



Note to Task Teams: The following sections are system generated and can only be edited online in the Portal.

Combined Project Information Documents / Integrated Safeguards Datasheet (PID/ISDS)

Appraisal Stage | Date Prepared/Updated: 08-Mar-2017 | Report No: PIDISDSA19632



BASIC INFORMATION

A. Basic Project Data

Country Kiribati	Project ID P159632	Project Name P4: Pacific Regional Connectivity Program Phase 4: KI: Connectivity Project	Parent Project ID (if any)
Region EAST ASIA AND PACIFIC	Estimated Appraisal Date 22-Mar-2017	Estimated Board Date 31-May-2017	Practice Area (Lead) Transport & ICT
Lending Instrument Investment Project Financing	Borrower(s) Ministry of Finance and Economic Development	Implementing Agency Ministry of Information, Communications, Transport and Tourism Development	

Proposed Development Objective(s)

The Project development objective is to reduce the cost and increase the availability of Internet services in Kiribati.

Components

- 1 (a) Submarine Cable System
- 1 (a) Landing Stations and Ancillary Equipment
- 2 Technical Assistance
- 3 Project Management

Financing (in USD Million)

Financing Source	Amount
Asian Development Bank	16.00
IDA Grant	20.00
Total Project Cost	36.00

Environmental Assessment Category

B - Partial Assessment

Decision

The review did authorize the preparation to continue



Other Decision (as needed)

B. Introduction and Context

Country Context

1. Kiribati is one of the most remote and geographically dispersed countries in the world, consisting of 33 coral atolls spread over approximately 3.5 million square kilometers of ocean and up to 3,700 km between the farthest islands. It is located at the Equator and the International Date Line. The population of about 109,693 (2015 census, preliminary results) lives on 22 coral atolls and a single volcanic island. Its population is growing at a long-term rate of 1.5 percent p.a. (1.25 percent over the last five years). The total land area is less than 800 square kilometers, comprising almost half of that is Kiritimati (Christmas) Island, at the eastern extremity of the country (and about 800 km west of Hawaii). The capital, South Tarawa, is the most populated island with approximately 56,000 people (2015 census, preliminary results). The populations of the Outer Islands vary from around 20 (Kanton) to 6,400 (North Tarawa and Kiritimati Islands).
2. The economy of Kiribati is fragile but the Government has enacted and continues to enact reforms that will strengthen the economy. Historically, in one form or another, Kiribati gets a large portion of its income from abroad. Examples include fishing licenses, development assistance, worker remittances, and niche tourism. Given Kiribati's limited domestic production ability, it must import nearly all of its essential foodstuffs and manufactured items (imports were 12 times exports in 2014); Kiribati depends on these external sources of income for financing. In common with other small island atoll states, it faces obstacles posed by remoteness, lack of scale, and vulnerability to external shocks and environmental stress. Internal and external remoteness and weakness in the business climate have kept Kiribati's private sector small. Private sector contributors to the Kiribati National Provident Fund (KNPF), however, indicate a steady increase in private sector operations (private sector KNPF data indicates private sector employment has risen from about 22 percent in 2009 to about 30 percent of total employment in 2015 and probably related to the Government reform program).
3. Kiribati's economy is based largely on natural resources (fishing licenses) and transfers, remittances from expatriate workers and donor grants, and is dominated by a large public sector. In recent years Kiribati has experienced modest levels of economic growth. GDP growth was 4 percent in 2015, boosted by large, externally-funded infrastructure Projects and is projected at around 2.5 percent for 2016 (IMF, 2016). Fishing license fees and remittances are sensitive to fluctuations, depending on fish migratory patterns and the global economy respectively. Notwithstanding its limited resources, Kiribati has largely had a solid record of financial stability since its independence in 1979. Governments have adopted a cautious approach to domestic spending combined with a deliberate policy of capitalizing its sovereign wealth fund, the Revenue Equalisation Reserve Fund, used to supplement recurrent revenues and smooth volatility in other income sources.
4. The long-term viability of Kiribati hinges on better domestic and, particularly, international economic integration. Like many Pacific island economies, Kiribati lacks economies of scale, faces high transaction costs, and has limited institutional capacity. Improved connectivity with access to the



international market and environment based on lower communications costs will contribute both to national economic development and to regional coordination, and to the Kiribati's integration in the Pacific and internationally. Broadband Internet offers improved connectivity, lowers transaction costs for businesses, government, and households, creates new economic opportunities, and increases options for service delivery.

