SPACE AGENCY OF THE REPUBLIC OF AZERBAIJAN



ANNUAL REPORT



SPACE AGENCY OF THE REPUBLIC OF AZERBAIJAN









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Of course, we are buying new technologies, and we are providing great support for technological development, but one of the important issues here is personnel training. I can say that there has been a great development in this direction in the last year or two.

Ilham Aliyev President of the Republic of Azerbaijan Quote from the Inauguration Speech, 2024 M azercosmos

Azerbaijan's Space Strategy 2030

To outline the development prospects of the space sector in the Republic of Azerbaijan for the years 2024–2030, as well as to define the goals, objectives, and priority areas of the national space program, Azerbaijan's Space Strategy has been developed.

The main objective of the strategy is to implement a sustainable space program that supports the socio-economic development of the Republic of Azerbaijan by the year 2030. The key priority areas of the Space Strategy include:

Ensuring the sustainability of existing satellite services

Forming local manufacturing potential within the space industry, creating jobs and employment opportunities

Providing support for ensuring the interests and security of the Republic of Azerbaijan

Expanding the scientific research in space and development of human capital

Supporting start-ups and innovative SMEs within the space field

Strategic Development Plan

Azercosmos has developed a new Strategic Development Plan (SDP) for the years 2025–2027. This plan outlines the development prospects of the space sector over the next three years and defines the agency's goals, objectives, and priority areas for 2025–2027.

Our 4 strategic goals for 2025-2027 are as follows:

- 1) Ensure sustainable growth in space economy
- 2) Protect national interests through advanced technologies
- 3) Space Ecosystem Development
- 4) Strengthening Azerbaijan's international standing as a space country

In line with our 2022-2024 Strategic Development Plan, we implemented **16 projects and 14 activities**, achieving 89% completion overall.



SPACE AGENCY OF THE REPUBLIC OF AZERBAIJAN

About Us



Driver of Azerbaijan's Modern Space Ecosystem: Azercosmos

The Space Agency of the Republic of Azerbaijan – Azercosmos – is the founder of Azerbaijan's modern space ecosystem. Azercosmos began operations in 2010. It provides satellite-based telecommunications and Earth observation services and solutions, as well as its own space-related intellectual products, to more than **200 partners** across **Europe, Africa, the Middle East, and Central Asia**. Azercosmos prioritizes expanding the global reach of its telecommunications services, contributing to the development of human capital, strengthening its role as a regional space hub, and advancing the growth of the space industry in Azerbaijan.

The Board of Azercosmos



Dunay Badirkhanov Chair of the Board (a/g)



Fuad Aslanov Vice-Chairman of the Board

SPACE AGENCY OF THE REPUBLIC OF AZERBAIJAN

Mission, Vision, and Values

Mission

To provide advanced technological solutions for peace and prosperity and to maintain sustainable development



Vision

To establish Azerbaijan as one of the driving forces of the global space industry



Values

Our corporate values are the core principles that underpin our operations. As one of the country's leading institutions, we operate in line with our Strategic Development Plan and apply the latest innovations in corporate governance.



Our values are not just a set of rules, but tools we actively apply in practice. These values include **diligence, collaboration, integrity, curiosity, and agility.**





Collaboration



Integrity





Our Team

Azercosmos employs a workforce of over **200** professionals. Our team consists of young and experienced local specialists, many of whom are graduates of top universities in Azerbaijan and abroad.

30% of our employees have completed their undergraduate or graduate education in countries such as **Türkiye**, **Russia**, **Hungary**, **the United Kingdom**, **France**, **the United States**, **and Italy**. Azercosmos places special emphasis on gender equality and the integration of women into the space sector. Currently, 32% of our staff are women.



A continuous training program is in place to ensure our employees receive instruction from international experts.

Azercosmos team members also share their knowledge and expertise with developing countries that are emerging in the space industry. For several years now, Azercosmos has implemented a structured approach to identifying, developing, and retaining talented personnel. This includes an internal mentorship



program, the "Buddy" program for new hires, the implementation of an "Individual Development Plan" procedure for employees, and training initiatives for both leadership and staff.

Azercosmos specialists undergo training in a wide range of topics, including "Corporate Leadership Development", "Spectrum Management", "Project Management", "Business Continuity Management Systems", "Satellite Communications", "Earth Observation Solutions", and others.

