World s Largest Fiber Optic Cable

Article Overview

The 2Africa cable is currently the largest fiber optic cable in the world, spanning approximately 45,000 kilometers and designed to deliver up to 180 terabits per second.

Overview of the 2Africa Cable

The 2Africa cable is a monumental subsea fiber optic project aimed at enhancing internet connectivity across Africa, the Middle East, and Europe. Announced in May 2020, it is designed to encircle the African continent, connecting 23 countries and significantly increasing bandwidth in regions that have historically faced limited internet infrastructure .

Specifications and Technology

o Length: Approximately 45,000 kilometers, making it one of the longest subsea cable systems globally .
o Capacity: Up to 180 terabits per second on key segments, surpassing the combined capacity of all existing subsea cables serving Africa .
o Technology: Utilizes Spatial Division Multiplexing (SDM1), which allows more fiber pairs per cable and higher data throughput, meeting the growing demand for internet bandwidth .

Consortium and Deployment

The project is led by a consortium of major telecom and technology companies, including Meta (Facebook), China Mobile International, MTN GlobalConnect, Orange, stc, Telecom Egypt, Vodafone, and WIOCC . This collaboration ensures both the technical expertise and financial backing required for such a large-scale infrastructure project.

Impact on Connectivity

The 2Africa cable is expected to transform internet access in Africa and surrounding regions by providing faster, more reliable connectivity. This will support economic growth, digital inclusion, and access to global markets. For individuals, it will improve access to education, communication platforms, and online services, bridging the digital divide .

Comparison to Previous Cables

Previously, cables like the Fibre-optic Link Around the Globe (FLAG), which spans 28,000 kilometers, were among the longest, but the 2Africa cable surpasses them in both length and capacity . Its advanced technology and scale make it the current record-holder for the largest fiber optic cable system in the world. In summary,

the 2Africa cable represents a major leap in global telecommunications infrastructure, combining unprecedented length, high capacity, and cutting-edge technology to connect multiple continents and millions of users.

Light forms the basis for all communications in the modern world, with many thousands of kilometers of fibre-optic cables to be found

Meta"s 2Africa subsea cable has landed in Djibouti City, Djibouti. Djibouti Telecom announced on 13 May that the

Spanning approximately 45,000 kilometers, the 2Africa cable is one of the longest subsea cable systems in

TeleGeography"s comprehensive and regularly updated interactive map of the world"s major submarine cable systems

Can you name any fiber optic company off the top of your head? Probably not. Here"s a list of the 15 largest fiber optic companies

The largest fiber optic companies in the world power global connectivity, enabling 5G, AI,

The worlds longest submarine telephone cable is FLAG (Fibre-optic Link Around the Globe), which runs for 27,000 km 16,800 miles

Furukawa Electric Group company Lightera has started mass production of 13824 count

Explore the physical backbone of the internet with our interactive map of undersea fiber optic cables, peering exchange points, and

Meta will pay Corning up to $6 billion through 2030 for fiber-optic cable in its AI data centers. In an exclusive interview

Based on 2025 rankings from industry sources like Owire and TSCables, the top

The Infrastructure Connectivity Map (Broadband maps - BBmaps) webapp provides infrastructure visualization of ICT networks.

Fibre-optic Link Around the Globe (FLAG) is a 28,000-kilometre-long (17,398 mi; 15,119 nmi) fibre optic mostly- submarine

SEA-ME-WE3 or South-East Asia - Middle East - Western Europe 3 was an optical submarine telecommunications cable linking

The World Wide Web might sound metaphorical, but it"s actually grounded in a physical web of translucent glass

Meta (formerly Facebook) plans to build the world"s longest undersea cable that will be longer than the Earth is round.

Web: https://www.kremgroup.co.za