Sectoral and Institutional Context

5. **Sector Overview.** Given its geography and dispersed population, provision of affordable and reliable access to ICT services is challenging in Kiribati. The Government is currently implementing a comprehensive program to increase access to ICT infrastructure and services by liberalizing the ICT sector and enabling the introduction of competition. Key achievements include:
- a. Introduction of a new telecommunications policy, completed in 2012, and new telecommunications legislation, enacted in 2013. The Ministry of Information, Communications, Transport and Tourism Development (MICTTD) has begun a review of the 2012 policy identifying and detailing new policy initiatives for the ICT sector, including e-Government options.
 - b. Reform of the monopoly incumbent, Telecom Services Kiribati Ltd (TSKL) through a sale of most of its assets, (completed 26 May 2015), and, through a competitive process, licensing of two new mobile operators as well as several other Internet and gateway providers. 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 growing the local market. ATHKL is expanding coverage of services to some Outer Islands, and proposes further extensions. The second mobile services licensee, Ocean Links, is in the process of establishing its network.
 - c. Establishment of a sector regulator, the Communications Commission of Kiribati (CCK), and preparation of a new regulatory framework, including: 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.
 - d. Confirmation of commitment to Outer Islands' connectivity as a national high priority. Recognizing the dispersed population and great difficulty in providing ICT services on a commercial basis, the Government is working to address this through a public-private partnership (PPP); services under the PPP are anticipated in 2017.
6. Kiribati has benefited from these developments to date in several ways. The introduction of ATHKL as a larger operator with access to greater finance, technological, and managerial expertise has resulted in a more extensive network 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.
7. Cost and quality of services have improved. Voice and text messaging (SMS) service is now much improved and the price of local and international calls has fallen (though call rates now include VAT) and there has been some rebalancing of tariffs reflecting ATHKL's parent market. International



SMS is now available to many countries. Prepaid services and offerings are mirrored from Fiji (text top-up, text marketing etc.) with mobile money to be established in the near future. Mobile Internet is much improved, with user speeds four to five times higher, and no reported congestion. However, now that speeds are higher and more attractive to users, users are concerned about high costs and the associated “bill shock” for high usage of data.

8. The remaining significant gap in the Government’s ICT program, and industry need, is for much improved international connectivity that is lower cost and more resilient to circumstances of Kiribati. At present any operator in Kiribati depends on high cost satellite links. As satellite capacity is sold as single direction links while submarine cable and microwave connections are sold as bi-directional links, more satellite capacity is required for equivalence to the submarine cable (or microwave link) capacity. This further adds to the disadvantage of countries dependent on satellite services.

9. Another consideration is that the majority of the population of Kiribati resides on a few islands around the main island of Tarawa. This group of islands includes North and South Tarawa, Marakei, Abaiang and Maiana and hosts 73,000 persons, representing more than 66 percent of the total population. The significance of this geographic grouping is that a submarine optical fiber service to Tarawa is, with simple (and in the main, existing) microwave links able to deliver high capacity ICT and broadband services to this large portion of Kiribati’s population.

10. **Market structure and regulatory framework.** The 2013 Telecommunications legislation that opened the market also established an independent regulator, the CCK. The CCK deals with licensing, technical regulation, spectrum, and consumer matters. It is responsible for monitoring unfair trade practices and introducing price controls when necessary. Responsibility for sector policy lies with the MICTTD. The current market structure, while still developing, comprises five individually licensed operators and 12-class licensed operators (typically small local and niche services providers that rely on infrastructure of the individually licensed operators). Individually licensed operators are:

- a. ATHKL (part of the Fiji-based ATH Group): a full services operator
- b. Ocean Links (owned by China based Acclinks), a new mobile network operator expected to commence services later in 2017
- c. Tenicom (100 percent owned by the local Moel Trading Group) offering Internet services via a WiFi network
- d. Speedcast (an Australia based satellite equipment and services firm) offering satellite services into Kiribati; and
- e. WISInc (a United States-based network design and build firm) licensed to operate a satellite gateway predominately for broadcast services.

