine cable is expected to increase bandwidth to facilitate learning on ICT and ecommerce learning within the in-country institutions and ICT centres in the outer-islands.

Prior to the arrival of the cable and the introduction of e-government initiative, investment in e-commerce skills and knowledge development is urgent. A general consensus prevails among stakeholders surveyed during this assessment that government officials should be the first beneficiaries of training and mentoring on e-commerce (see Figure 15), taking advantage of the e-government initiative sponsored by the World Bank in Kiribati.

6.2 Strategies and policies supporting ICT skills development

The GoK has consistently addressed the ICT and e-skills businesses in the different policies and strategies referred to in this report. It is therefore hoped that concurrent implementation of these different policies and strategies will accelerate adoption of ICT tools and boost ICT-related knowledge of all stakeholders.

- The Kiribati Development Plan (KDP) 2016-2019 outcome aimed to reach the following target: "an education and training system where quality, inclusive, equitable, technical, and professional development opportunities are enhanced." The corresponding approach is to implement a strategy to integrate emerging developments in ICT into the school curricula.
- The MICTTD Ministry Strategic Plan for Information, Communication, Transport and Tourism Development (MSP: 2016 - 2019) sets out the direction of the Ministry in terms of ICT for the next four (4) years, in support of the Kiribati Development Plan (KDP: 2016-2019).



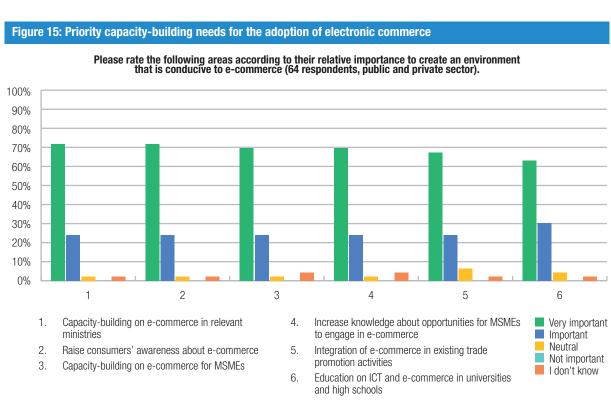
The ICT Policy and Development Division of MICTTD is responsible for advising the government on ICT-related matters, coordinating the development of national ICT-related policies such as the National ICT Policy, coordinating ICT projects throughout Kiribati, and promoting the use of ICT in the country. In 2018, the Division led the development of the eGovernment Roadmap, which sets a high-level plan to adopt eGovernment in Kiribati. The ICT Division sets different objectives to enhance the adoption of ICT tools in Kiribati, which will be achieved by the new National ICT Policy 2019 and the next MICTTD MSP 2020 to 2023.

6.3 Support to ICT and development of e-commerce skills

Apart from the initiatives and projects supported by the World Bank as presented in Chapters 1 and 2, Kiribati's development partners have not prioritized provision of support to ICT and e-commerce skills development. However, with the advent of PACER Plus, the landing of the submarine cable, and the development of sector-specific strategies to increase the use of ICT; more support is expected.

In the meantime, several private sector initiatives such as those led by ANZ Kiribati (see MoneyMinded, ANZ's financial literacy program discussed in Chapter 7) or the South Pacific Tourism Organization (SPTO) show promise. The SPTO, through the Kiribati National Tourism Office(KNTO), facilitated capacity-building in e-marketing to enhance online marketing for local accommodations providers in Kiribati. With the assistance of the PIFS Pacific Trade Invest (PTI) and a local agent working for hotel listing solutions, twelve (12) accommodations in South Tarawa, several in Kiritimati, and one in the Southern Gilbert Group can be accessible by visitors abroad through direct online booking¹¹.

As a result, promotion of niche tourism products and tours are readily made available through the KNTO website, social media networks, trade shows, and familiarization visits.



Source: UNCTAD



¹¹ http://spto.org/resources/ta10-e-marketing-support-for-sme

Table 9: MSP 2016-2019 Objectives and Strategies for ICT-skills development

Objective 1: Capacity development and up-skilling of work force

Strategies

- Encourage all leaders and policymakers to attend all ICT awareness activities and workshops: to raise awareness of all leaders and policymakers on the use of ICT as a tool for sustainable economic development.
- Coordinate local and regional opportunities to provide regular and on-going ICT trainings to government IT staff: building capacity of ICT officials to meet the demand for skilled workforce.
- Designing and implementing in-country technical training and awareness programs in conjunction with higher education institutions: promote ICT as a career to help in the sector's development.

