

PUBLIC INFORMATION SUMMARY
Trans Pacific Networks

Host Country	Singapore
Name of Borrower(s)	Trans Pacific Networks Cayman Co.
Project Description	Trans Pacific Networks Cayman Co. (the “ Borrower ”), a submarine cable developer and operator, will use the proceeds of the \$190,000,000 DFC loan (the “ Loan ”) to finance the development, construction, and operation of the Borrower’s ownership in a 15,200 km submarine fiber-optic cable from Singapore to the U.S., with branches serving Indonesia and Guam and yet-to-be developed branches to serve other jurisdictions in the Indo-Pacific, including Palau (the “ Project ”).
Proposed DFC Loan	Up to \$190,000,000 with a 10-year amortization period with final repayment no later than November 1, 2033.
Total Project Costs	\$255,300,000
Sponsor	Unique Infrastructure Group
Policy Review	
Developmental Effects	This Project is expected to have a positive development impact through the development and operation of critical connectivity infrastructure that will improve internet accessibility and speed in the Indo-Pacific region. Internet access contributes significantly to economic growth in global and emerging markets. Research shows that each additional 10% of internet penetration adds 0.77% to per capita GDP growth in developed countries and 1.12% in emerging markets. According to the World Bank, the share of individuals using the internet in the Indo-Pacific is just 55% compared to 82% in developed countries. The Project provides a new, geopolitically diverse submarine cable route, and is the first direct cable connection between Singapore, Indonesia and the U.S. As a result of Project’s new route that will avoid the South China Sea, the Project will provide significant cost savings over other options. This Project, once operational, will offer the lowest end-point-to-end-point data transport cost, as well as the lowest latency relative to existing subsea cables in the region. Additionally, the Project will provide infrastructure that will allow additional markets, including highly isolated Pacific island nations, increase internet access in the future.
Environment	Screening: The Project has been reviewed against DFC’s categorical prohibitions and determined to be categorically

eligible. Subsea cables are screened as Category B under DFC's environmental and social guidelines because impacts are site-specific and readily mitigated.

Applicable Standards: DFC's environmental due diligence indicates that the Project will have impacts that must be managed in a manner consistent with the following of the International Finance Corporation's (IFC) 2012 Performance Standards (PS):

PS 1: Assessment and Management of Environmental and Social Risks and Impacts;

PS 2: Labor and Working Conditions;

PS 3: Resource Efficiency and Pollution Prevention;

PS 4: Community Health, Safety and Security; and

PS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources

In addition to the above standards, the Project will also be required to comply with:

- The IFC's Environmental, Health, and Safety (EHS) General Guidelines (April 30, 2007); and
- The IFC's EHS Guidelines for Telecommunications (April 30, 2007);

Environmental and Social Risks and Mitigation:

Environmental and social issues of concern for the Project include the need for a robust Environmental and Social Management System (ESMS) including risk/impact identification, marine water quality, occupational health and safety, emergency preparedness and response during cable laying, and impacts on marine biodiversity.

Environmental and Social Management System (ESMS)

The Project's Environmental and Social Policy will be developed as part of the Project deliverables. The Project has developed a Permit Tracking Matrix (PTM) which lists and tracks the numerous permitting and EIA requirements/processes based on the landing site and crossing jurisdictions.

All Project contractors will implement established Project ESHS Guidelines, which will be linked to the EPC Contractor's ESHS Plan (through mutual Bridging Documents) and the various jurisdictional requirements, and overseen by a Lead ESHS Manager working for the EPC. Project ESHS Managers will be represented at all operations, both on and off-shore, and take the lead role in implementing the established Project ESHS

Guidelines. ESHS Managers will also report to the EPC ESHS office regarding ESHS topics, statistics, and incidents.

The Project will conduct a desk top study (DTS) and a Cable Route Survey (CRS) to determine the final routing of the cable. The DTS is the key driver for the initial marine and route engineering for the system. The DTS examines in detail the planned cable routing and landing sites, identifies and recommends the best marine engineering solution, and ensures that the recommended undersea routes are clear of any hazards that might affect the security or performance of the system.

