

Article Overview

Asia-Pacific is undergoing a major fiber optic expansion, with both submarine and terrestrial networks enhancing connectivity, capacity, and digital infrastructure across the region.

Submarine Cable Projects

E2A Submarine Cable: The E2A consortium is constructing a 12,500 km transpacific cable linking Asia and North America, with landings in Taiwan, South Korea, Japan, and California, USA. It features 12 fiber pairs delivering over 192 Tbps, optimized for low latency and AI-driven applications, with an expected service date in the second half of 2028 . **Candle Subsea Cable:** Meta's Candle cable spans 8,000 km, connecting Japan, Taiwan, the Philippines, Indonesia, Malaysia, and Singapore. It will provide 570 Tbps capacity using 24 fiber-pair technology, enhancing intra-Asia connectivity and transpacific links, with completion targeted in 2028 . **Asia Direct Cable (ADC):** A 9,400 km trans-Asia cable connecting China, Japan, the Philippines, Singapore, Thailand, and Vietnam. It is designed to carry over 140 Tbps and includes multiple high-capacity fiber pairs, supporting 5G, cloud, IoT, and AI applications . **Apricot Cable:** A 12,000 km system linking Japan, Taiwan, the Philippines, Indonesia, Singapore, and Guam. It complements existing cables like Bifrost and Echo, providing 290 Tbps capacity and enhancing redundancy and resilience in the region . **Geopolitical Considerations:** Subsea cables in Asia face geopolitical challenges, particularly in the South China Sea, where territorial claims and security concerns influence project approvals and routing. The U.S. has intervened in some projects to mitigate potential Chinese control over strategic cables .

Terrestrial Fiber Expansion

China: Mainland China leads in fiber deployment with 59.6 million km of installed fiber lines as of 2022. China Mobile has deployed 19.4 million km, aiming for 90% fiber broadband penetration by 2027. National policies like the Broadband China Strategy and 5G integration support rural and urban connectivity . **India:** Rapid FTTH growth is led by Reliance Jio and Bharti Airtel, connecting millions of residences. Government initiatives like BharatNet aim to connect 250,000 rural gram panchayats, supporting digital inclusion and 5G readiness . **Japan and South Korea:** Mature markets focus on upgrading speed and efficiency. Japan targets 99.9% fiber coverage by 2027, while South Korea's Giga-KOREA Project delivers gigabit-speed internet nationwide . **Southeast Asia:** Indonesia, the Philippines, Malaysia, Thailand, and Vietnam are expanding fiber networks through government-backed projects and private telco initiatives. Examples include Indonesia's Palapa Ring Project, the Philippines' National Fiber Backbone, Malaysia's JENDELA, and Thailand's Digital Thailand policy .

Market Trends and Technology

The Asia-Pacific fiber optic cable market was valued at \$6.45 billion in 2023 and is projected to reach \$16

Asia Fiber Optic Cable Project

billion by 2032, growing at a CAGR of 10.62%. Growth drivers include 5G deployment, smart city projects, cloud computing, IoT, and AI applications. Single-mode fibers dominate long-distance communication, while multi-mode fibers are used for shorter distances like data centers .

Key Players

Leading companies in the APAC fiber optic market include NEC Corporation, Fujikura Ltd., LS Cable & System Ltd., Sumitomo Electric Industries, and major telcos such as China Mobile, Reliance Jio, Bharti Airtel, PLDT, Singtel, and SoftBank .

Conclusion

Asia-Pacific's fiber optic infrastructure is rapidly expanding through a combination of submarine and terrestrial networks. These projects are critical for supporting high-speed internet, AI, cloud services, and 5G, while also addressing digital inclusion in rural and remote areas. Strategic investments, government policies, and technological advancements are shaping a robust, high-capacity, and resilient digital backbone for the region.

The SJC2 consortium announced today with NEC Corporation (NEC; TSE: 6701) the completion of construction and

The AUG East cable system is supplied by NEC. The AUG East cable system features a high-count fibre pair system

The ALC cable system features 13 fiber pairs on its Hong Kong to Singapore trunk, 26 Tbps per fiber pair and a system

The Asia-Pacific Fiber Optic Cable Market is witnessing robust growth, driven by the rapid adoption of 5G technology,

FPT Telecom will invest \$87 million to participate in the Asia Link Cable (ALC) project. The company's Board of

The Candle submarine cable system is a 24-fiber pair, 8,000 km submarine cable system

The Asian Internet Gateway (AiGateway) is one of Asia's largest and most ambitious subsea fiber-optic cable projects, spearheaded

The Asia-Pacific fiber optic cable market is projected to grow steadily over the next decade,

Asia Fiber Optic Cable Project

The Palapa Ring Project is a key government-led initiative that aims to establish a

Subsea cables, which carry the world's data, are now central to the U.S.-China tech war. Washington, fearful of

INTRODUCTION In February 2022, America's SubCom was awarded the contract to construct the Southeast Asia

Thus, it is reasonable to look at both countries together to study the current status and emerging prospects of co-deployment of fibre

The Asia-Pacific Fiber Optic Cable Market, valued at USD 6.45B in 2023, is projected to reach USD 16B by 2032, growing at a

The E2A consortium is pleased to announce the start of construction for the new submarine cable system, E2A. The consortium has

Government-led broadband projects across markets in the Asia-Pacific region have reaped the fruits of success in recent years as

New Asian undersea cable ADC ready to operate, developer says Japan's NEC is the

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