

# TRANSPORT AND LOGISTICS

## Development of passenger transport



FOUNDED IN 2002, AIR ASTANA JSC (HEREINAFTER — AIR ASTANA, THE GROUP) IS THE LARGEST AIRLINE IN KAZAKHSTAN IN TERMS OF REVENUE AND FLEET SIZE.

In 2023, the Board of Directors approved the issuance of a separate Air Operator Certificate (AOC) for FlyArystan and in September made a number of decisions regarding its future: FlyArystan became a separate legal entity, wholly owned by Air Astana, and was renamed FlyArystan JSC.

Thus, by the end of 2023, the Group operated flights on 91 routes, providing regular, direct, and transit, short-haul and long-haul air transportation on domestic, regional, and international routes. The Group offers a network of route connections in growing markets to capitalize on the increasing mobility levels in Kazakhstan and neighboring countries. By the end of 2023, the Group operated 49 aircraft, serving 91 domestic and international routes across 43 destinations.

### KEY PERFORMANCE RESULTS FOR 2023

Indicator	2022	2023
<b>Production indicators:</b>		
Passenger traffic, million	7.4	8.1
Aircraft load factor, %	83	83
On-time flight performance indicator, %	74	79
<b>Financial indicators, KZT billion:</b>		
Revenue	478.0	535.2
Dividends	7.5	0
Net profit	37.6	30.7
Operating income	70.1	61.3
<b>Sustainability indicators:</b>		
GHG emission intensity (tons of CO <sub>2</sub> per seat-kilometer)	0.064	0.063
Volume of disposed waste, tons	8.15	11.79
Accidents	17	29
Fatal accidents	0	0

By the end of 2023, the Group operated

**49**

aircraft



### MARKET OVERVIEW

#### AIR TRANSPORTATION OF PASSENGERS AND CARGO IS CLOSELY LINKED TO GLOBAL ECONOMIC DEVELOPMENT.

In 2023, the international air transport network recovered to

**89.5%**

Recent restrictions on flights to and from Russia have had a negative impact, but the opening of the market in China has already shown positive effects. In 2023, the international air transport network recovered to 89.5% of its pre-pandemic level, and domestic transport to 97.5%, which is 12 percentage points higher than in 2022<sup>18</sup>. The situation is expected to continue improving in 2024.

Leisure travel is more closely tied to seasonality, particularly evident in Europe, which was unprepared for the huge number of passengers wanting to fly in the summer of 2023. In 2019, a 50% increase in demand was anticipated for the vacation season. The increase to 65% in 2023 led to delays and dissatisfaction among both passengers and staff. However, in North America, the impact was not as severe, as flights to resort destinations at short distances are operated year-round.

The solution to this problem should be flexibility and adaptation to increased seasonal fluctuations. Some airlines have already taken steps to shift crew training and annual employee vacations to off-peak periods. Maintenance programs have been adjusted accordingly. Wider use of automated processes, such as self-service passenger check-in, helps to reduce the load. On the other hand, identifying and increasing the number of destinations for beach holidays in winter, as well as seeking commercial and international contracts from the MICE category (meetings, incentives, conferences, and exhibitions), can increase revenues during low-demand periods.

<sup>18</sup> Source: Global Outlook for Air Transport, IATA, December 2023.

## KAZAKHSTAN AVIATION MARKET

Kazakhstan has 20 airports, 18 of which are open for international commercial flights. The airports are either state or privately owned, except for the Aktobe International Airport, which is owned by a public-private partnership.

According to the Aviation Administration of Kazakhstan (AAK), the civil aircraft registry of Kazakhstan has 920 units, 17% of which are airliners.

The number of Kazakhstani operators registered with AAK is 53 in 2023. Air Astana is one of seven airlines allowed to fly to EU countries. The other operators are Comlux, Prime Aviation, FlyJet.kz, KazAirJet, Jupiter Jet and SCAT. Six airlines operate domestic flights: Air Astana, FlyArystan, SCAT, Qazaq Air, Southern Sky and Zhetysu.

Kazakhstan continued to develop its air transport capabilities in 2023. The Civil Aviation Committee is reforming its sector, intending

to adopt the European management model within 2-3 years. As part of this effort, AAK is responsible for the regulatory oversight functions of the industry, improving efficiency, and preventing corruption.