After the completion of the DTS, the Project will perform the CRS to verify seabed conditions along the agreed upon DTS route. The CRS will include various surveys (landing site, in-shore, shallow-water, and deep water) to determine bathymetry and seabed characteristics. The presence of any sensitive habitats (e.g., corals) will be determined during the CRS. Benthic habitat surveys may be required as part of the environmental permitting in each landing jurisdiction.

Marine Water Quality

Project-related sediment disturbance will be minimal along most of the route, as the majority of the cable will simply be laid directly on the ocean floor or buried using a mechanical plow. There are two examples where laying/plowing are not possible: (1) in the Port of Singapore there is the requirement to bury the cable 10 meters deep. Per industry standard, a water injection method will be employed, and (2) some cable will be buried ~1 meter deep via Remotely Operated Vehicle (ROV) using a water jet where mechanical plowing is not feasible.

There is no trenching planned on or off shore and therefore no need to sample or dispose of any sediment. For the shore side, Horizontal Directional Drilling (HDD), a minimal-impact trenchless method of installing underground utilities, will be utilized to tunnel from the beach to a cable outlet several hundred meters offshore.

Emergency Preparedness and Response

The Project's operations will involve various stages and vessels with specific procedures, guidelines and regulations for safety, emergency, and environmental response. Each vessel will integrate these procedures in an overall Ship/Safety Management System (SMS). The SMS references and abides by international standards, codes, and safety organizations, including the International Maritime Organization (IMO), the International Convention for the Prevention of Pollution from

	<p>Ships (MARPOL), the International Safety Management Code (ISM), Safety of Life at Sea (SOLAS), the International Ship and Port Facility Code (ISPS), and the International Marine Contractors Association (IMCA). In addition, cable ships are required to regularly perform emergency drills in accordance with SOLAS, ISPS, and any company specific requirements, which all form part of an SMS. All marine suppliers to the Project will provide Emergency Response Plans (ERP) and safety procedures relating to specific items such as: spills; weather and sea working limitations; personnel protective and life-saving equipment; drill and muster plans, etc.</p> <p><u>Occupational Health and Safety (OHS)</u></p> <p>OHS risks during cable laying are addressed by the SMS (see Emergency Preparedness and Response above).</p> <p>For on-shore works, Project contractors will be required to provide adequate OHS plans prior to beginning any onsite work. These OHS plans will include EHS policies, safe work procedures, training, hazard/risk controls, emergency response, and requirements for adequate personal protective equipment. In addition, each contractor and site may have specific rules and requirements unique to their operations that will be made part of the Project’s documentation through appended risk assessments and site-specific hazard reporting forms.</p> <p><u>Impacts on Marine Biodiversity</u></p> <p>The Project does not cross any areas of known deep water corals or hydrothermal vents. These areas were specifically avoided in the preliminary desktop survey (DTS). Additional desktop investigations will be conducted as well as a detailed marine survey of the planned route. Any corals or other sensitive habitat or hydrothermal vents found will be avoided by the final cable route. The impact of subsea noise will only be studied or modelled if required by a permitting agency. At this time, noise impact studies are not required for the Project; however, the findings and recommendations from the impact assessments will be considered as part of the local permitting process. Marine Mammal Observers (MMO) or Protected Species Observers (PSO) will be used onboard Project vessels as necessary/required by local permits.</p>
Social Assessment	<p>The Project will have impacts that must be managed in a manner consistent with the International Finance Corporation’s Performance Standards, DFC’s Environmental and Social Policy and Procedures and applicable local laws. DFC’s statutorily required language will be supplemented with</p>

	<p>provisions concerning the rights of association, organization and collective bargaining, minimum age of employment, prohibition against the use of forced labor, non-discrimination, hours of work, the timely payment of wages, and hazardous working conditions. Standard and supplemental contract language will be applied to all workers of the Project, including contracted workers.</p> <p>Significant adverse social impacts are not anticipated. Employment is expected be primarily technical. The Project will be connecting to existing cable landing stations (CLS), however, Project activities in Indonesia may have temporary impacts on local fishing activities. The Project's ESMS will be required to address social risk, including labor, appropriate to the risks associated with the Project's activities.</p> <p>This review covers the commensurate human rights risks associated with submarine cable installation.</p>
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