Cambodia Fiber Optic Cable Upgrade Project

Overview

By building out the fiber optic cable backbone and the metro network across the country, the project is expected to support increased access to telecom services in both rural and urban areas.

Key Takeaways

The Cambodia Fiber Optic Cable Upgrade Project aims to expand the national fiber optic backbone and metro networks to improve connectivity across urban and rural areas.

Project Overview

The project, led by Cambodia Fibre Optic Communication Networks Co., Ltd (CFOCN), focuses on building and upgrading both the fiber optic backbone and metro networks across Cambodia to enhance telecom services, increase network capacity, and improve indoor and outdoor coverage for service providers.

CFOC

N is one of three licensed national fiber optic backbone operators in Cambodia, alongside Viettel Cambodia and the state-owned Telecom Cambodia.

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Geographic Scope

The upgrade targets nine major provinces: Kandal, Kampot, Kampong Speu, Kampong Thom, Kep, Sihanoukville, Koh Kong, Takeo, and Svay Rieng. The project involves drilling and installing underground fiber optic cables, primarily along existing road infrastructure, minimizing land acquisition and disruption to local communities.

Objectives and Benefits

Enhanced connectivity: Expands high-speed internet access to rural and urban areas. Increased network capacity: Supports telecom operators with greater bandwidth and reliability. Improved coverage: Strengthens both indoor and outdoor service quality.

Economic development: Facilitates digital infrastructure growth, supporting business, education, and government services.

Environmental and Social Considerations

The project has been classified as Category B under the Asian Infrastructure Investment Bank (AIIB) standards, indicating limited environmental and social risks. Key considerations include: Occupational health and safety during construction. Waste management, particularly spoil from trenching and backfilling.

Air emissions from dust, vehicle exhaust, and stationary equipment. An Environmental and Social Management Plan has been developed to mitigate these impacts, and public consultations were conducted with local communities. The project also follows the Project-affected People's Mechanism (PPM) to address grievances and ensure compliance with AIIB policies.

StakeholdersCFOCN: Project developer and operator, subsidiary of Shenzhen-based HyalRoute Group. Ministry of Public Works and Transport (MPWT): Regulatory oversight and approval authority.

AII

B: Provides financing and ensures adherence to environmental and social standards. Local provincial departments: Collaborate on technical planning and implementation.

Project Status

As of mid-2024, CFOCN has submitted proposals for approval and conducted feasibility studies to ensure safe, efficient, and sustainable installation of the fiber optic network. The project is in the planning and regulatory approval phase, with coordination ongoing between CFOCN, MPWT, and provincial authorities to expedite implementation.

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Technical Details

Backbone network: Approximately 1,000 kilometers in less dense areas to improve regional coverage. Metro network: Approximately 1,000 kilometers within major cities to enhance urban connectivity. Installation method: Underground fiber optic cables along existing public utilities and roadways to minimize disruption.

The Cambodia Fiber Optic Cable Upgrade Project represents a major step toward nationwide high-speed internet access, supporting both economic growth and digital inclusion across Cambodia.

Article Content

CFOCN Proposes Underground Fibre Optic Cable Expansions In 9

Cambodia Fibre Optic Communication Networks Co., Ltd (CFOCN) has requested the Ministry of Public Works and Transport (MPWT) for approval to undertake a project involving the

Cambodia: Fiber Optic Communication Network Project

By building out the fiber optic cable backbone and the metro network across the country, the project is expected to support increased access to telecom services in both rural and urban areas.

Cambodia: Fiber Optic Communication Network

Project Description If provided by the financial institution, the Early Warning System Team writes a short summary describing the purported development objective of the project and project components.

CFOCN Proposes Extensive Fibre Optic Network Installation Across

Cambodia Fibre Optic Communication Networks Co., Ltd (CFOCN) requested approval from the Ministry of Public Works and Transport to undertake a significant project involving the

New Cambodian Carrier Backbone Fiber Switch

Phnom Penh, Cambodia – February 13, 2025 – In a significant move to enhance Cambodia''s digital infrastructure, Nokia and Cellcard have announced a partnership to upgrade the nation''s fiber

WCFO Expands Cambodia Fiber Optic Cable Capacity Amid AI

Hong Kong manufacturer WCFO announces plans to build a new factory in Cambodia, aiming to roughly double local fiber optic cable component production capacity to meet the rapidly

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Cambodia National Grid Optical Cable Construction

ENC W& W Co., Ltd., based in Phnom Penh, Cambodia, partners with top Chinese manufacturers to distribute premium fiber optical cables and services the state grid projects in ASEAN region.

Sihanoukville-HK submarine optical fibre cable to be completed in 2025

The project to build submarine optical fibre cable network between Sihanoukville and Hong Kong will be completed in July 2025, Chinese media reported quoting Unicom Group sources.

AIIB''s First Project in Cambodia to Help Improve Fiber

Cambodia will see a major improvement in internet speed and quality following a USD75-million investment by the Asian Infrastructure Investment

China Unicom to Build Cambodia''s First State-Owned Submarine Optical ...

The nearly 3,000-kilometer submarine optical fiber cable will run from Hong Kong to Sihanoukville in southern Cambodia, China Unicom announced yesterday, citing a deal it signed with

Cambodia announces submarine cable upgrade

According to figures cited by the Phnom Penh Post, as of February, Cambodia had more than 17 million registered SIM cards (a little more than the population, estimated at 16,891,245) and

Cambodia will launch submarine fiber optic cable

The Ministry of Posts and Telecommunications plans to connect 2,715 kilometres of submarine fiber optic cable network from Hong Kong to Preah

AIIB''s first project in Cambodia to help improve fiber optic ...

AIIB''s loan to Cambodia Fiber Optic Communication Network Co., Ltd is the Bank''s first project in Cambodia. It will be invested in approximately 2,000 kilometers of metro and regional fiber

China Unicom to Lay Subsea Fiber Cable Linking Hong Kong and Cambodia ...

This project represents Cambodia''s inaugural state-owned submarine optical fiber cable, equipped with substantial capacity for international communication. Commencing construction on

Cambodia-Hong Kong cable to be completed by mid-2025

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A project to build submarine cable network between Sihanoukville, a coastal city in southern Cambodia, and Hong Kong is to be completed in July 2025, according to regional press

US$165M Hong Kong -Phnom Penh Submarine Cable to Complete in

The Hong Kong-Phnom Penh submarine fiber-optic cable project, valued at over US$165 million and spanning 2,715 kilometers, is set to be completed in 2024, addressing Cambodia''s

Cambodia announces submarine cable upgrade

The country has 38 internet service providers, and five onshore and submarine fibre optic infrastructure operators. There are an estimated 640 kilometres of submarine fibre optic cable

Chuan Wei to build Cambodia''s first 100G fiber-optic network

Alcatel-Lucent (Euronext Paris and NYSE: ALU) says it will supply the equipment necessary for Chuan Wei to deploy the first 100-Gbps fiber-optic network in Cambodia.

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This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

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