

Iraq Fiber Optic Transmission



Overview

The data transmission takes place using Iraq's recently activated 2,000-kilometer overland fiber-optic line, known as the Civilizations Road Project.

Key Takeaways

Iraq is rapidly expanding its fiber optic network through domestic FTTH projects and international submarine cable links, aiming to modernize digital infrastructure and enhance regional connectivity.

Domestic Fiber Optic Expansion

The Iraqi Ministry of Communications is actively rolling out fiber-to-the-home (FTTH) services nationwide, targeting both urban and rural areas to ensure reliable, high-speed internet access for all citizens. This initiative includes migrating subscribers to electronic systems via the National Data Center and gradually phasing out Wi-Fi subscriptions, which will improve service quality and reduce costs. Private companies like iQ Networks have been instrumental in building Iraq's largest fiber-optic infrastructure, providing high-speed, stable connectivity and supporting last-mile access in regions such as the Kurdistan Region.

International Connectivity



Iraq is also enhancing its role as a regional digital hub through international fiber optic projects. A notable development is the Sixth Marine Cable Unloading Contract at the Al-Fao Marine Unloading Station, linking Iraq to a submarine cable network stretching from Singapore to Europe via Turkey. Additionally, partnerships with companies like Zain Omantel International, Horizon Scope Telecom, and ITPC are creating a digital telecommunications corridor connecting the Middle East to Europe through Iraq, offering alternative terrestrial routes for international data traffic.

Broadband Infrastructure and Challenges

Despite these advancements, Iraq's broadband infrastructure faces challenges. Mobile broadband coverage varies, with 4G availability ranging from 64.4% to 87.4% across operators, and fixed broadband deployment has been slower than expected.

Current internet bandwidth entering Iraq is approximately 111 lambda (1 lambda = 10Gb), while future 4G service requirements are estimated at 500 lambda, highlighting the need for continued fiber expansion. Fiber deployment is critical for supporting 5G mobile broadband, fixed wireless access, and bridging the digital divide, particularly in rural areas.

Economic and Strategic Impact

Expanding fiber optic networks in Iraq is not only a technological upgrade but also an economic and geopolitical strategy. Improved connectivity facilitates digital transformation, supports e-commerce, and attracts foreign investment. By positioning Iraq as a key transit point for international telecom traffic, these projects enhance the country's influence in regional communications and strengthen its digital economy.

Key Players

Q Networks: Leading provider of fiber infrastructure and last-mile connectivity. **Zain Omantel International, Horizon Scope Telecom, ITPC:** Partners in international fiber corridors. **Iraqi Ministry of Communications:** Oversees national FTTH rollout and submarine cable integration.

Iraq's fiber optic initiatives represent a strategic push toward modern, high-speed, and reliable digital infrastructure, supporting both domestic connectivity and international data transit.

Article Content

Iraq turns into international data corridor

The data transmission takes place using Iraq's recently activated 2,000-kilometer overland fiber-optic line, known as the Civilizations Road Project.

Iraq's Digital Ascent: Over 1 Tbps of Internet Transit Now Flows ...

By mid-2025, Iraq quietly crossed a historic threshold: more than 1 terabit per second (Tbps) of terrestrial internet transit is now flowing through its territory.

Iraq-based iQ Group Launches Silk Route Transit Network

Now a leading Iraqi fiber optic provider has launched its own 21 st century version – The Silk Route Transit Network. Based in Sulaymaniyah, Iraq, iQ Group launched the ambitious project in

Silk Route Transit

As a transit hub, Iraq will be able to link all the neighbouring countries to the global fibre optic network and act as the path of least resistance between Europe and Asia, fulfilling a long dream of ours to

Fiber Optic | Iraq Business News

The National Investment Commission (NIC) has hosted a high-level meeting with an Omani delegation to discuss the establishment of advanced international data centres and the transit

Silk Route Transit

iQ Silk Route Transit Network is known as Iraq's first fully secured fibre network, deployed in parallel with the Middle Eastern country's strategic oil pipeline, strictly guarded by Iraqi

Iraq plans fiber-based landline comeback to advance telecom

The FTTH initiative, launched by the Ministry of Communications in partnership with private-sector firms, aims to upgrade Iraq's telecom infrastructure, bolster internet connectivity, and

Iraq positions as a digital landscape and gateway with new

This fiber optic cable, expected to be completed in 2027, will provide ultra-high capacity (24 pairs of fibers, up to 720Tbps) and low latency connectivity, connecting Iraq with Gulf countries including

Iraq 5G and Fibre: Telecoms Investment Opportunities

At the heart of Iraq's telecoms development is the expansion of its fibre-optic infrastructure. Projects such as the Silk Route Transit Network are establishing domestic and

Engineers enable quantum communication over existing fiber optic

Engineers enable quantum communication over existing fiber optic cables — new research shows data transmission using quantum teleportation is possible in parallel with a classical

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Fiber Optic In Iran Fiber Optic In Iran have become a standard and reliable solution for internet connectivity in the recent years. Although the implementation of this

Advantages and Disadvantages of Fibre Optic Cable

Medical Imaging: Optical fibers are used in medical along side endoscopes and scientific lasers for diagnostic imaging and surgical approaches. Advantages of Fibre Optic Cable Bandwidth

YOFC Achieved World's First 1.2Tb/s Per-Wavelength Transmission ...

On June 16, Yangtze Optical Fibre and Cable Joint Stock Limited Company (YOFC) announced the successful completion of the world's first field-trial hollow-core fiber (HCF) wavelength

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Iraq Expands Fiber Network and Signs Sixth Submarine

Together, these initiatives—domestic fiber expansion and international submarine connectivity—reflect the ministry's commitment to

Iraq Expands Fiber Network and Signs Sixth Submarine Cable Deal

Iraq boosts FTTH and signs sixth submarine cable deal, cutting costs and positioning itself as a regional internet hub.

Iraq boosts global data access with Fibre in Gulf subsea

The Landing Party Agreement will enable the installation of the Fibre in Gulf (FIG) subsea cable in Iraq, significantly enhancing the nation's digital

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