The Government of Kazakhstan intends to increase the number of international flights and continues to implement the open sky policy to attract new foreign carriers. Specifically, flights to Doha (Qatar), Ankara (Turkey), Medina (Saudi Arabia), Baku (Azerbaijan), and Dushanbe (Tajikistan) were added in the spring and summer. Additionally, the number of flights from Astana, Almaty, Aktobe, Turkistan, and Atyrau to Istanbul will be increased, as well as from Astana and Almaty to Antalya, and from Almaty to Baku, Tbilisi, Phuket, and Malé.

Air Astana launched flights to Tel Aviv twice a week in September 2023, but was forced to discontinue them a month after opening due to the conflict in the region.

## DOMESTIC MARKET

The launch of FlyArystan has had a significant impact on Kazakhstan's domestic market (before, during, and after the pandemic) and has contributed to the rapid recovery of the overall air transport market. Today, Kazakhstan's market is the fastest-growing domestic market in the world.

Over the past five years, FlyArystan has driven the majority of domestic transport growth, accounting for 37% of domestic flights in Kazakhstan in 2023. Together with Air Astana's 30% share, the Group represents 67% of the entire domestic market.

Since the inception of FlyArystan, both of Kazakhstan's major airports—in Almaty (the largest airport) and Astana—have seen an increase in domestic passengers, totaling about 70%. While Astana Airport accounted for about 5% of this volume, the number of domestic passengers at Almaty Airport grew from 2.8 million in 2018 to more than 5 million in 2023.

## TRUCKING. GLOBAL OVERVIEW

### THE GLOBAL DECLINE IN DEMAND FOR CARGO AIR TRANSPORT, WHICH BEGAN IN 2022, CONTINUED FOR MOST OF 2023.

The overall cargo capacity, measured in available ton-kilometers, increased by

# 11.3%

The problems remained largely the same: a downturn in the global economy and trade, the geopolitical situation worldwide, persistently high inflation in key markets, and increased global oil prices. Tensions in the Red Sea region added to these issues in the fourth quarter, the full impact of which has yet to manifest.

One of the latest effects of the pandemic in 2023 was the gradual discontinuation of passenger aircraft temporarily converted for cargo transport (so-called "freighters"), as they were reconfigured and returned to regular passenger service. Global cargo capacity significantly increased over the past two years as international passenger flights resumed and schedules expanded exponentially, opening opportunities for cargo transport in the belly-hold of passenger aircraft. The overall cargo capacity, measured in available ton-kilometers (hereinafter — ATKs), increased by 11.3% compared to 2022 and grew by 2.5% compared to pre-pandemic levels. Belly cargo in passenger aircraft accounted for 49% of the ATKs, a significant increase from 20% in 2020. This mode of transport continues to capture market share from dedicated freighter aircraft.

This substantial increase in belly-hold capacity negatively impacted cargo load factors (CLFs), affecting cargo revenues and airline profitability. Decreasing throughout the year, the global average CLF ended the year at 44%, although it reached 49.9% on international routes, 0.8% higher than in 2019. As an indicator of the balance between supply and demand in the industry, it is expected to stabilize after the normalization of passenger and cargo volumes to pre-pandemic levels.

Air Astana Group's cargo turnover growth in 2023 primarily occurred on routes from China, Korea, and the UAE to Kazakhstan. The growth matched the increase in capacities deployed in 2023. Cargo volumes from Turkey were affected by the slowdown in economic growth and the limited cargo capacity of narrow-body aircraft.

## AIRCRAFT FLEET

### AIR ASTANA'S PLANS FOR FUTURE CAPACITY AND PASSENGER COMFORT ARE CLOSELY LINKED TO THE EXPANSION AND SIMPLIFICATION OF A FUEL-EFFICIENT AND ENVIRONMENTALLY FRIENDLY AIRCRAFT FLEET, ADDRESSING ALL THREE STRATEGIC DIRECTIONS: GROWTH, EFFICIENCY, AND HIGH STANDARDS.

In 2023, the Group acquired the latest aircraft, an Airbus A321LR in October and an Airbus A320neo in November. As of December 31, 2023, the Group's aircraft fleet increased to 49 aircraft (43 in 2022), including 41 narrow-body Airbus A320 family aircraft, 5 narrow-body Embraer E190-E2 aircraft, and 3 wide-body Boeing 767 aircraft (under a single Air Operator Certificate (AOC), 31 aircraft are operated by Air Astana and 18 by FlyArystan).