Objective 9: Kiribati Tourism Marketing and Promotions

Strategies

- Improvement of the Kiribati tourism website: www.kiribatitourism.gov.ki to develop a new version compatible with mobile phones and/or tablets and easy to update and maintain (i.e., user-friendly).
- Encourage local MSME tourism operators to participate in the South Pacific Tourism Organization (SPTO)/ Kiribati
 National Tourism Office (KNTO) joint initiative program on e-marketing to develop individual websites for accommodation
 and tour activity operators. Promoting this e-marketing program requires the conduct of awareness-raising workshops
 and e-marketing website training workshops. Websites (accommodations and tour activities) of most tourism operators
 in Kiribati are developed and well-maintained; operators receive more online reservations through the websites, giving
 the tourism sector in Kiribati a boost.

Objective 11: To increase and maximize the utilization of ICT for sustainable development

Strategies

- Increase support to private sector development.
- Encourage the use of ICT as a tool to create more jobs and sustain workforce development.
- Improved MICTTD website to accommodate and enhance sustainable development.
- Develop public-private strategies to use ICT to enhance the productivity of local businesses.
- Encourage e-money for business transaction online.
- Encourage the private sector to improve high-quality ICT products and services offered to the public.

Source: MSP 2016-2019, MICTTD



7. ACCESS TO FINANCING

The financial services sector in Kiribati, along with similar sectors in other small island states, is primarily concerned with the facilitation of transactions resulting from the exchange of goods and services, savings mobilization, allocation of capital funds, and other similar activities. The scope of activities associated with lending for business development remains very narrow. Options to access financing are limited to the services offered by ANZ Kiribati, DBK, the Kiribati Provident Fund, and the loan scheme of the Ministry of Women, Youth, Sports and Social Affairs. While other money lending options are also available, they remain unregulated by the financial sector.

Nevertheless, opportunities to improve access to financing, attract remittances with cheaper transaction costs, and make productive use of these remittances, such as peer-to-peer lending¹² for digitization are available. Most stakeholders interviewed admitted their lack of understanding and identified lack of dedicated access to financing instruments as key

constraints to e-commerce development (see Figure 16). But as with ICT skills, opportunities to enhance digital skills, digital financial literacy and availability of information on non-bank funding sources are very limited. No business incubator or venture capitalist are currently active in Kiribati.

Figure 16: Most important awareness-raising needs for improving access to financing for SMEs Please score the following areas according to their relative importance to create an environment that is conducive to e-commerce (63 respondents, public and private sector). 100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% 2 6 7 3 4 8 Availability of Access to Finance instruments for Awareness of bank officers on the challenges of Very important Important Neutral Awareness of investment opportunities in the Awareness of different types and blends of financing 6. Not important e-commerce ecosystem Identification of barriers to financing of e-commerce 7. I don't know Favorable investment climate for e-commerce Identification of potential sources of financing and Experience sharing on access to financing for e-commerce

Source: UNCTAD

¹² Peer-to-peer lending, also abbreviated as P2P lending, is the practice of lending money to individuals or businesses through online services that match lenders with borrowers. Peer-to-peer lending companies often offer their services online.



7.1 Financing by banks and MFIs

SMEs are typically constrained in accessing credit because they are under-collateralized, possess limited credit history, and often lack the requisite expertise to develop strong proposals and produce sophisticated financial statements. Information asymmetry also exists between the firm, as the potential borrower, and the financial institution as the potential lender; collectively, the lender attributes a high risk of default to the borrower. As a result, there is a partial or negative response to credit demand.

Recognizing the importance for MSMEs to access finance, the Government of Kiribati has undertaken strategic actions to provide assistance and promote greater equity and wealth distribution. This is both relevant and necessary given that most members of the private sector, which primarily represent MSMEs, note access to finance as one of the principal challenges that confront them. This perspective is consistent with the findings of the 2018 World Bank Doing Business Report, with Kiribati ranking 170th. The government developed a concept paper, which identifies some of the main factors that contribute to low access to finance and proposes mechanisms to address them. One proposed primary measures for adoption is the establishment of a Small Business Development Fund¹³:

- To provide a holistic policy framework towards addressing access to finance related constraints;
- To create new business startups and improved domestic trade through improved access to finance;
- To assist in providing equipment, including farming tools, to support agricultural development;
- To improve domestic investment targeting value-added initiatives:
- To support the growth of domestic value chain linkages; and
- To support the growth of new SMEs in the productive sector to eventually have the capacity to secure further funding from mainstream financial institutions like ANZ or other regional financing programmes.

