

Azerbaijan Fiber Optic Channel



Overview

AzerTelecom company is a backbone internet operator connecting the Republic of Azerbaijan to global network.

Key Takeaways

The Azerbaijan ABS Fiber Optic Channel, part of the Trans-Caspian Fiber Optic Cable, is a high-capacity submarine cable linking Azerbaijan and Kazakhstan, forming a key digital corridor between Europe and Asia.

Overview

The Trans-

Caspian Fiber Optic Cable is a flagship project under Azerbaijan's Digital Silk Way initiative, launched by Neqsol Holding and implemented through its subsidiary AzerTelecom. It aims to establish a direct digital link between Azerbaijan and Central Asia, enhancing regional connectivity and creating a high-speed data corridor between Europe and Asia. The project is designed to transform Azerbaijan into a regional digital hub.

Project Phases and Route

The project consists of two main phases: Azerbaijan-Kazakhstan Route: A submarine fiber-optic cable laid along the Caspian Sea seabed, connecting the Kazakh port city of Aktau to the Azerbaijani city of Sumgayit. Azerbaijan-Turkmenistan Route: A similar subsea cable planned to extend connectivity further across the Caspian Sea. Marine route surveys have been conducted to identify the safest, shortest, and environmentally sustainable path for the cable, including seabed analysis, coastal assessments, and geological fault mapping.

Technical Specifications

Transmission Capacity: Designed for at least 400 terabits per second, supporting cloud services, hyperscale data demands, and emerging AI ecosystems. **Hybrid Subsea-Land Route:** Combines submarine and terrestrial segments to ensure redundancy and reduce reliance on traditional pathways. **Landing Stations:** Strategically located in Sumgayit (Azerbaijan) and Aktau (Kazakhstan) to optimize data flow and regional connectivity.

Strategic Importance

Digital Corridor: Forms a critical part of the Digital Silk Way, linking Europe and Asia and enabling faster, more secure data transmission. **Regional Integration:** Strengthens cooperation between Azerbaijan, Kazakhstan, and potentially Turkmenistan, fostering economic and technological collaboration.

Future-

Ready Infrastructure: Supports AI, cloud computing, and high-speed internet services, positioning Azerbaijan as a regional digital hub.

Current Status

As of 2025–2026, the project has entered the active construction phase, with specialized vessels conducting seabed surveys and installation preparations.

Azer

Telecom and Kazakhtelecom are jointly overseeing the project, with supervision services provided by Pioneer Consulting. The cable is expected to significantly enhance regional digital infrastructure upon completion.

Conclusion

The Azerbaijan AB

S Fiber Optic Channel, through the Trans-Caspian Fiber Optic Cable, represents a strategic, high-capacity digital link that will transform connectivity between Europe and Central Asia, support emerging technologies, and strengthen Azerbaijan's role as a regional digital hub.

Article Content

Peace in fibre optics

The map of internet cables mirrored the map of confrontation. Now, however, a new route is emerging — through Azerbaijan, precisely where any form of infrastructure connectivity would

AzerTelecom

AzerTelecom company is a backbone internet operator connecting the Republic of Azerbaijan to global network. Established in 2008, this advanced telecommunications operator is a subsidiary of the

Digital Silk Way

The project envisages the implementation of big infrastructure projects, laying of terrestrial and subsea fiber optic backbone cables to form a digital corridor between Europe and Asia.

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

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

Azerbaijan's plan to become region's digital hub gains

The ambitious Azerbaijan-Kazakhstan Trans Caspian Fiber Optic (TCFO) project, set to lay a fiber-optic communication line (FOCL) across the

Fiber Optic Coverage Statistics in Azerbaijan (2026)

Comprehensive overview of Azerbaijan's internet landscape in 2026, including fiber optic coverage and usage statistics.

Caspian Region Launches World's First Subsea Fiber Cable

Timeline and Regional Coordination for Trans-Caspian Fiber Optic Cable Line 2026

The project has maintained a rigorous timeline, a testament to the high-level political backing from both Azerbaijan

AzerTelecom

The company has a sustainable and diversified fiber optic cable network covering all major regions and cities in Azerbaijan and connected to global network, including all major international

Azerbaijan's plan to become the digital hub of the region is ...

The primary route of the submarine fiber-optic line, approximately 370 kilometers in length, will extend from Aktau in Kazakhstan to Siyazan in Azerbaijan. Additionally, a secondary optical

Fibre-optic cable laid in Azerbaijan's Garabagh

During 2023, 550 km of fiber optic cables have been laid across Azerbaijan to expand the AzStateNet network created by the State Service for Special Communication and Information Security for reliable

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Home News The Networking Channel Corning unveils suite of next-gen optical tech to connect AI data centers Multicore fiber and CPO offerings on display at OFC 2026 March 18, 2026

Kazakhstan to complete Trans-Caspian Fibre-Optic line

The Trans-Caspian Fibre-Optic (TCFO) line will run from Aktau, Kazakhstan, to Siyazan, Azerbaijan, with an additional reserve channel from

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

The Trans-Caspian fiber-optic cable project has once again come into the spotlight after President Ilham Aliyev reaffirmed Azerbaijan's plans to build the digital corridor linking Europe with

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Azerbaijan to build 100% optical Internet network by end of 2024

According to Report, he said the fiber optic internet network to be built by the end of the year will provide 800,000 people with high-speed internet. By the end of 2024, a 100% optical

How Kazakhstan and Azerbaijan connect Europe and

Kazakh and Azerbaijani telecommunications operators have joined forces to implement an ambitious project: laying a Trans-Caspian fiber-optic

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