The new, more modern, and eco-friendly aircraft reduce operational costs and environmental impact. For example, the Airbus A320neo family can provide up to 20% reduction in fuel consumption, a 20% reduction in noise levels compared to the previous generation A320ceo aircraft. Considering the fleet additions in recent years and in 2023, the average age of the Group's operating fleet is now 5.3 years.

Taking into account the planned returns and further acquisition of aircraft, the Group plans to increase its fleet to 80 aircraft by the end of 2028, with Air Astana operating 46 aircraft and FlyArystan operating 34 aircraft. To achieve this goal, an additional delivery of 48 aircraft is required from 2024 to 2028, for which 22 operational lease agreements have already been concluded by 2026: 19 Airbus aircraft (11 A320neo and eight A321neo) and three Boeing 787-9 Dreamliners.

## MAINTENANCE AND REPAIR

The Department of Engineering Provision and Technical Maintenance (EPTM) of Air Astana has approximately 900 employees who work at the airports in Almaty and Astana, as well as at the line maintenance stations in Atyrau, Aktobe, and Shymkent. The EPTM Department is responsible for all maintenance work, technical services, aircraft acceptance/return, support for repair shops, sales of engineering consulting services, and cabin cleaning for the entire Air Astana aircraft fleet. It also prepares engineering and technical specialists (FlyArystan delegates all its engineering support and maintenance work to Air Astana).

The EPTM Department holds an AAK certificate and an EASA Part 145 certificate, which authorize it to perform line and base maintenance of its aircraft. Based on other certificates from the National Aviation Administration and an approved EASA Part 145 certificate, Air Astana also provides maintenance services to more than 22 other international and domestic airlines, including Asiana, DHL, Air Arabia, VietJet, Jazeera Airways, Lufthansa, Qatar Airways, Wizz Air, Fly Dubai, Air China, and Turkish Airlines, as well as Qazaq Air and SCAT Airlines. Additionally, the Training Academy conducts maintenance training on Air-

bus A320 family aircraft with various engine configurations in the Air Astana and FlyArystan fleets in accordance with the approved EASA Part 147 certificate.

The simplification of the Group's aircraft fleet has created opportunities for efficient planned and unplanned maintenance without the need for external contractors. Since 2019, Air Astana has become the first airline in Kazakhstan capable of independently performing complex maintenance on the Airbus A320 family of aircraft, such as C1-check and C2-check, at its engineering bases in Almaty and Astana. After successfully completing the first six-year C-check maintenance at the end of 2023, Air Astana performs all C-checks on Airbus A320 family aircraft, including those owned by FlyArystan. The six-year maintenance is very complex: it took over 20 days and required 7,800 man-hours of work by highly qualified mechanics and engineers with international EASA Part 66 certificates and licenses, including specialists trained through the Air Astana aviation technicians' training program. The airline was authorized to perform this type of work at the beginning of 2023 following an international EASA audit. According to the Group's estimates, the ability to conduct

C-check maintenance in-house is expected to lead to annual savings of approximately USD 3.0 million and has already reduced aircraft ground time by 14-18%.

The Group plans to expand its maintenance capabilities in line with the expected expansion of its aircraft fleet. This will require enlarging the existing hangar at the Astana airport and constructing a larger hangar at the Almaty airport to simultaneously accommodate two Boeing 787s or five Airbus A320s. As the Group gains experience in conducting C-check maintenance, it intends to offer C-check inspections to other aircraft operators by 2025.



SINCE 2008, THE GROUP HAS BEEN RUNNING THE PILOT AB-INITIO CADET PROGRAM TO MEET THE DEMAND FOR LOCAL QUALIFIED PILOTS.

AIR ASTANA TRAINING ACADEMY

The Air Astana Training Academy, located in Almaty, was established with the aim of creating a center of expertise dedicated to training Group personnel, developing operational and personal skills of employees, and providing services to external customers from the aviation industry in CIS countries. It is the only training center in Kazakhstan certified under EASA Part 147, where both theoretical and practical training according to Part 147/145 standards is conducted, in collaboration with the Flight Training Center (see below).