The concept and model of the Small Business Development Fund for Kiribati was developed with due consideration to the lessons learnt from Fiji's and Samoa's efforts to address constraints to access to finance. Specific to Samoa, a two-pronged approach was developed to address access to finance: (1) the establishment of a Private Sector Support Facility, and (2) the development of an SME Credit Guarantee scheme. A similar systematic and holistic approach is proposed in developing the Small Business Development Fund, which will primarily focus on improving access to finance particularly for SMEs, youth, women and other vulnerable groups.

The challenges faced by SMEs in getting access to finance was also recognized as a key policy constraint in the Investment Policy Framework (IPF). The IPF indicates that the integration of the youth and women into investment-oriented initiatives is hampered by their limited access to finance among SMEs, which does not favor financial inclusion. Inadequate access to finance is also attributed to the lack of legislation on personal property security that will allow individuals and entities to pledge movable personal property to secure finance and for the lenders to secure their interest in the personal property. Such legislation will ensure that SMEs and MSMEs have better access to credit.

The GoK recognizes the need to implement strategies that will foster financial inclusion to connect people and businesses from the informal to the formal sector. It also acknowledges the need to strengthen microfinancing arrangements for MSMEs.

Policy measures proposed in the IPF aim to14:

- Develop and implement a financial sector inclusion strategy to foster financial inclusion programme in Kiribati.
- Implement a "Grow Local" Incentives
 Programme through grants for SMEs and loan
 schemes targeting new start-up businesses,
 especially women and youth, in sectors
 supporting the development priorities of KV20.
- Enact and implement a personal Property Security Legislation to facilitate access to finance for SMEs with movable assets.

¹⁴ The NIPF implementation plan only indicates whether actions are of a short-term nature –up to three Years, medium-term nature, e.g., up to six Years or long-term nature, e.g., up to 10 Years



¹³ See Financial Sector Gap Analysis, Kiribati, Pacific Financial Inclusion Programme

- Review and revise the Company Ordinance and Business Names Acts to simplify the business registration system, especially for SMEs.
- Implement capacity-building programmes on proposal writing, business plan development, project management, bookkeeping, and accounting.
- Improve SMEs' access to market and business information.

7.2 Support by incubators, venture capitalists, and donors

No other alternative forms of access to finance are available to SMEs and MSMEs interested in digitalization and moving their businesses from offline to online. ANZ and the United Nations Pacific Financial Inclusion Programme (PFIP) started a financial literacy programme to offer new financial services and reach more i-Kiribati.

In order to implement financial inclusion programme in line with the policy measures in the TPF, the government with technical assistance from Pacific Financial Inclusion Programme and MFAT ,NZ under took financial sector gap analysis .The report recommended the need to Development of Financial Inclusion Strategy; Strengthen Regulatory Framework; Expand Financial Services & Support to Providers; Implement Financial Literacy Efforts and Digitization Of Payments. The recommendations have since been endorsed by Cabinet in October 2019.

Box 7: ANZ and PFIF's MoneyMinded Initiative

MoneyMinded, ANZ's financial literacy program initiated in 2002, was established to expand to more than 5,000 i-Kiribati living in rural islands, thanks to a new partnership between ANZ and the United Nations Pacific Financial Inclusion Programme (PFIP).

PFIP is a Pacific-wide programme that has helped over two million Pacific Islanders gain access to financial services and financial education. It has achieved these results through funding innovation with financial services and delivery channels, support of policy and regulatory initiatives, and consumers' empowerment. It is jointly administered by the UN Capital Development Fund (UNCDF) and the United Nations Development Programme (UNDP) and receives funding from the Australian Government, the European Union, and the New Zealand Government.

Financial competency is an important life skill that PFIP has been working towards improving across the Pacific. Financial literacy is an important component for financial service users because it increases their ability to interact positively with the money economy in a way that prepares them to utilize digital finance solutions.