Training and Development Activities in 2024



2024 Internal Training Statistics



2024 External Training Statistics

130 training sessions held online	26 training sessions held offline	Covered 52 technical topics	Total of 302 participants	35 books distributed	
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Our Services

Telecommunications

In 2024, the live broadcast market, especially in the African region, saw the highest volume of sports broadcasts over the past five years via Azerspace-1 and Azerspace-2 satellites. Among the events transmitted through our satellites were the "Africa Cup of Nations", "FIFA World Cup", "NBA Africa", "Idols Show", "Love Island Show Africa (LISA)", "Big Brother Show", the Uganda Football Championship, and African Cricket the South and Rugby Championships.

We also broadcast one of the largest religious events in the Middle East-the **Arbaeen Walk**.

The volume of services provided by Azercosmos to mobile operators doubled. Pakistan's largest mobile operator, **Telenor**, began receiving full service via Azerspace-1. **Tajikistan's Zet Mobile operator started using Azerspace-2**.

Satellite Internet

In 2024, Azercosmos provided internet data services to Ethiopia for the first time and also supplied internet connectivity to the Spanish Embassy in the Middle East. Azercosmos began cooperation with Botswana's Civil Aviation Authority in Southern Africa. The provision of satellite data services to Botswana via the C-band of the **Azerspace-1** satellite's African beam was carried out for the first time.

Using the Azerspace-2 satellite, we provided data services to our country's military institutions. Revenues in this area have doubled compared to the last five years. 2024 ANNUAL REPORT



200 TV and Radio Channels

200+ Local and International Partners

> 50+ Countries Served

100+ million

Users

80%

Utilization of Satellite Resources



of Revenue Generated from Exports Azercosmos partnered with the well-known satellite operator **ABS**, delivering Pay TV services to its customers in Nigeria via the **ABS-3A** satellite. This partnership has helped Azercosmos expand its reselling business lines significantly.

In South Sudan, the volume of our internet services more than doubled compared to the previous year.

AnewZ TV, Azerbaijan's new English-language television channel, is now broadcasting via the Azerspace-1 satellite.

This year, our telecommunications services in the defense sector have expanded significantly.

In our teleport services, the global company **Leaf Space (Italy)** used our hosting services for the second time.

Starting this year, Azercosmos has further expanded its cooperation with China. We have begun partnerships with Chinese technology companies such as **"Starvision"**, **"Rhosoon"**, and **"China Siwei"**. The scope of our communication services, satellite data, and artificial intelligence solutions will continue to grow.

Leaf Space's antenna at the Baku Teleport

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Earth Observation Services

Azercosmos achieved a record performance in Earth observation over the past 10 years. In 2024, we established collaborations with a contract value totaling **10 million USD** in this sector. We signed **42 commercial contracts** for Earth observation services, with 70% of these being international agreements. The remaining **30%** are contracts with government agencies such as the State Property Issues Service, SOCAR, Ministry of Economy, Ministry of Agriculture, State Tourism Agency, and Ministry of Ecology and Natural Resources.



For the first time, Azercosmos delivered strong results in large-scale, state-important tenders. We will provide our own GIS solutions in state projects such as the National Water Strategy, the "National Spatial Data" information system, and the development of the "Digital Ecology" information system.

Last year, Azercosmos' GIS Center launched a digital climate platform (Climate Report) for assessing the impact of global climate change in Azerbaijan, which was presented to the public.

Our GIS Center has implemented over **100 projects** by digitalizing satellite services and expanding the use of satellite solutions. These projects include agriculture, ecology, environmental monitoring, geological exploration, and the country's orthophoto mapping initiatives.

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SPACE AGENCY OF THE REPUBLIC OF AZERBAIJAN

Our Activities at the COP29 Event



COP29 Baku Azerbaijan

As Azercosmos, we contributed to the United Nations Framework Convention on Climate Change Conference of the Parties **(COP29)**.

We hosted the **World Space Leaders Summit** during COP29 and signed the **"International Pledge for Space-Based Climate Action – COP29 Impact and Output"** endorsed by over 20 space agencies.

At the same time, Azercosmos organized panel sessions within the COP29 framework, co-hosted an event with the United Nations, and participated in the international symposium of the Islamic World Educational, Scientific and Cultural Organization (ICESCO).

We presented our space-based climate solutions to Small Island Developing States and other vulnerable member countries of the United Nations.

Projects addressing drought, agriculture, and forest monitoring have been implemented in Tonga and Papua New Guinea.

As the next step, we plan to offer our training programs to these countries.



International Cooperation

In 2024, Azercosmos was successfully represented with impactful booths at major international customer events such as CABSAT (Dubai), IBC (Amsterdam), AfricaCom, and IAC (Milan).