The Training Academy ensures all aspects of operational training:

- ◆ The Training Academy offers approximately 79 programs in engineering support, ground handling, and onboard services based on international standards (ICAO, IATA, and EASA 147/145), accredited by AAK and thus also available to external organizations.
- ◆ The new Flight Training Center, located at the Astana airport, was commissioned in 2023 and enables training on the L3 Harris Reality Seven A320 full-flight simulator. It is the first of its kind in Kazakhstan and is designed for 7,000 hours of training per year, which, according to the Group's estimates, will reduce pilot travel time to external training centers by about 25%, equating to more than 1,000 person-days. Procedural training is also conducted on Aerosim fixed-base simulators, supported by the flight simulator. The Group plans to acquire a second full-flight simulator in 2025.
- ◆ Advanced onboard safety training at the Training Academy means that the Group will not engage external providers for initial or triennial crew training for its Airbus fleet. It is estimated that using the emergency cabin escape simulator provided by Skyart and the realistic fire training simulator provided by Flame Aviation for the A320 family of aircraft instead of sending pilots and crew members to Germany and Turkey for training will provide significant savings. The Group also intends to offer safety and emergency response training to other airlines in Kazakhstan in the future.

- ◆ A regular internal leadership course for captains, "Leadership for Flight Commanders", launched in 2020 as part of the "Learning/Career Options" program for the pilot community, is conducted for new captains.
- ◆ Since 2008, the Group has been running the Pilot Ab-Initio Cadet program to meet the demand for local qualified pilots. Each year, about 20 cadets start training under the program, and since its inception, 270 cadets have completed the training, with many becoming flight crew members, and some achieving the rank of captain. In 2024, the number of cadets recruited annually will be increased to meet the ongoing need for qualified pilots.
- ◆ All crew members undergo training, including safety techniques and emergency actions, first aid, and handling of hazardous materials. The Training Academy also conducts refresher training for crew members transitioning to business class or other positions within the Company.
- ◆ After completing two programs for obtaining EASA Part 66 licensed qualifications for apprentice mechanics from 2018 to 2022, in August 2023, the Training Academy also introduced a professional training program. New participants undergo a five-year course and receive international and local certificates, as well as the additional opportunity to obtain a licensed EASA B1/B2 qualification. Engineers responsible for aircraft airworthiness in the Group's Technical Standards Department provide mentoring on standards compliance and coordinate training under the EASA Part 147 program.

MAJOR IT INVESTMENTS AND DIGITALIZATION

Air Astana sees itself as one of the leaders in digital technology among airlines in the Central Asia and Caucasus region. The Group operates its own Airline Performance Excellence (APEX) program, which provides the Company with unrestricted access to information and helps model scenarios, especially during periods of rapid change. Several budget management and forecasting modules have been launched to handle fixed and variable costs, staffing, operational expenses, and to automate procurement planning through inventory control systems and accumulated stock management. The next stage of continuous improvement and a full part of the Group's strategic planning process involves expanding the forecasting capabilities within these modules.

The Group is also investing in a new online booking system aimed at increasing the visitor return rate to the website and conversion in e-commerce, as well as improving the overall quality of digital services by enhancing performance and a more modern, user-friendly interface. The system's capabilities will be expanded with the following enhancements:

- ◆ Convenient features that allow website users to find the nearest airport, select "low fare days", and store passenger and credit card data. This will simplify and speed up the booking process and help strengthen customer loyalty.
- ◆ Improvements will be made to the Nomad loyalty program that will facilitate user registration in the loyalty program and simplify the use of accumulated points.
- ◆ A wider selection of ancillary products will be displayed during the booking process to encourage more active use of these high-profit additional services.



SUSTAINABILITY

Air Astana aims to become the leading environmentally sustainable and socially responsible airline in the CIS and Central Asia. Air Astana is committed to reducing its negative impact on the environment and the communities in which it operates, implementing a comprehensive approach to sustainable development. These efforts include reducing emissions, waste management, the efficient use of resources (such as energy) and supporting local communities.

ESG STRATEGY

In February 2023, the Group approved a comprehensive ESG Strategy for 2023–2032. It was developed based on best practices and international standards, considers steps already taken or planned by the Group in sustainable development, and is aligned with the United Nations Sustainable Development Goals (SDGs). The Group identified six priority SDGs: Quality Education (SDG 4), Gender Equality (SDG 5), Decent Work and Economic Growth (SDG 8), Reduced Inequality (SDG 10), Climate Action (SDG 13), and Partnerships for the Goals (SDG 17).

