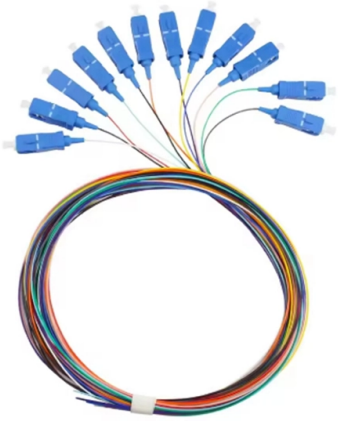
Details of Kazakhstan s Optical Cable Project



Overview

The large-scale infrastructure project aims to build a high-capacity transit fiber-optic network linking Europe with Central and South Asian markets.

Key Takeaways

Kazakhstan and Azerbaijan are jointly implementing a 380–400 km submarine fiber-optic cable across the Caspian Sea, set to launch in 2026 with a capacity of 400 Tbit/s.

Project Overview

The Trans-

Caspian fiber-optic cable (FOC) project is a strategic initiative linking Aktau, Kazakhstan, and Sumqayit, Azerbaijan via an underwater cable along the Caspian Sea seabed. Initially proposed in 2019, the project aims to enhance digital connectivity between Europe and Asia, reduce latency, and support high-speed international data transmission. The cable is part of the broader Digital Silk Way initiative, designed to streamline data transit across Eurasia and attract foreign investment into the regional digital economy.

Technical Specifications

© 2026 CGWEB NETWORK INFRASTRUCTURE - All rights reserved

Length: Approximately 380–400 kilometers Capacity: At least 400 terabits per second, supporting large-scale data transfers and future digital demands Infrastructure: Includes beach manholes and cable landing stations on both coasts, with the seabed route mapped for depth, terrain, underwater currents, and geological conditions Construction: Two parallel fiber-optic lines are being laid to ensure redundancy and reliability Timeline and ImplementationActive construction phase: Currently underway, with specialized survey vessels operating from the Kazakh port of Bautino to finalize the cable route Expected launch: Third quarter of 2026, with full operational capacity by the end of 2026 Project cost: Estimated at $50.

6 million, jointly funded by Kazakhtelecom and AzerTelecom Strategic ImportanceThe project is designed to: Enhance regional digital connectivity and internet quality in Kazakhstan, Azerbaijan, and neighboring regions Reduce latency and improve stability for international data traffic Support economic cooperation and attract foreign investment in the digital sector Serve as a critical link in the Digital Silk Way, connecting Europe and Asia through a high-speed, low-latency corridor Participating CompaniesKazakhtelecom: Kazakhstan's national telecommunications operator, leading the project on behalf of Astana AzerTelecom: Azerbaijan's backbone internet provider, part of NEQSOL Holding, partnering in the joint venture Current StatusCoastal surveys and site selection for landing stations are complete Seabed mapping and geological assessments are ongoing to ensure technical feasibility and optimal routing The project is positioned to become a digital bridge between Asia and Europe, supporting sustainable connectivity and regional digital transformation This Trans-Caspian optical cable represents a landmark infrastructure project for Kazakhstan, enhancing its role as a key digital gateway in Eurasia while fostering regional collaboration and technological advancement.

Article Content

Azerbaijan, Kazakhstan Advance Trans-Caspian Fiber-Optic Cable

Kazakhstan and Azerbaijan are moving ahead with the development of the Trans-Caspian fiber-optic communication line, which is designed to run along the floor of the Caspian Sea and

Kazakhtelecom CEO Confirms 2026 Launch of Caspian Submarine

First proposed in 2019, the project involves the construction of two parallel fiber-optic lines, spanning approximately 380 to 400 kilometers, to connect the digital infrastructures of

Trans-Caspian Fiber-Optic Cable Project in Spotlight After President ...

