

# INFORMATION TECHNOLOGY

Kazakhtelecom provides its clients with a wide range of infocommunication services essential for digital business-from physical placement of customer equipment in data centers and virtual infrastructure to SaaS services for information security, website development, conferencing, and more.

21.45

## **KZT** billion

revenue from Kazakhtelecom JSC's products and projects based on data center infrastructure<sup>3</sup>

19.94

#### **KZT** billion

ICT revenue for the full year 2024<sup>4</sup>

2024 marked another successful stage in the development of the ICT segment for Kazakhtelecom JSC. The Information Technology Division (ITD) continued to improve both internal and customer-facing processes, with a focus on cloud solutions development, data management, and infrastructure modernization. The stable demand for commercial data center and cloud services confirms their relevance among the company's clients.

One of the key areas of development in 2024 was the modernization of data center infrastructure, including the expansion of the bunker-type data center in the city of Akkol, the development of a cloud services portfolio, and the active implementation of big data solutions. These measures contribute not only to improving service quality but also to strengthening the company's position in the ICT solutions market.



### DEVELOPMENT OF THE DATA CENTER NETWORK

In 2024, the IT Division maintained its leadership in the Kazakhstani data center and cloud services market. The company operates a network of 23 data centers with more than 1,600 rack spaces (65,000 units).

One of the key achievements was the completion of a new sealed area at the bunker-type data center in Akkol, located 120 km from the capital. This is the company's largest project, implemented in compliance with TIER II standards and incorporating elements of TIER III. The center ensures a high level of data protection thanks to the N+1 redundancy system, which guarantees uninterrupted operation even in the event of individual component failures.

The data center in Akkol was selected for the implementation of the new project due to its unique location and technical characteristics. As an underground bunker-type facility, it provides additional protection from external factors, including dynamic loads and electromagnetic interference, meeting the most stringent customer

requirements. This makes the site optimal for hosting critical IT resources and ensures a high level of reliability.

In 2025, Kazakhtelecom JSC plans to begin construction of a new TIER III data center in the city of Astana, which will become one of the company's largest facilities. The data center will have a capacity of 250 racks, 25 of which will be allocated for artificial intelligence projects. The project aims to meet the growing demand for data center services in the capital and to provide businesses with highly reliable infrastructure for data storage and processing.

During 2024, the company upgraded the engineering infrastructure of existing data centers, including power supply, cooling, and security systems. New uninterruptible power supplies (UPS) were commissioned at data centers in Almaty and Astana, enhancing the resilience of critical facilities. In 2025, the company plans to continue updating engineering systems, including replacing batteries at key data centers.

23

#### data centers

in major cities and regional centers of the Republic of Kazakhstan

1,600

racks in data centers

<sup>&</sup>lt;sup>3</sup> The reporting data covers exclusively Kazakhtelecom JSC.

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### **DEVELOPMENT OF CLOUD SERVICES**

In terms of cloud services development and portfolio expansion, the ITD is advancing its proprietary virtual resource infrastructure and infrastructure solutions based on its own data centers, as well as through partnerships. As part of this effort, in 2024 the ITD, together with Smart Cities LLP (a member of the BTS Digital group), launched an IaaS and PaaS platform with self-service capabilities on the ismet.kz platform. Four Kazakhstan-developed cloud services were launched, fully implemented on the telecom operator's own infrastructure. These services aim to simplify data management, reduce IT resource costs, and decrease dependency on foreign providers for domestic companies and government institutions.

Currently, customers of the telecom operator can purchase four cloud services on the ismet.kz portal: "Compute Cloud," "S3 Object Storage," "Kubernetes," and "Database as a Service." Additionally, the platform offers hourly billing, allowing clients to scale their projects and pay only for the time during which the systems are actually in use.

In 2025, the product range is expected to expand further, alongside increased capacity at Kazakhtelecom's data center resources, enabling a higher level of service for businesses and government entities.

#### **INFORMATION SECURITY**

In 2024, the ITD implemented a number of key initiatives aimed at enhancing information security and increasing the reliability of the corporate infrastructure. One of the most significant achievements was the launch of a fully functional Security Operations Center (SOC), which operates on a 24/7 basis.

As part of a large-scale transition to the Zero Trust model, the second stage was completed in 2024, involving the deployment of modern software and hardware information security tools. This significantly strengthened the company's resilience to cyber threats and ensured the protection of critical business processes.

In 2025, the ITD plans to implement the third stage of the information security system modernization. In addition, an external audit is planned to assess compliance with the international ISO 27001 standard. This audit will confirm the high level of maturity of the company's cybersecurity processes and its alignment with global cybersecurity requirements.

Also in 2025, a set of initiatives aimed at improving employee cyber hygiene is planned, with a focus on minimizing human factor risks and fostering a culture of safe behavior in the digital environment.