Current international connectivity.

11. **Current international connectivity.** *ATHKL* International satellite bandwidth in December 2016 comprised 100Mbps (80/20) via O3B Pty Ltd for Internet on Tarawa and nearby islands (providing a medium reliability, medium cost technology) and 19.5 Mbps (15/4.5) C band via Speedcast Pty Ltd (a high reliability/high cost technology) for telephony, private lines and service to outer Islands.



Responding to demand for Internet it has contracted to expand this connectivity with an additional 150 Mbps that will be commissioned in stages so that by Q2 2017 its Internet connectivity will be 250 Mbs delivered via O3B satellite. Other international connectivity services providers are:

- a. Tenicom connectivity, via the Asia Broadcast satellite (ABS) with a total of 8Mbps (6/2) in service.
- b. Ocean Links: 10 Mbps for its new network.
- c. Speedcast- direct subscriber connections.

Market and services.

12. **Market and services.** Table 1 summarizes current service provision. Basic mobile phone penetration as of end-December 2016 was more than 37 percent of the population spread over eight (of the 22 inhabited) islands. Mobile broadband (3G/4G) coverage is available on six islands representing 77 percent of the population with 2G service installed on two more, taking mobile services coverage to about 80 percent of the population. Demand continues to increase for mobile and particularly mobile Internet services. As of August 2016, ATHKL advised that all of its satellite capacity is in service and expansion of that capacity is planned – to 250 Mbps by Q2 2017. Mobile customers (December 2016) total some 40,000 with about two-thirds being 3G and 4G users. Fixed broadband is less than 2 percent and ATH proposes to close its copper cable based ADSL and obsolete WiMax services and transfer all high-speed broadband services to its 4G network. The pending entry of the second mobile operator and the Tenicom WiFi service as an alternative to both is expected to see further improvements in affordability and quality.

Table 1. Kiribati: ICT Access by Island, 2016

Island	Population 2015 (census)	Fixed Lines	Active Mobile subscribers		Fixed Internet (Wimax & ADSL)
			2G	3G	
North and South Tarawa	62,625	2,700	11,000 (est)	26,000	900
Kiritimati	6,356	75	<1300 (est)	nil	nil
Marakai, Abaiang Maiana, Tabiteuea North, Onotoa,	15,696	3-10 per atoll	<1000 (est)	nil	nil
Banaba, Makin, Butaritari, Abemama, Kuria, Aranuka, Nonouti, Tabiteuea South, Beru, Nikunau, Tamana, Arorae	20967	3-10 per atoll	nil	nil	nil
Tabuaeran, Teraina, Kanton	4049	3-10 per atoll	nil	nil	
TOTAL	109,693		13,300	26,000	900



Source: ATHKL

13. **Future needs.** Estimated demand for bandwidth is summarized in Table 2 below, based on utilization trends and relevant comparators under base, low and high-case economic development scenarios.

Table 2. Data Bandwidth Requirements of Kiribati, Nauru and Kosrae (FSM)

	High scenario	Baseline scenario	Low scenario
Kiribati - 2026	1,365 Mbps	665 Mbps	354 Mbps
Kiribati – 2041	14.1 Gbps	6.7 Gbps	3.5 Gbps
Kosrae - 2026	210 Mbps	122 Mbps	70 Mbps
Kosrae - 2041	1.9 Gbps	1.0 Gbps	0.5 Gbps
Nauru - 2026	376 Mbps	243 Mbps	159 Mbps
Nauru - 2041	3.3 Gbps	2.1 Gbps	1.4 Gbps

14. A submarine optical fibre cable to Kiribati is necessary to meet demand in long-term traffic and to increase resilience and lessen the risk that communications will be interrupted by tropical storms or other severe weather events. Being at 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 by stakeholders to opt for submarine cable connectivity was based on studies reviewing potential cable solutions but also considering available satellite technology such as O3B and 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 into the long-term. Additionally, the tropical location of Kiribati with associated weather events dictates that a more robust solution is required for network resilience and services continuity, especially when disaster management is considered.