MoneyMinded aims to build financial knowledge and confidence of individuals to make informed decisions on money management. The program covers important topics such as planning for the future, needs and wants, budgeting, making money last until next pay day, assertiveness, and action planning. ANZ Kiribati is able to expand the programme's reach in the community through funding from the New Zealand Ministry of Foreign Affairs and Trade (MFAT) and technical assistance from PFIP.

The partnership with Kiribati, starting in 2019, will be undertaken in two phases: (1) expansion of the MoneyMinded programme; and (2) introduction of digital financial services. Through this partnership, ANZ is also in discussions with the Government of Kiribati to include MoneyMinded in the school curriculum.

The partnership is a response to a request from the Ministry of Commerce, Industry and Cooperatives (MCIC). It also includes a Financial Sector Gap Analysis that would enable future services and training to be better tailored, particularly for the benefit of low-income households.

Source: Interview with ANZ Kiribati CEO, PFIP website.



CONCLUSION

The nation of Kiribati is at a crossroads: improved and affordable connectivity is a necessity rather than an option for its future economic and human development growth prospects, given that the level of geographic isolation and population dispersion is even more pronounced than other Pacific Island Nations surveyed by UNCTAD. Cognizant of this, the government has sped up the development response through enhanced mainstreaming of ICT and e-commerce in development plans, implementing a robust telecommunications sector reform, and reaching out to investors and development partners. Among other achievements, this resulted in increased voice/Internet (3G/4G) coverage, faster (?) Internet speeds, value-added services, and increased awareness of the power of the Internet in breaking isolation from markets.

With the major investment in a submarine cable scheduled to boost Internet connectivity and affordability, the Government of Kiribati has signaled the clear development path ahead. While ICT infrastructure projects are underway to improve Internet and mobile connectivity in the outer Islands, the Government needs to put in place the right policies, laws, regulations, and to create incentives that increase confidence for businesses and investors to make a productive use of the extra bandwidth and for consumers to go online.

While the application of ICT and e-commerce solutions cannot directly address all of Kiribati's structural and infrastructural challenges related to trade, they can reduce the administrative barriers that contribute to costs, delays, and unreliability. This is particularly important for administrative and operational activities that relate to investment market entry and economic activities. E-commerce represents a key dimension of ICT that investors can utilize in advancing the development of their business activities and the private sector in which they operate. Opportunities exist in the

tourism sector particularly, but also in the promotion of exports of fish products and coconut-based products.

The long-term viability of the investment in submarine cable for Kiribati hinges on better domestic and international economic integration. As with many Pacific island economies, Kiribati lacks economies of scale as well as institutional capacities and faces high transaction costs. Improved connectivity, access to the international market, and an environment that is based on lower communications costs will certainly contribute to national economic development. These factors will also enhance regional integration with its neighbors in the Pacific and with the global economy. Kiribati must learn from the experience of neighboring countries (Marshall Islands, Solomon, Vanuatu) that have enjoyed submarine cable connectivity for the past few years. It must ensure that a strong business scenario is available and discussed with main stakeholders, before the cable landing. Discussions should focus on both the management of the cable and how to ensure the investment will translate into gains, in particular for the massive digitalization efforts led by the Government. In parallel, new private sector-led investment is needed to improve access to ICT services in Kiribati. This, in turn, depends on public funding for international connectivity with advantageous terms to ensure that capital investments for this sector serve the national needs.

Yet, the improvement in connectivity and affordability of the Internet alone will not be sufficient for ICT to remedy Kiribati's economic development. Equipping the government with the right skills and knowledge-set will help promote adoption of ICT tools by MSMEs and citizens. Upgrading the legal and regulatory frameworks using globally approved model laws and conventions will increase credibility of the reform agenda. The eTrade Readiness action matrix presented in this report proposes steps towards increasing ICT and e-commerce uptake in Kiribati and making sure benefits of digitalization are shared among all.