The large-scale infrastructure project aims to build a high-capacity transit fiber-optic network linking Europe with Central and South Asian markets. The 380-kilometer cable will run along

© 2026 CGWEB NETWORK INFRASTRUCTURE - All rights reserved

Kazakhstan, Azerbaijan Launch Active Phase of Underwater Fiber

The initiative will link the Kazakh port city of Aktau with the Azerbaijani city of Sumqayit via an underwater cable system, enhancing digital connectivity between Asia and Europe.

Azerbaijan, Kazakhstan launch pioneering Caspian undersea fibre

Kazakhstan and Azerbaijan have officially launched the active phase of an ambitious project to lay the first-ever fibre-optic cable beneath the Caspian Sea—a major step toward

Trans-Caspian Fiber Optic Cable Project

The Trans-Caspian Fiber Optic Cable Project is a strategic infrastructure initiative aimed at constructing a 380 km submarine fiber-optic cable line across the Caspian Sea, connecting

Trans-Caspian Fiber-Optic Cable Project Desktop Study Completed

The Trans-Caspian Fiber-optic Cable Line features a 380 km fiber-optic line across the Caspian Sea, connecting Sumgait (Azerbaijan) and Aktau (Kazakhstan). With a data transmission

Azerbaijan and Kazakhstan to build Trans-Caspian fiber

The construction of the Trans-Caspian fiber-optic cable is expected to be completed in 2025. The project is being implemented by AzerTelecom and

Kazakhstan announces launch timeline for fiber optic cable project ...

The project is part of the larger "Digital Silk Way" initiative, which aims to create a digital telecommunications corridor between Europe and Asia. The main underwater cable route will stretch

Trans-Caspian Fiber Optic

In early March 2025, AzerTelecom and Kazakhtelecom signed an agreement on the construction of the submarine fiber-optic communication lines along the seabed of the Caspian Sea, upon approval by

AzerTelecom and Kazakhtelecom Begin Next Phase of

AzerTelecom and Kazakhtelecom aim to finish the project by the end of 2026. The Trans-Caspian Fiber Optic Cable Line is a crucial part of the Digital

Trans-Caspian Fiber-Optic Cable Project Reaches Key Milestone with ...

© 2026 CGWEB NETWORK INFRASTRUCTURE - All rights reserved

The Trans-Caspian Fiber-optic Cable Line features a 380 km fiber-optic line across the Caspian Sea, connecting Sumgait (Azerbaijan) and Aktau (Kazakhstan). With a data transmission

Kazakhstan, Uzbekistan putting digital distance

Kazakhstan already has two fiber-optic cable connections with Chinese networks, but Kazakh authorities are reportedly hesitant to expand in

Light Reading

Light Reading is the leading source of news analysis for communications industry professionals.

AzerTelecom and Kazakhtelecom Ink Agreement for the Trans

Kazakhtelecom is Kazakhstan''s largest telecommunications company and holds the status of a national telecom operator. The Trans-Caspian Fiber Optic Cable Project, being an essential part

Kazakhstan and Azerbaijan establish joint venture for Caspian Sea

A joint venture has been established between Kazakhstan and Azerbaijan to prepare a feasibility study for a project to lay a fiber-optic cable line along the bottom of the Caspian Sea, said

Significant Milestone of the Trans-Caspian Cable Line Project

The Trans-Caspian Cable Project, which is strategically significant for the region, involves the construction of a 380 km long fiber-optic cable line along the seabed of the Caspian Sea,

Optical Cable Linking Kazakhstan and Azerbaijan Across Caspian

Kazakhstan: The laying of an optical cable to be laid along the bottom of the Caspian Sea between Kazakhstan and Azerbaijan is planned to be completed by the end of 2026, Kazakh media reported,

© 2026 CGWEB NETWORK INFRASTRUCTURE - All rights reserved

Contact Us

Continue your research online:

Website: https://cgweb.co.za
Technical inquiry: https://cgweb.co.za/project-enquiry.html

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

© 2026 CGWEB NETWORK INFRASTRUCTURE - All rights reserved