15. **Submarine cable routes and options.** All route options require a connection to the Hannon-Armstrong (HANTRU)-1 cable that connects Guam (the optical communications hub of the North Pacific) to the Federated States of Micronesia (FSM) in Pohnpei, and Majuro and Kwajalein in the Marshall Islands. HANTRU-1 became ready for service in 2010. Three main options for connecting to HANTRU-1 have been considered during Project preparation, including potential cost-sharing arrangements with the neighbouring states of FSM (Kosrae State) and Nauru that have a keen interest to improve their international bandwidth options (see Table 3 below).

Table 3. Submarine Cable Options Considered

	Option 1	Option 2	Option 3 (Selected)
Cable Route	Tarawa-Majuro	Nauru-Tarawa-Majuro	Pohnpei-Kosrae-Nauru-Tarawa
Cable length (km)	699	1,399	2,070
Total Capex (US\$ m) est.	16.9	30.4	42.2



	Option 1	Option 2	Option 3 (Selected)
Cable Route	Tarawa-Majuro	Nauru-Tarawa-Majuro	Pohnpei-Kosrae-Nauru-Tarawa
excluding cable landing stations ¹			
Kiribati’s share of Capex	100 %	60 %	33 %
Annual Opex-for the whole system (US\$ m)	0.5	0.9	1.2
Kiribati’s share of annual Opex-(US\$ m) est.	0.5	0.54	0.72 (60% of the EMC cable OPEX)²
Kiribati’s total operating costs (cable OPEX + interconnection) (US\$ m) est. [3]	12.8	12.9	12.7

16. Option 3 was selected as it represents many advantages: (i) the interconnection price in FSM is much more attractive than the expected interconnection price in Majuro and offsets any differences in cable OPEX cost, especially if the bandwidth demand of Kiribati exceeds expectations; (ii) the CAPEX sharing arrangement results in a CAPEX for Kiribati that is lower than for options 1 or 2; (iii) it reduces the uncertainty of interconnection in Majuro; and (iv) from a regional point of view it allows the connection of Nauru and FSM at a lower cost that would difficultly be achieved otherwise.