Specifying SDGs as priorities allowed the Company to develop an ESG Strategy that is not only more targeted but also more effective, reflecting the specific challenges and opportunities of the civil aviation sector. While we focus particularly on these six SDGs, we do not overlook the other goals. All 17 SDGs are necessary for a sustainable future and deserve our attention. Nevertheless, given the complex specifics of the industry, we have made a strategic choice to direct our efforts towards achieving those SDGs that are most closely related to our core activities, our capabilities, and where we can make a significant impact.

SPECIFYING SDGS AS PRIORITIES ALLOWED THE COMPANY TO DEVELOP AN ESG STRATEGY THAT IS NOT ONLY MORE TARGETED BUT ALSO MORE EFFECTIVE, REFLECTING THE SPECIFIC CHALLENGES AND OPPORTUNITIES OF THE CIVIL AVIATION SECTOR.



Delivery of seven A320neo family aircraft increasing the fleet to

**56**

units

Number of cadets joining the Ab-initio pilot training program each year

**40**

cadets

**THE GROUP PLANS TO REFRESH ITS LOW CARBON DEVELOPMENT PROGRAM AND COMMIT TO ZERO EMISSIONS BY 2050 THROUGH A SUSTAINABILITY PLAN AND ACHIEVABLE SHORT-TERM TARGETS FOR THE NEXT FIVE YEARS.**

**LOW-CARBON DEVELOPMENT PROGRAM**

To set targets for reducing greenhouse gas emissions, the Group has developed a Low Carbon Development Program (LCDP) for 2023-2032. It is part of the Group's ESG Strategy and is in line with Kazakhstan's goal of achieving carbon neutrality by 2060.

Under this program, the Group is replacing Airbus family aircraft with new generation A320 and A321neo aircraft. Airbus notes that this family of aircraft can provide up to 20% reduction in fuel consumption, 20% reduction in CO<sub>2</sub> (NOx) emissions and 50% reduction in noise levels compared to the previous generation A320ceo family of aircraft. In recent years, the Group has made extensive efforts to reduce CO<sub>2</sub> emissions, reducing CO<sub>2</sub> emissions from 0.122 tons per passenger-kilometer performed

in 2016 to 0.076 tons in 2023. The achieved emission reduction of 38% wins against comparable emissions for comparable international air carriers and low-cost carriers.

The Group is currently aiming to achieve zero emissions by 2060. However, during 2024, the Group plans to review its LCDP and update its commitment to achieve carbon neutrality by 2050 in line with the long-term goal adopted by the International Civil Aviation Organization (ICAO) by developing a sustainability roadmap with realistic short-term targets for the next five years. These will be independently verified by a third party as science-based targets (SBTi) consistent with the Paris Agreement's mitigation goals.

In line with the recent resolution of the Asia Pacific Airlines Association, the Group has also set a target to achieve a collective blending rate of 5% of sustainable aviation fuel with conventional fuel by 2030 (assuming SAF is available in the market). This target may be adjusted, if necessary, following the update of the LCDP.

**PLANS FOR 2024:**

- ◆ Air Astana's IPOs on the London Stock Exchange, AIFC and Kazakhstan Stock Exchange attracted new Kazakhstani and international investment, which will help realize our ambitious business development plans from 2024 to 2028.
- ◆ Delivery of seven A320neo family aircraft (4 for FlyArystan and 3 for Air Astana), increasing the fleet to 56 units, in line with plans to increase the fleet to 80 units by 2028.
- ◆ Expansion of the route network by opening flights to Kuala Lumpur (Malaysia) in 2024. Flights to Japan and Singapore are planned for 2025-2026.
- ◆ Training volume on the L3 Harris A320 flight simulator is expected to increase to 5,500-6,000 hours. The simulator has a maximum annual capacity of 7,000 hours. The Group plans to purchase a second simulator in 2025.
- ◆ Each year, about 40 cadets join the Ab-initio pilot training program, which was established to meet the need for locally qualified pilots. A total of 270 cadets have already graduated and enrollment is expected to increase to 300 in 2024.
- ◆ Eight Airbus family aircraft are subject to maintenance, three of which require a full six-year C-check maintenance program, and the first 12-year C-check maintenance program is planned. In-house C-check maintenance has already reduced downtime by approximately 14-18%. By 2025, the Group intends to offer this type of maintenance to other aircraft operators.
- ◆ In July 2023, Pratt & Whitney announced an engine recall due to contamination of the material used in engine production. Air Astana has already addressed a number of issues related to this situation and has taken mitigating actions ahead of the market. During 2024, 34 engines are scheduled for removal and alternative engine replacement options are already in place to avoid schedule disruptions. The Company is in the final stages of negotiating an agreement with Pratt & Whitney that provides compensation and other support to the Company for operational impacts.
- ◆ The Group plans to refresh its low carbon development program and commit to zero emissions by 2050 through a sustainability plan and achievable short-term targets for the next five years.
- ◆ Investment in a new online booking system designed to increase repeat website visits and e-commerce conversion rates and improve the overall quality of digital service delivery.