Additionally, cooperation meetings with foreign space agencies were held during key events, including the **Space Technologies Conference** in Ankara, the **5th Summit of Leaders in Space Economy** in Brazil, and the **United Nations Framework Convention on Climate Change Conference of the Parties (COP)** held in Baku. In 2024, Azercosmos expanded its partnerships with Türkiye's **Plan-S** and **Impro** companies, Uzbekistan's **Uzbekkosmos**, global GIS provider **ESRI**, global communications company **Viasat**, Chinese companies **Rhosoon**, **Star.vision**, and **StarWin**, Czech company **PEKASAT SE**, global satellite operator **ABS**, and Italy's

Leaf Space.



















Our partnership geography



Space Ecosystem

In Azerbaijan, a series of activities are being carried out to develop science, research, innovation, project management, space law, and space business mindset in the space sector. Thousands of young people have supported the strengthening of the national space ecosystem in Azerbaijan through these initiatives.

For the third consecutive year, Azercosmos has organized **World Space Week** in Azerbaijan from October 4 to 10. In 2024, more than 20 events were held during this week to encourage youth interest in the space sector, raise awareness, and foster an innovative space ecosystem.

The main theme of World Space Week 2024 was "Space and Climate Change."



Educational Activities

In our country, the **"Earth Observation Competition"** promoting the use of satellite imagery was held once again. This competition has been organized by Azercosmos for the eighth time. Its main goal is to make satellite imagery, especially archival images from the Azersky satellite, more accessible and to support the development of projects using satellite data within the country. In 2024, the competition received **382 applications**, of which **255 topics** were approved, leading to the submission of **78 projects**. Among these, **52 projects** met the competition criteria and advanced to the finals, and **3 winners** were selected. For the first time in Azerbaijan, a training program on the **"Essentials in Space Medicine"** was held. This international program, jointly organized by Azercosmos and the **Islamic World Educational, Scientific and Cultural Organization (ICESCO)**, took place from December 19 to 21.



The rich three-day training covered core topics such as space medicine fundamentals, adaptation to microgravity, medical monitoring in space, telemedicine, psychological approaches, cardiovascular adaptation, skeletal systems, muscle and bone structure, vision changes, neurological changes, and other related fields.

The program aims to train local professional specialists in space medicine. This training will pave the way for Azerbaijan's first space medicine professionals and become an important part of the country's space ecosystem.

Baku-2024

SG[Azerbaijan]

Human Capital Development

In Baku, the "Space Generation Azerbaijan 2024" (SG Azerbaijan) event was held, organized by Azercosmos, the Space Generation Advisory Council (SGAC), the Youth Foundation (AzGF), and the Public Association for Supporting Youth Education. Now in its second year, the event was dedicated to the theme "Beyond Horizons: Sustainable Space, Sustainable Earth."

From April 16 to 25, Azercosmos employees participated in the ADA University initiative, "Employability Week." Our staff delivered presentations to ADA University students on topics such as "The Role of Emotional Intelligence," "Mastering Interview Skills," "Personal Branding and Digital Networking," and other personal development themes aimed at enhancing modern skills and knowledge.

As a result of this project, Azercosmos accepted 10 students into an internship program at the agency.

> Üfüqləri aşaraq: Dayanıqlı Kosmos Dayanıqlı Yer

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Within the framework of a partnership between the Space Commerce Institute the first-ever and Azercosmos, three-month mentorship program titled "Women in Space" was held in Azerbaijan from March to May. The program's goal was to help women unlock their full potential in the space sector and support their participation in global collaborations.



Export of Intellectual Products

Azercosmos commercializes not only satellite services but also the knowledge and expertise it has gained in the international space market.

For example, Azercosmos offered its intellectual product – a training and consulting program on **spectrum management** – to the **Telecommunications Regulatory Authority** of the Kingdom of Bahrain.

The 10-day program held in Manama, Bahrain's capital, covered topics such as spectrum management methods, preparation of applications for registration of satellite and ground stations, analysis and mitigation of interference between satellite networks, as well as relevant international laws and regulations in this field.



Azercosmos also delivered its intellectual product to representatives of **The National Institute of Communications of Mozambique.**

Within the training program, Mozambican representatives received foundational technical knowledge on spectrum management, including procedures for assigning unique orbital positions for each country and preparing corresponding applications for satellite and ground stations.

This training program is offered to developing countries in Africa, Central Asia, and the Middle East in the space sector.



SPACE Academy



As the leading force of Azerbaijan's national space ecosystem, Azercosmos has implemented numerous significant projects over the past 10 years in education, science, training, and awareness. The goal has been to strengthen our country's position in space technologies and develop human capital in the space sector.

To carry out these objectives in a more structured and organized manner, the **SPACE Academy** was established. The Academy aims to increase Azerbaijani youth's interest in space and high technologies and prepare them for future technological advancements.