THE WAY FORWARD: ACTION MATRIX

E-COMMERCE READINESS ASSESSMENT AND STRATEGY FORMULATION				
Indicative action	Expected outputs	Priority Level ¹⁵	Potential support by	
Facilitate a sustained multi-stakeholder dialogue regarding national ICT and e-commerce issues by developing a single sector coordination mechanism based on individual agencies' and SOE's mandates on ICT and e-commerce.	All relevant agencies contribute to the formulation and implementation of the country's e-commerce strategy and ensure that their contributions/mandate on e-commerce do not overlap with other agencies' efforts.	High	MICTTD, MCIC, KCCI	
Formulate a national policy for e-commerce in line with the TPF as part of the current efforts to take advantage of ICT sector growth and needs. Ensure that formulation is inclusive and paired with awareness-raising activities and education on e-commerce.	A vision for e-commerce deployment in Kiribati is adopted by all segments of population, in line with the KV20, National ICT Policy, and the TPF.	High	MCIC, KCCI, UNCTAD MCITTD	
Develop a blueprint/strategy for e-government in the country as a way to accelerate preparation for the use of the submarine cable.	Government takes the lead in promoting the adoption of ICT tools by providing G2B or G2C applications, to be enhanced and upgraded with the fibre-optic cable.	High	MICTTD, MFED	
Effectively implement the revised National ICT Policy (2019) and initiate the development of a national ICT Strategy, which should include the broader digital economy and linked crossfunctional themes, including entrepreneurship and skills development.	Public and development partner investments are coordinated and respond to more urgent needs of the government and the private sector, in line with contemporary technologies. Development projects incorporate digital-transformation and e-commerce aspects, where pertinent.	High	MICTTD, MCIC, KCCI, WB, ITU, ADB	
Increase the capacity of relevant non-State Actors like KCCl and KClS to undertake training and awareness to promote e-commerce adoption and use of ICT services to the business community and consumers.	A single, easily accessible reference point for every question or needs related to digitization and e-commerce for the business community is established, possibly at KCCl or a business association.	Medium	KCCI, MCIC, MFED, KCIS	
Mainstream e-commerce in sector policies by accelerating the adoption of ICT for the priority export sectors (fishing, coconut, and tourism) through the establishment of dedicated and updated websites, establishment of e-centres on the outer Islands, and support to e-marketing of export products and services.	Increased awareness and visibility of Kiribati export products in international markets; realtime information on quantity, quality, prices, and tracking are available.	Medium	MICTTD, MFED, MCIC KCCI	

¹⁵ high priority level: to be implemented within 12 months, medium priority level: to be implemented between 12 and 24 months and low priority level: to be implemented with 36 months



ICT INFRASTRUCTURE AND SERVICES			
Indicative action	Expected outputs	Priority Level	Potential support by
Broaden and accelerate discussions on the operationalization of BNL (SOE) for the operation of the cable, as well as on the benefits of the submarine cable investments for GoK, businesses, and citizens.	Increased awareness of the investments made by the government and the proposed PPP. Businesses are able to exert influence on the business case for the cable and pricing structure of the access to broadband for the private sector using the extra bandwidth when available.	High	MICTTD, MFED, WB, ADB, Non-state actors
Ensure that more segments of the population in Kiritimati benefit from the ADB investment in a submarine cable by sustaining the pace of reform and investments in a nationwide mobile, voice, broadband access and reliability, as a prerequisite for growth in the digital economy.	ICT use by businesses in Kiritimati, especially in the tourism sector, which contributes to the implementation of the government's development policy for Kiritimati.	Medium	MICTTD, MFED, MISE, Kiritimati Authorities, Telecom Operators, ADB
Initiate e-government/digital applications as pilot cases.	Adoption of ICT and e-commerce by businesses and citizens is accelerated, by having government to business (G2B) and government to consumer (G2C) applications supporting the move from offline to online.	High	MICTTD, MFED, MCIC
Increase demand-side awareness of digital issues for the general public, businesses, ministries, and public sector.	All stakeholders are better informed of the opportunities, challenges, and risks associated with ICT, especially in a Small Island Developing States (SIDS) context.	Medium	MICTTD, MFED, MCIC
Support the development of value-added services, including data centres, cloud-based services: PBX-hosted services, Disaster Recovery, e-Education, e-Health, and	Lower cost of transactions for government, better/faster access to much-needed services in a SIDS context (remoteness, power supply, distance to markets and to outer islands).	Low	MICTTD, Telecom Operators
e-empowerment.	Incentivized regional players to operate in Kiribati and contribute to the development of the ICT and e-commerce sectors.		

