

European Optical Cable Routes



Overview

Interactive map of 700+ submarine cables worldwide - explore routes, landing points, owners, year of service and length. Click any cable for full details.

Key Takeaways

Europe's optical cable network consists of extensive terrestrial and submarine fiber routes connecting countries across the continent and linking Europe to North America and other regions.

Submarine Cable Routes

Europe is connected to other continents through a network of submarine fiber optic cables. Major transatlantic routes link Europe to North America, with operators like EXA Infrastructure managing eight diversified subsea cables, including the EXA Express, a 4,600 km high-performance route, currently the fastest transatlantic fiber link. These cables are critical for international data traffic, cloud connectivity, and global internet backbone operations.

TeleGeography's Submarine Cable Map provides an interactive visualization of these undersea routes, showing landing stations and cable paths.

Terrestrial Fiber Networks

Within Europe, extensive terrestrial fiber networks span thousands of kilometers, connecting major cities, data centers, and regional hubs.

EX

A operates over 174,500 km of high-capacity fiber across 37 countries, with more than 500 optical Points of Presence (PoPs) and over 65,000 km of 400G-enabled routes. Similarly, the SEFE network offers an interactive map of fiber-optic routes across Europe, allowing users to explore city connections, districts, and detailed fiber paths. These networks support high-speed broadband, enterprise connectivity, and inter-data center communication.

Mapping and Visualization Tools

Several platforms allow visualization of European optical cable routes: TeleGeography Submarine Cable Map: Interactive global map of submarine cables and landing stations. Internet Infrastructure Map (2026): Shows undersea cables, peering points, and IP distribution across Europe and globally.

SEF

E Interactive Fiber Map: Provides detailed terrestrial fiber routes and city-level connections.

E

U Broadband Infrastructure Mapping: Aggregates fixed and mobile broadband quality across the EU, supporting policy and investment decisions.

Key Features and Technology

European optical networks use low-loss, high-capacity fiber technologies such as Corning Ultra G. 652D, supporting 400G transmission and multiple route combinations for redundancy. Networks are designed for core-to-core and core-to-edge connectivity, ensuring high reliability and scalability for cloud services, enterprise networks, and international data exchange.

Submarine and terrestrial routes are often diversified to minimize disruption risks and optimize latency. SummaryEurope's optical cable infrastructure is a complex, high-capacity network combining submarine and terrestrial fiber routes. Interactive maps and operator resources allow detailed exploration of routes, landing stations, and network coverage.

These networks are essential for broadband connectivity, international data transfer, and supporting the digital economy across Europe and beyond.

Article Content

Submarine Cable Map: Interactive Routes of 700+ Subsea Cables

Interactive map of 700+ submarine cables worldwide - explore routes, landing points, owners, year of service and length. Click any cable for full details.

OpenFiberMap — Global Fiber Optic Network Map

Global Africa Americas Europe Asia-Pacific 3D ☐☐ OpenFiberMap Terrestrial fiber infrastructure — the backbone routes, conduits, and peering points that carry internet traffic across continents — has no

Broadband infrastructure mapping (RP2023) | Interoperable Europe

It consists of an interactive online mapping application that aggregates and visualizes various dimensions of quality of service (QoS) delivered by broadband networks (fixed and mobile) in the

Internet Infrastructure Map (2026)

Explore the physical backbone of the internet with our interactive map of undersea fiber optic cables, peering exchange points, and more. Visualize the growth of global connectivity.

EXA Infrastructure: Connecting Europe and North America

Our routes extend throughout Europe and North America, crossing the Atlantic via eight diversified subsea cables (three wholly owned and operated), including EXA Express, a 4,600 km high

Interactive map

Explore our fibre-optic grid with our interactive map: Zoom into the map in seven steps (zoom levels) to view the route in detail or search directly for your location using the search function.

EXA Infrastructure Network Map: Connecting Europe & North America

EXA Infrastructure owns and operates the most extensive dedicated infrastructure footprint connecting Europe and North America. Download EXA network map

Network Maps: Europe

Both pan-European and regional networks are welcome. Where only a global map is available, such as for the larger telecoms, I refer to the International Network Maps page so that I don't have duplicate

Global Network Capabilities and Fibre Network Maps | Zayo

Our resilient fibre network connects Europe, the Middle East and beyond, ensuring low-latency, high-capacity data transport for carriers, enterprises, and hyperscalers worldwide.

Submarine Cable Map 2024

These rollouts can be traced back, in part, to submarine cable routing decisions. Cables land near locations prime for cloud region growth, so cable routes show where inter-data center bandwidth

Gulf states race to build overland data cables to Europe

Six competing projects backed by Gulf nations are racing to build overland data routes to Europe through Syria, Iraq, and the Horn of Africa,

Full-fibre networks in Europe: state of play and future evolution

Active equipment includes equipment in the network to transmit data on the fibre-optic cables, and equipment in homes and other premises that act as a gateway for customers. These

-BROADBAND INFRASTRUCTURE MAPPING | Interoperable Europe

ITU-T SG15 is responsible in ITU-T for the development of standards for the optical transport network, access network, home network and power utility network infrastructures, systems, equipment, optical

Submarine Cable Map | Interactive Global Undersea Cables

This interactive submarine cable map shows the global undersea fiber optic cables connecting world. Explore cable routes, landing stations and system status. Coming Soon: Data Service

Visualizing the Internet (2024)

From route selection, cable manufacturing, and specialized cable-laying ships; it's all incredible. Even more normal aspects of fiber optic cables like having in-line amplifiers become far

Fibre-optic Link Around the Globe

Fibre-optic Link Around the Globe (FLAG) is a 28,000-kilometre-long (17,398 mi; 15,119 nmi) fibre optic mostly- submarine communications cable that connects the United Kingdom, Japan, India, and many

Communication Infrastructure - EuropaCable

Today, Europe has world class research centers, highly specialised universities and industrial sites with the know-how and the capacity to respond to

Submarine Cable Map

TeleGeography's comprehensive and regularly updated interactive map of the world's major submarine cable systems and landing stations.

Contact Us

Continue your research online:

Website: <https://fdsoluciones.es>

Technical inquiry: <https://fdsoluciones.es/project-enquiry.html>

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