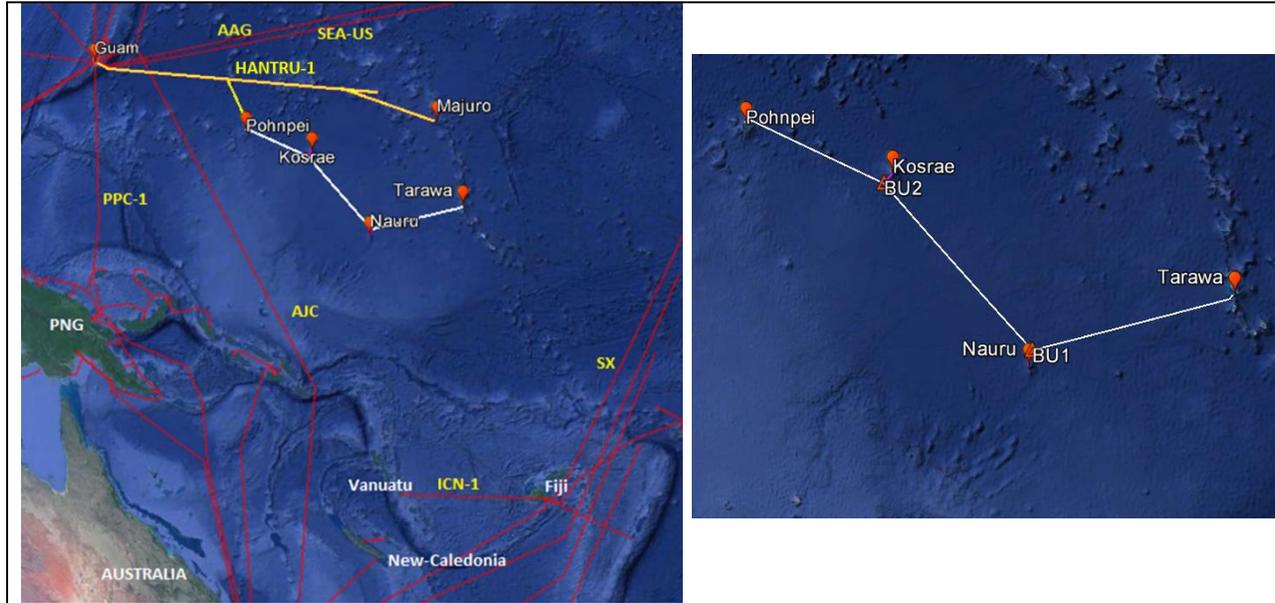
17. After a series of tripartite meetings and stakeholder consultations, the Governments of Kiribati, Nauru and the FSM decided to proceed with Option 3: a jointly financed and implemented regional submarine cable system connecting Tarawa with Nauru, Kosrae (FSM) and Pohnpei (FSM), then on to Guam, US (see Figure 1 below). This will be known as the East Micronesia Cable (EMC). A Kiribati Cable Company (KCC) will be established as a separate legal entity to operate the cable on a commercial basis in Kiribati and once established, become the implementing entity for Component 1 (inasmuch as it is carried out in Kiribati) as well as technical assistance and capacity strengthening directed at KCC under Components 2 and 3. For Project implementation, the three participating countries will enter into enter into a contractual arrangement for the financing, ownership contracting arrangements, technical and related matters for the EMC currently referred to as a Construction and Maintenance Agreement (C&MA). KCC will manage all national aspects of provision of service to users of the capacity in Kiribati.

¹ Including 10% of safety margin compared to original estimated CAPEX

² According to distance-based sharing, using the rationale “Kiribati would pay 100% for 700 kms to Nauru. Nauru and Kiribati would share 50/50 the 800 kms to Kosrae, FSM, Nauru and Kiribati would split the Kosrae-Pohnpei 600 kms 33/33/33”. Additionally, a large component of the cable OPEX is the ‘insurance’ for retaining a cable ship ready to address any fault that may present. Some operators elect to not pay this premium (which in the case of this Project represents about US\$ 0.36 million per year of the Kiribati US\$ 0.72 million total) and accept that if there is a cable fault they will rely on backup capacity until a cable ship can be procured for the repair. The cost of the cable ship completing the repair under this policy is subject to spot market price for both the ship and the work to execute the repair. Notably both FSMTC and MINTA, the owners of both the links that are options for this Project to connect to the HANTRU-1 cable have adopted this position.



Figure 1. Proposed East Micronesia Cable (EMC) including Sub-Regional View



C. Proposed Development Objective(s)

Note to Task Teams: The PDO has been pre-populated from the datasheet for the first time for your convenience. Please keep it up to date whenever it is changed in the datasheet.

Development Objective(s) (From PAD)

The Project development objective is to reduce the cost and increase the availability of Internet services in Kiribati.

Key Results

Progress will be measured against the following PDO-level results indicators (for Tarawa and surrounding islands):

- a. Access to Internet services, including mobile (number of subscribers per 100 people);
- b. Wholesale Internet bandwidth price (\$/Mbps per month);
- c. Retail price of Internet services (\$/GB);
- d. Available international and domestic bandwidth (Mbps);
- e. Direct Project beneficiaries and percent of beneficiaries that are female;
- f. Sub-indicator: Total beneficiaries – female (number); and
- g. Sub-indicator: Total beneficiaries – male (number)



D. Project Description

18. Using IDA national and regional financing of US\$20 million the proposed financing will be allocated to the Project to support Kiribati's participation in the EMC system, plus associated technical assistance and Project management support.

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

19. **Subcomponent 1 (a):** Submarine cable system (US\$15.5m). The Project will finance construction of the EMC, a regional submarine cable system connecting Tarawa, in Kiribati, with Narua as well as Kosrae and Pohnpei (both in the FSM).