TRADE LOGISTICS AND TRADE FACILITATION					
Indicative action	Expected outputs	Priority Level	Potential support by:		
Implement customs procedures that are aligned with the Trade Facilitation Agreement (TFA); implement policy measures to support the effective implementation of the country's obligations related to customs procedures in regional trade agreements.	Increased cooperation and coordination between customs and other agencies involved in import and export control, to facilitate trade, avoid duplication, and eliminate redundant procedures.	High	Kiribati Customs, MFED, UNCTAD, MCIC and agencies involved in import and export control		
Further improve connectivity through infrastructure investment in air transportation and shipping services. Provide Air Kiribati the means to offer new routes and services by mobilizing donorfunded investment in ICT infrastructure.	Improved reliability of services, reduced delays in shipment, and diversified services options in e-commerce/parcel deliveries for South Tarawa and the outer islands.	Medium	MICTTD, MCIC, Air Kiribati		



TRADE LOGISTICS AND TRADE FACILITATION				
Indicative action	Expected outputs	Priority Level	Potential support by:	
Accelerate readiness of Kiribati officials in cross-border, paperless trade through the country's participation in the UNESCAP Framework Agreement on Facilitation of Cross-Border Paperless Trade in Asia and the Pacific.	Increased support to relevant agencies to accelerate implementation of cross-border paperless trade measures.	Medium	Kiribati Customs, MFED, UNESCAP, UNCTAD	
Consider accession to UNESCAP Framework Agreement on Facilitation of Cross-Border Paperless Trade in Asia and the Pacific including undertaking preparatory work to inform accession process.	Integrate emerging cross-border paperless trade considerations and best practices early in the development of national single window and other paperless trade systems to ensure they are interoperable and enabled for (future) cross-border data exchange.	High	UNESCAP	
Develop a mechanism through Single Window system to ensure that all authorities and agencies involved in border and other import and export control points cooperate and coordinate in order to facilitate trade.	Reduced trade transaction time and costs, potentially boosting trade competitiveness; improved levels of compliance by traders to regulatory requirements in international trade; and more direct engagement of SMEs in international trade and cross-border e-commerce.	Medium	World Bank, MOJ (Customs)	
Develop Kiribati Post website to establish a track and trace system and to enable valued customers to track their items.	E-commerce related products, with corresponding service prices and delivery times, are available to the public and businesses.	Medium	MICTTD, Kiribati Post, UPU	
Develop an open national physical address system to homes, institutions and businesses to facilitate trade and logistical support for a modern postal system. This could also take the form of better communication on the What3Words mapping service Kiribati is benefiting from.	Increased and improved "findability" of addresses in South Tarawa that lead to more suitable delivery services being developed, including that for e-commerce parcel drop-off and pick-up.	Medium	MICTTD, Kiribati Post, UPU	

PAYMENT SOLUTIONS					
Indicative action	Expected outputs	Priority Level	Potential support by:		
Support integration of a payment system in websites of hotels, lodges, and guesthouses to enable them to accept reservations from overseas.	Increased revenue streams for local accommodation providers and increased visibility of lodging options for visitors.	High	MFED, KCCI, ANZ Kiribati, DBK		
In collaboration with banks, launch a countrywide awareness building campaign to make citizens and businesses aware of the benefits of using ATMs, debit cards, mobile money, online banking options, as well as the risks.	Increased awareness of the benefits and risks of using mobile money that will lead to an increase in trust and confidence in products provided by DBK and ANZ Kiribati. Businesses are encouraged to use e-money for business transactions online.	High	MFED, KCCI, ANZ Kiribati, DBK		
Promote enabling regulatory environments by encouraging cross-regulatory cooperation on payment towards preparing for a Payment Systems Act.	Interoperability of electronic payment platforms between providers is possible and generates savings for users.	Medium	MFED, ANZ Kiribati, DBK		



PAYMENT SOLUTIONS				
Indicative action	Expected outputs	Priority Level	Potential support by:	
Implement an e-Payment system to allow for Electronic Funds Transfers (EFT), with particular attention to facilitation of electronic payments both to and by Government.	Mobile money and similar services are available throughout Kiribati.	Medium	MFED, ANZ Kiribati, DBK	
Digitization of payments: support government to conduct a payments flow diagnosis to map all government transactions and develop a roadmap for the shift from cash to digital payments.	Operational efficiencies and service delivery are improved, and there is accrued trust and confidence in electronic payments.	Medium	MFED, ANZ Kiribati, DBK	
Ensure main Kiribati businesses with international operations (tourism, transportation companies) have access to affordable electronic means of payment.	International firms based in Kiribati and Kiribati firms serving international businesses reduce costs associated with sending and receiving funds.	Medium	MFED, MCIC KCCI, ANZ Kiribati, DBK	
Provide convenient and affordable channels to support and encourage remittances transfer through the Internet (e.g., developing an app to reduce the costs of remittances/international money transfers).	Reduced costs of transactions for remittances; this will free funds for domestic investments by MSMEs. Reduced risks associated with transferring money.	Low	MFED, KCCI, ANZ Kiribati, DBK	
Explore the feasibility of alternative international money transfer through the Post Office to increase competition.	Reduced costs of transactions and additional means of payment, remittances and secure payment for overseas transactions for purchases made online.	Low	MICTTD (Post Office), MFED	