QAZAQ AIR JSC (HEREINAFTER — QAZAQ AIR) IS A KAZAKHSTAN AIRLINE, WHICH IS A SUBSIDIARY OF THE FUND AND IS BASED AT NURSULTAN NAZARBAYEV INTERNATIONAL AIRPORT LOCATED IN ASTANA.

**MARKET OVERVIEW**

ACCORDING TO THE INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA) WORLD AIRLINES INCREASED PASSENGER TRAFFIC BY 36.9% IN 2023, AS A RESULT, IT RECOVERED TO 94.1% OF PRE-PANDEMIC 2019 LEVELS. KAZAKHSTAN'S CIVIL AIR TRANSPORTATION MARKET HAS DEMONSTRATED STRONG GROWTH IN THE POST-COVID PERIOD.

1.	2.	3.
ABOUT THE FUND	CONSOLIDATED FINANCIAL INDICATORS	FUND PERFORMANCE

QAZAQ AIR strives to realize its mission in providing affordable inter-regional air transportation that meets high international and national safety standards. The growing demand for interregional air transportation confirms the high potential of the country's regions to develop tourism and business activity.

The Company's aircraft fleet consists of 5 modern turboprop aircraft manufactured in Canada, which is classified as a small fleet size by aviation standards. Using the convenient geographical location of the base airport in Astana, the Company successfully develops a hub route network to the regions and border cities of neighboring countries.

**KEY PERFORMANCE RESULTS FOR 2023**

Indicator	2022	2023
<b>Production indicators:</b>		
Passenger traffic, thousand people	561	588
Cargo transportation volume, tons	32	23
Aircraft load factor, %	82	84
On-time performance of flights, %	78	77
<b>Financial indicators<sup>19</sup>, KZT billion:</b>		
Revenue	20.4	19.6
Dividends	0	0
Net loss	-6.6	-7.6
Costs	18.9	20.8
Operating profit/loss	3.2	-2.9
Taxes paid	0.6	0.6
<b>Sustainability Indicators:</b>		
GHG emissions intensity (tons of CO <sub>2</sub> per kilometer)	0.012	0.011
Volume of waste disposed of, tons	0.3	0.19
Accidents	0	0
Deaths in accidents	0	0

The annual growth of passenger traffic at the level of about 20% indicates an active phase of market growth.

In 2023, half of domestic scheduled air routes are subsidized by the government to phase them into commercial viability.

The cost-effectiveness of QAZAQ AIR based on the current fleet, which has the best indicators on the size of the cost of production on regional routes, allows the rational launch of new and low-intensity subsidized routes. Subsequently, when passenger traffic grows, QAZAQ AIR will transfer these routes to a commercial basis.

The relatively low level of infrastructure of regional airports does not allow to service narrow-body aircraft, which additionally creates a natural competitive advantage for QAZAQ AIR in the domestic market.

In Kazakhstan and border territories of neighboring countries at a distance of 500 km from the borders of the Republic of Kazakhstan lives a population of about 100 million people.

QAZAQ AIR aims to develop international air service on cross-border international routes with high commercial potential.

In 2023, the Company was among the top three in the nomination "Best Regional Airlines of Central Asia and CIS 2022" according to Skytrax. The high assessment of the Company's performance in the Skytrax awards is proof of the Company's commitment to high standards and recognition by passengers.

4.	5.	6.	
SUSTAINABLE DEVELOPMENT	CORPORATE GOVERNANCE	ANNEXES	CONTACT INFORMATION



**FACTORS AFFECTING THE RESULTS**

QAZAQ AIR delivered a historic record in 2023 with 5 aircraft carrying 588,000 passengers, the highest number of passengers carried in a similar period since operations commenced in 2015.

Significant changes were made to the seasonal schedule for passenger convenience, the number of flights was increased, and various measures were implemented to stimulate ticket sales, including seasonal discounts during periods of low demand. These measures resulted in an increase in overall traffic volume. The route network remained largely unchanged from the previous year.