20. **Subcomponent 1 (b):** Cable Landing Station (CLS), Beach Manhole (BMH) and ancillary equipment (US\$1.5m) in Tarawa. This entails construction of a CLS and ancillary works and facilities on Tarawa, including acquisition and installation of onshore equipment. At the other end of the EMC, the cable landing station (CLS), beach manhole (BMH) and ancillary equipment in Pohnpei, which are required to connect the EMC to the rest of the network and the achievement of the PDO, are already in place (through previous bilateral financing to FSM) and connection works will be funded through another source of IDA financing for FSM. The EMC also provides for the additional cable connections for Kosrae and Nauru.

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

21. **Subcomponent 2(a):** Provision of legal, financial, technical and transactional assistance in connecting with the drafting and negotiation of an arrangement for the construction, ownership and management of the EMC to be entered into, between Kiribati, Nauru and FSM, each acting through its respective national cable operator on the one hand and the constructor and other parties (as the case may be) on the other hand.

22. **Subcomponent 2(b):** Provision of legal advisory assistance for the establishment of a Kiribati national cable service operator, with capacity and resources for the purpose of operating the EMC and managing all national aspects of the provision of services to users of the EMC's capacity in the Recipient's territory.

23. **Subcomponent 2(c):** 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 capacity.

24. **Subcomponent 2(d):** 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 for the development of the legal and regulatory framework to support safe electronic transactions, cyber security, data protection and confidentiality.

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

25. Component 3 supports a program of activities designed to strengthen the capacity of the Recipient and related agencies involved in the implementation of the Project, and the Project Implementing Entity once established, to process Project transactions, implementation, and management. Such a program will include: (a) overall Project coordination; technical coordination; financial and contract management; procurement, communications, outreach; reporting, audit, and monitoring and evaluation; (b) environmental and social safeguards management.



E. Implementation

Institutional and Implementation Arrangements

This Project is a strategic partnership between Kiribati, Nauru and FSM. The countries established a Steering Committee (SC) for the EMC in September 2016 to guide the development of the Project and institutional arrangements around it, on national and regional levels

National Cable Company. Kiribati will establish an open access entity to be known as Kiribati Cable Company (KCC). At present this is envisaged as a 'Not for Profit' state-owned enterprise (SOE) under the SOE Act 2013, with a provision for enabling private sector participation in the future. Other organizational structures and business models will also be considered during the early implementation and institutional development phase of the Project. Pending the formation of KCC, the MICTTD will be the designated Project Implementing Entity, and will be responsible for the functions to be performed subsequently by KCC.

Regional Coordination. FSM and Nauru will establish similar open access cable corporations at the national level. As noted above, to minimize institutional overhead, the three national cable entities will negotiate and enter into a C&MA to govern the financing, ownership, design and installation (including construction milestones corresponding supplier payments) and operations and management of the EMC cable system over its lifetime. In addition, and without limitation, the C&MA will provide, *inter alia* for EMC member access to (including capacity commitments and pricing) and termination/interconnection on the HANTRU-1 cable at Guam. It is expected that the C&MA will be completed and enter into force during the first 6-12 months of Project implementation.

Note to Task Teams: The following sections are system generated and can only be edited online in the Portal.

F. Project location and Salient physical characteristics relevant to the safeguard analysis (if known)

The Project will finance Kiribati's share in the proposed submarine cable system connecting Tarawa to Kosrae, via Nauru. A Limited ESIA will be prepared for the entire system, however the salient physical characteristics relevant to the Project are situated in Kiribati. The land-based infrastructure will comprise a beach manhole, underground cable installation and a cable landing station which will involve minor civil works. The cable route will traverse the near shore environment where the cable is expected to be trenched and buried. In this environment avoidance of seagrass, coral and other marine habitat elements will be important. The deep water component of the cable will be surface layed from a ship. Environmentally sensitive sites such as sea mounts and hydrothermal vents will be avoided in design by re-routing the cable.