LEGAL AND REGULATORY FRAMEWORK				
Indicative action	Expected outputs	Priority Level	Potential support by:	
Finalize and enact electronic translation legislation to facilitate e-transactions for e-commerce, including e-signature and the development of an enabling legal framework for e-commerce development.	Validity and equivalence of electronic documents and transactions (including government forms) and rules of electronic contracting are asserted by law.	High	MOJ, OAG, MICTTD, World Bank, UNCTAD, UNCITRAL	
Develop and enact a Data Protection and Privacy Act in accordance with best international practices, ensuring the public's right of access to government records and allowing the government to contract with the private sector for the creation and maintenance of government information systems.	Protective mechanisms to ensure data privacy are implemented. There is smooth integration and sharing of data systems within and across administrations. The electronic filing of documents with public authorities is made easier, and the government and public agencies are able to provide reliable electronic records.	High	MOJ, OAG, MICTTD, World Bank, UNCTAD	
Enhance the regulatory framework for e-commerce through the development of a Cybercrime Act, a review of the Evidence Act and a Consumer Protection Act that incorporates e-commerce and ensure criminal laws cover "electronic crimes" and other crimes that affect electronic government data or networks.	Increased trust by citizens and businesses to transact online and to digitalize their operations.	High	MOJ, OAG, MICTTD, World Bank, UNCTAD UNODC.	



LEGAL AND REGULATORY FRAMEWORK				
Indicative action	Expected outputs	Priority Level	Potential support by:	
Consider adoption of Electronic Communications Convention (ECC) to support the implementation of the Electronic Transactions Bill.	Enhanced harmonization with international best practices, reducing the costs and time for legal drafting.	High	MCIC, UNCITRAL	
Educate consumers on electronic commerce and the corresponding legal framework (once in place) to promote e-commerce entrepreneurship, awareness of online consumer rights and cybercrime (and how to avoid/prevent it).	Increased trust by consumers and businesses to transact online and to digitalize their operations.	Medium	MOJ, OAG, MICTTD, KCCI, AMAK, World Bank, UNCTAD, UNCITRAL	

E-COMMERCE SKILLS DEVELOPMENT				
Indicative action	Expected outputs	Priority Level	Potential support by:	
Assess current e-commerce and ICT skill gaps to accelerate the development of ICT related curricula in line with private sector needs.	Government- and donor-supported programmes are targeted to those individuals needing to enhance their skills, making them more employable by ICT-enabled firms and organizations.	High	MICTTD, MFED, MCIC, KCCI, ITC	
Organize training series about online security, Internet for businesses, including hands- on training for small businesses on how to move online, step-by-step guide to setting up e-commerce business, payment solutions, and how to be listed on major e-commerce platforms.	Businesses are better equipped and prepared to move their operations online, once the submarine cable makes available extra bandwidth for businesses.	High	MICTTD, MFED, MCIC, KCCI, ITC, KCIS	
Disseminate information about the Kiribati trade portal developed by UNCTAD, prepare next phase of the portal to include options for more import/export procedures and online registration.	Increased access for businesses and potential investors to do business in Kiribati, especially for foreign trade and FDI.	High	MICTTD, MFED, MCIC, KCCI	
Incorporate basic digital skills into the national curriculum at all levels.	Better preparation of future citizens, consumers and users about the benefits and pitfalls of the digital economy, better inclusion in professional life.	Medium	MICTTD, MFED, MoE	

ACCESS TO FINANCING				
Indicative action	Expected outputs	Priority Level	Potential support by:	
Encourage a suite of simple financial services, including digital financial services, that suit the needs of the excluded population including the SMEs.	Reduced share of the population and MSMEs currently excluded from the formal banking system, with a view to eventually move them to the formal sector.	High	MFED, ANK Kiribati, KCCI	