SPACE Academy plays a unique role as a regional space hub, serving not only Azerbaijan but also neighboring countries and Central Asia. The Academy's primary focus is on enhancing youth education and practical experience in the space sector. By combining Azercosmos' local and international expertise, SPACE Academy aims to train specialists for future generations in this field.

Among the Academy's projects are the **Azerbaijan National Satellite Innovation Competition**, the **International Space Olympics** in partnership with the Israeli Space Agency, the **International Space Poster Competition** in collaboration with the Asia-Pacific Regional Space Agency Forum (APRSAF), **Space Camp Türkiye**, and an internship exchange program in cooperation with the **Mohammed Bin Rashid Space Centre (MBRSC)** of the United Arab Emirates, among other initiatives.

MBRSC Internship Exchange Program





International Astronautical Congress





International Space Olympics



International Space Poster Competition







SPACE AGENCY OF THE REPUBLIC OF AZERBAIJAN

Azercosmos on global media focus

Throughout 2024, news about Azercosmos' activities has attracted significant attention from both local and international media. Media tours, briefings, and networking events with international media partners were organized with the participation of local journalists. In a joint initiative with the Media Development Agency, a meeting on the topic **"Climate Change and Space"** was held for media representatives. The meeting, held around National Press and Journalism Day, aimed to raise awareness among journalists about how space technologies are used to combat climate change.





The Euronews channel interviewed Natavan Hasanova, Director of the Strategy and Business Development Department at Azercosmos, focusing on the role of women in space and their participation in this sector.

euronews.



NE Global Media's Digital Press Platform **Coverage of Azerbaijan's Space Perspective**

A comprehensive article titled "Azerbaijan's Space Shot: Satellites Tracking Climate Change Clues" was published. The article discussed the World Space Leaders Summit held within the framework of COP29.















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Azerbaijan's Space Shot: Satellites

Tracking Climate

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COP29 Baku zerbaijan

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Future Activity Priorities

Our New Strategic Projects

Azercosmos is currently working on new satellite projects to ensure the continuity of the country's space program. Work continues on the **Azerspace-3** project, launched last year, which aims to replace our first telecommunications satellite, **Azerspace-1**, in 2028-2029. International consultants have been involved to develop a project focused on more advanced and technological solutions.

Our new satellite program in the Earth observation sector is also ongoing. The **Azersky-2** project, which will include at least two low Earth orbit satellites (**Azersky-2A** and **Azersky-2B**), will expand our capabilities in Earth observation services.

We have completed the design and planning phase for establishing the **Spacecraft Development Center**, a satellite manufacturing facility, which will also support the personnel involved in production.

Additionally, for the first time in Azercosmos' history, we established a subsidiary company, **Spacecraft Development and Production LLC**, dedicated to satellite manufacturing projects. This LLC will facilitate the implementation of our spacecraft production initiatives more efficiently.





(The satellite is under development)

Azersky-2 program



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Sustainable Development

The space sector significantly contributes to the achievement of several key goals that the international community has agreed upon in the pursuit of sustainable development. The Sustainable Development Goals (SDGs) report shows that satellite Earth observation has already proven effective globally in areas such as food and agriculture, healthcare applications, access to telecommunications, disaster risk reduction, humanitarian crises, natural resource and environmental management, and poverty alleviation. Therefore, cooperation toward achieving the SDGs provides an essential framework for the advancement of space activities.

Azercosmos has launched partnerships aimed at strengthening climate-related efforts with **developing Small Island States and other vulnerable member countries** of the **Commonwealth of Nations.** A comprehensive program has been developed by Azercosmos to support these nations in conducting analysis and assessing activities related to climate change using satellite technologies and geospatial data.

Under this program, the following activities will be carried out in Commonwealth member countries, particularly in the Caribbean region and Pacific island territories:

- Monitoring drought levels and assessing drought risk using satellite imagery
- Classification of agricultural lands
- Comprehensive forest monitoring
- Monitoring methane (CH₄) concentration from space

Through these initiatives aligned with the **Sustainable Development Goals**, Azercosmos contributes to global well-being by leveraging space-based technologies. Our Earth observation services not only provide satellite imagery for any point on the globe but also enable the collection of vast archived data. By processing these satellite images using artificial intelligence, we detect objects and identify changes with precision.







Conclusion

The Space Agency of Azerbaijan – **Azercosmos** – is committed to keeping both local and international communities informed about its operations and activities. The Agency ensures transparency in all the information it shares. In line with this commitment, Azercosmos has been publishing its activities and achievements in the form of an **Annual Report** for the past four years, providing a comprehensive overview of its work and strategic direction. SPACE AGENCY OF THE REPUBLIC OF AZERBAIJAN



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