G. Environmental and Social Safeguards Specialists on the Team

Penelope Ruth Ferguson, Ross James Butler, Nicholas John Valentine

SAFEGUARD POLICIES THAT MIGHT APPLY

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	<p>The works will involve cable laying across the sea bed and reef platform, minor earthworks for the beach manhole infrastructure, and the construction of a building for the cable landing station. The Environmental and Social Impact Assessment (ESIA) concluded that environmental impacts associated with this infrastructure will have minimal (mainly marine-based) impacts which are limited in scale and extent and can be readily mitigated.</p> <p>Mitigation measures include a detailed bathymetric and ecological survey prior to cable laying, to avoid sensitive deep sea environments and placement of cable in the sub-tidal zone to avoid coral assemblages. The final design (including routing) and associated Contractors ESMP will be submitted for Bank approval prior to commencement of works.</p>
Natural Habitats OP/BP 4.04	Yes	<p>Natural habitats may be disturbed temporarily during cable laying in the intertidal zone. No protected areas are located within the project area of influence. The ESIA has been informed by ecological surveys of the reef and foreshore and the reef platform is in a degraded state and does not contain any significant coral or sea grass assemblages. Significant seabed habitats, such as hydro-thermal vents and seamounts, will be surveyed during the detailed design phase and avoided. There are no natural habitats in the footprint of the terrestrial infrastructure.</p>
Forests OP/BP 4.36	No	<p>Works will be required on the foreshore but there are no mangroves in the vicinity and therefore there will be no disturbance to forest habitats.</p>
Pest Management OP 4.09	No	<p>There is no requirement to manage pests under this</p>



		project.
Physical Cultural Resources OP/BP 4.11	Yes	No PCR were identified in the ESIA and the small infrastructure footprint means that there is low likelihood of PCR being discovered during construction. Notwithstanding, a chance finds procedure has been included in the ESIA and the policy is triggered as a precautionary measure in case a PCR is discovered.
Indigenous Peoples OP/BP 4.10	No	An assessment completed by the World Bank into the application of OP4.10 in the Pacific Islands Countries concluded that projects situated in Kiribati would not be expected to trigger this policy.
Involuntary Resettlement OP/BP 4.12	No	The preferred beach manhole site is situated on Government-leased land, with the Land Planning Act providing for land use planning in the 'public interest.' While the customary landowner retains the right of veto over sublease applications for this land the risk of this right being invoked is considered very low given the benefits of the project and the small infrastructure footprint. Hence this policy is not triggered.
Safety of Dams OP/BP 4.37	No	This policy is not triggered.
Projects on International Waterways OP/BP 7.50	No	Submarine cable systems will be deployed in Kiribati territorial waters and the open ocean. No international waterways will be traverse by the cable route.
Projects in Disputed Areas OP/BP 7.60	No	This policy is not triggered.

KEY SAFEGUARD POLICY ISSUES AND THEIR MANAGEMENT

A. Summary of Key Safeguard Issues

1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:

The project influence area (PIA) includes terrestrial and marine environments on Tarawa, Kiribati’s most populous island. Potential adverse environmental impacts may include temporary site-specific disturbance of marine ecosystems (including habitats and species) and coastal areas and people using the reef (fishing, gleaning) during installation of the cable, and construction of the land and marine based infrastructure, which are expected to be temporary and readily manageable. There are no sensitive receptors which will be significantly impacted by the nature and scale of proposed civil works / cable laying.



Based on due diligence, all land for duct routes is government-owned including the reef and foreshore, public road reserve and landing station.

Due to the narrow and flexible cable footprint, the most effective impact management strategy is to avoid significant or sensitive receptors during detailed design. Prior to cable installation, a detailed marine survey of the sea floor bathymetry and ecology will be undertaken to avoid any sensitive environments such as seamounts, hydrothermal vents and intact / healthy coral assemblages during cable laying. Installation works will be temporary (such as digging trenches) with minor disturbances.

Potential impacts are not expected to be significant due to:

- the area disturbed representing only a very small proportion of the total intertidal habitat present;
- the reef community having already been heavily modified as a result of sediment deposition and wave action;
- the ability of the disturbed benthic communities to recolonise over time; and
- the short duration of trenching activities.