ACCESS TO FINANCING				
Indicative action	Expected outputs	Priority Level	Potential support by:	
Support Financial Services Providers to review their existing business strategies and current business models to ensure commercial viability and gain a better understanding of the financial needs of their target customers.	Product offering of existing services providers is expanded to facilitate "Access to Finance" that can be used to unlock MSME and private sector expansion.	High	MFED, ANK Kiribati, KCCI	
They should also increase and improve communication with consumers and strengthen efforts to improve agent network management.				
Strengthen supervision of public financial institutions (DBK, and the KPF). Steps should be taken to ensure that the DBK remains adequately capitalized, including a full assessment of its current capital buffers against the legacy of nonperforming loans.	Improved capacity of public institutions to support economic development through credits, with improved risk monitoring and liquidity management ability.	Medium	MFED, ANK Kiribati, KCCI	
Development of a National Financial Inclusion Strategy as a critical first step in the journey to strengthen the financial sector in Kiribati. The strategy should focus on the entire market development approach to ensure systematic and sustainable development of the market.	The unbanked population is reduced and have access to new products accessible through mobile phones.	Medium	MFED, PFIP, UNDCF ANK Kiribati, KCCI	
Study the feasibility of developing a Financial Service Act, establish a proper banking regulator; develop and implement a Banking Act.	Enhanced financial system developed in accordance with international banking standards and in adherence with the Financial Action Task Force (FATF) and Organization for Economic Cooperation and Development (OECD) guidelines.	Medium	MFED, WMA, IMF PFTAC, UNDCF, DBK, KCCI	
Explore the feasibility of establishing a credit loan guarantee scheme which could address some of the issues concerning collateral and access to finance for small businesses.	Increased capacity of businesses to contract loans.	Medium	MFED, DBK, ANZ Bank Kiribati, KCCI	
Put in place proper business training courses for interested entrepreneurs as a precondition for securing loans from the banks. Implement capacity-building programmes on proposal writing, business plan development, project management, bookkeeping, and accounting.	Capacity of businesses to contract loans, with quality applications, is increased; Access to market and business information to MSMEs improved.	Medium	KCCI, MCIC, MFED	



Annex I: Kiribati country profile on etradeforall.org



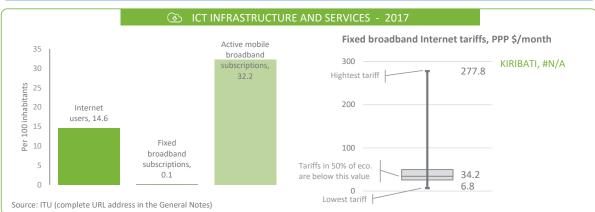


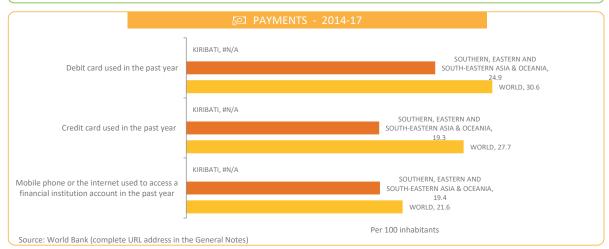
COUNTRY PROFILE: KIRIBATI

Contact: info@etradeforall.org





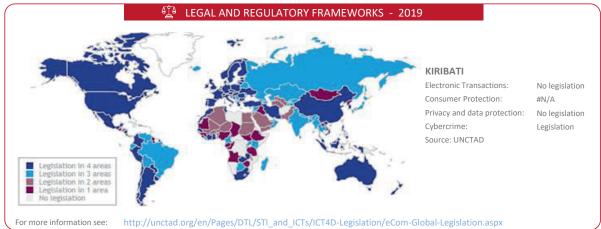


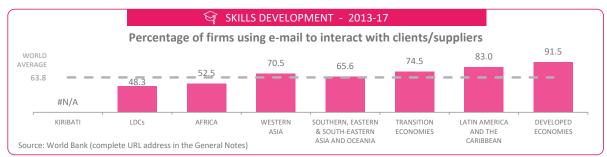




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Annex III: List of UNCTAD Rapid eTrade Readiness Assessments of LDCs

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