In 2023, due to temporary restrictions by the authorities of neighboring countries, the program of international flights was reduced, which had a negative impact on profitability.

**ROUTE NETWORK**

In 2023, QAZAQ AIR's route network included 29 destinations between cities in the Republic of Kazakhstan. Subsidized flights were also introduced to support domestic tourism, such as Astana — Urjar, Almaty — Kokshetau, Turkestan — Aktobe and Shymkent — Zhezkazgan. These air services have demonstrated their potential and the Company has received positive feedback from its passengers.

**EXPANSION OF AIR TICKET DISTRIBUTION NETWORK**

QAZAQ AIR has entered into an interline ticketing agreement with European airline Hahn Air. This agreement gives passengers worldwide and Hahn Air agents access to QAZAQ AIR tickets via electronic booking services. Thus, the Company has significantly expanded its presence in the international market.

<sup>19</sup> Financial indicators for 2022 are as per the Company's 2022 Consolidated Financial Statements



**ENVIRONMENTAL SAFETY**

QAZAQ AIR strives to minimize the negative impact of its operations on the public and the environment, to prevent industrial accidents that damage the environment, and supports the rational use and reproduction of natural resources. The Company complies with the principles of energy efficiency, resource conservation and utilization of alternative energy sources. The Company's management undertakes to comply with legal and other requirements applicable to the environmental aspects of QAZAQ AIR's operations.

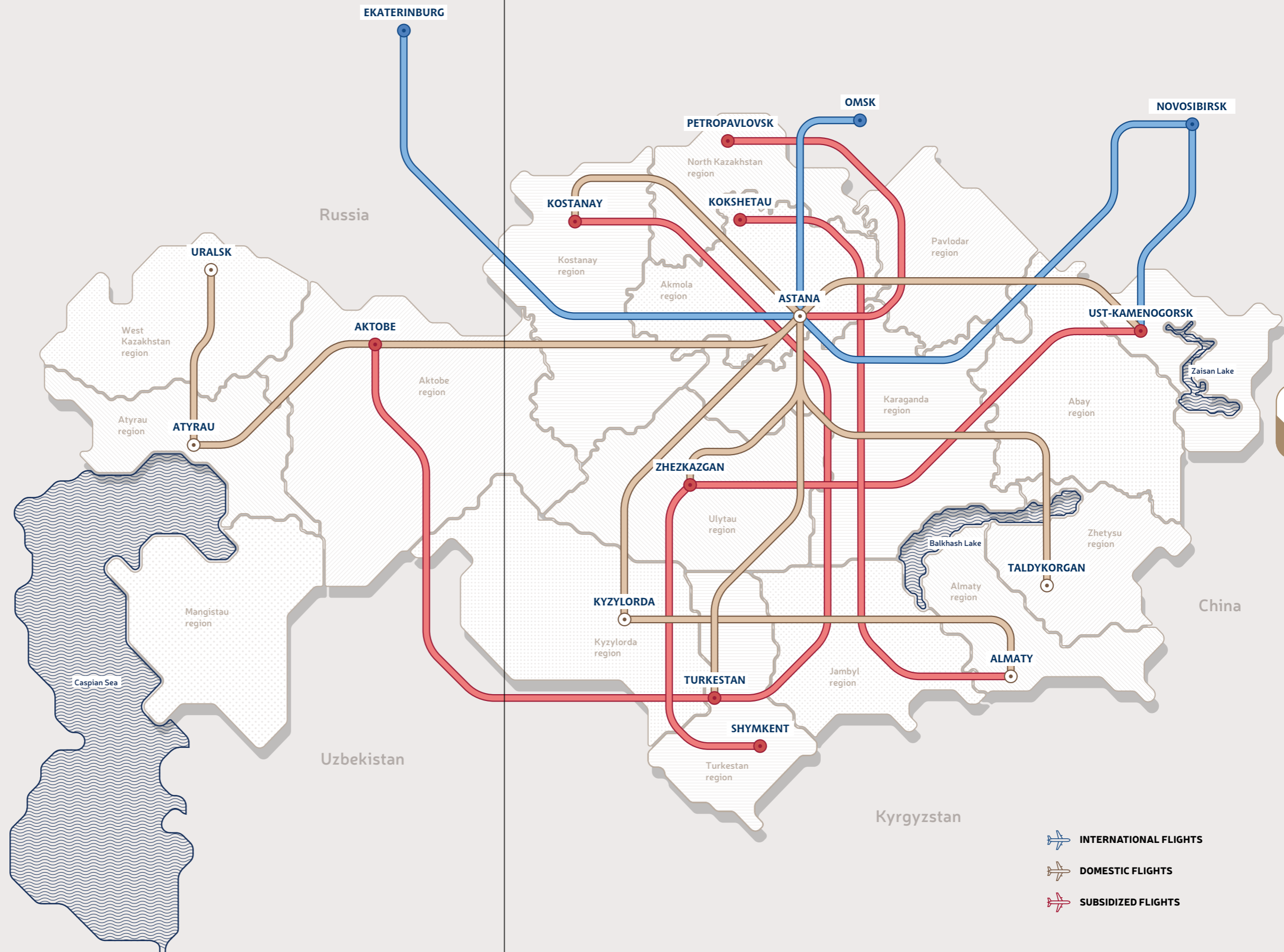
The Company adheres to the principles of no harm to people and protection of the environment in carrying out our work and achieving our objectives. QAZAQ AIR's environmental policy is aimed at improving the energy and environmental efficiency of passenger, baggage, mail and cargo transportation.