2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:

The impacts of the cable will be the social and economic benefits to the community from the increased access to internet services. This is overwhelmingly beneficial, relating to enhancing the potential for development of ICT-enabled business and e-commerce, and reduce business transaction costs on Tarawa. For individuals and households, it will mean greater access to educational and leisure activities, and assist with personal communications and household management. Potential social impacts from improved access, that require long term commitments from the industry to manage, include anti-social online behaviour (scamming, bullying, addictions, etc.).

There will be minor maintenance requirements on the cables and a 'no anchor' zone along the inshore length of the cable. There are only small water craft that use the area and this is unlikely to have an impact on their activities.

3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.

Both fibre optic cable and satellite connections were considered during the in feasibility studies by the World Bank. Satellite connections are currently used in all three countries and have provided a partial solution to long term needs, but do not currently pose a long term solution to connectivity needs due to limitations in available bandwidth, maintenance and deployment issues, and recurring costs. The fibre optic cable would allow for much broader bandwidth and sustainable, long term service.

Four alternative BMH sites were considered during a technical visit, which involved an assessment of potential environmental and social impacts. The evaluation of the four options indicates the most favourable location for a BMH site is the Broadcasting and Publications Authority radio tower site adjacent to Nanikai Village. The site is preferred as it is located on Government-leased land, has existing coastal erosion protection in place, and is located in close proximity to the cable landing station site at Betio.



4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.

The Ministry of Information, Communications, Transport and Tourism Development (MICTTD) has some institutional experience with implementing World Bank safeguard policies as the counterpart for the Kiribati Aviation Investment Project (KAIP). That said, MICTTD’s experience with submarine cable placement is expected to be limited. For this reason a safeguards specialist will be engaged during implementation to assist with applying for local consents and overseeing implementation of ESMP prescriptions by the cable and terrestrial infrastructure contractors.

5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.

The key stakeholders for the project are the people of Kiribati, the Ministry of Information, Communications, Transport and Tourism Development (MICTTD) and the Kiribati Cable Company Limited (KCCL) which will build, own and operate the cable infrastructure. The various safeguards instruments including the ESIA have been disclosed on the MICTTD website. More general consultation on the cable project will be undertaken by MICTTD prior to and during operation. No discrete potentially affected peoples have been identified.

B. Disclosure Requirements

Environmental Assessment/Audit/Management Plan/Other

Date of receipt by the Bank 12-Jan-2017	Date of submission to InfoShop 17-Jan-2017	For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors
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"In country" Disclosure

Kiribati
12-Jan-2017

Comments

Disclosed in-country on the Ministry of Finance & Economic Development's (MFED) website

C. Compliance Monitoring Indicators at the Corporate Level (to be filled in when the ISDS is finalized by the project decision meeting)

OP/BP/GP 4.01 - Environment Assessment

Does the project require a stand-alone EA (including EMP) report?

Yes

If yes, then did the Regional Environment Unit or Practice Manager (PM) review and approve the EA report?

Yes

Are the cost and the accountabilities for the EMP incorporated in the credit/loan?

Yes



OP/BP 4.04 - Natural Habitats

Would the project result in any significant conversion or degradation of critical natural habitats?

No

If the project would result in significant conversion or degradation of other (non-critical) natural habitats, does the project include mitigation measures acceptable to the Bank?

No

OP/BP 4.11 - Physical Cultural Resources

Does the EA include adequate measures related to cultural property?

Yes

Does the credit/loan incorporate mechanisms to mitigate the potential adverse impacts on cultural property?

NA

The World Bank Policy on Disclosure of Information

Have relevant safeguard policies documents been sent to the World Bank's Infoshop?

Yes

Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?

Yes

All Safeguard Policies

Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?

Yes

Have costs related to safeguard policy measures been included in the project cost?

Yes

Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?

Yes

Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?

Yes

CONTACT POINT

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APPROVAL

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Approved By

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Country Director:	Michel Kerf	09-Mar-2017

Note to Task Teams: End of system generated content, document is editable from here.