**ENSURING A SAFETY CULTURE**

The health and safety of employees forms the basis for the realization of the Company's strategic goals. QAZAQ AIR follows the safety performance indicators, reducing the risk of injuries and accidents by embedding a safety culture in all aspects of operations. For 2023, the Lost Time Injury Frequency (LTIF) rate is 0, with no accidents or incidents recorded during the period.

**TOWARD THE GOAL**

In the short term, a project is underway to bring QAZAQ AIR into a competitive environment aimed at attracting a strategic partner for the purpose of expanding and diversifying its fleet and flight geography.



-  **INTERNATIONAL FLIGHTS**
-  **DOMESTIC FLIGHTS**
-  **SUBSIDIZED FLIGHTS**

## Transport and Logistics Potential Development



National Company Kazakhstan Temir Zholy JSC (hereinafter – KTZh) is the key transportation and logistics holding company and operator of the main railway network of the Republic of Kazakhstan, performing the functions of a national carrier of cargo and passengers. The Company plays a central role in economic integration, connecting 17 regions of the country and three cities

of national importance, as well as providing transport links with five neighboring countries – China, Russia, Uzbekistan, Kyrgyzstan and Turkmenistan through 16 connecting points.

KTZh owns the largest fleet of locomotives and railcars in Kazakhstan and is one of the largest employers in the country.

Cargo turnover (operational)

# 269.7

billion ton-km

### KEY PERFORMANCE RESULTS FOR 2023

Indicator	2022	2023
<b>Production indicators:</b>		
Cargo turnover (operational), billion t-km	252	269.7
Passenger turnover, billion p-km	12.4	11.8
Container transit, thousand TEU	1,129.2	1,282.3
<b>Financial indicators<sup>20</sup>, KZT billion:</b>		
Revenue	1,481.5	1,934.1
Net profit	36.9	136.8
Costs	1,520.6	1,854.1
Operating profit	177.9	332.8
Net debt	1,520.8	2,061.2
Taxes paid	111.2	140.6
<b>Sustainability indicators:</b>		
Atmospheric emissions (CO <sub>2</sub> scope 1), thousand tons	2,389	2,389
Atmospheric emissions (CO <sub>2</sub> coverage 2), thousand tons	3,284	3,119, <sup>21</sup>
Volume of disposed waste, tons	59.1	58.6
Accidents	22	25
Deaths in accidents	5	6

### FACTORS AFFECTING THE RESULTS

#### THE INCREASE IN FINANCIAL RESULTS WAS DUE TO THE GROWTH OF INCOME FROM OPERATIONS.

The increase in net debt was due to the attraction of debt financing for the renewal of the Company's locomotive fleet (approximately KZT 216 billion), renewal of Stadler passenger cars (KZT 162.6 billion) and financing the leasing of 100 passenger cars (KZT 73 billion). The Company also purchased KTT gondola cars (KZT 71.5 billion), issued the second tranche of bonds to finance the infrastructure project "Construction of second tracks on the Dostyk-Moyinty section" (KZT 173.7 billion), refinanced 250 million Swiss francs Eurobonds and repaid short-term loans (KZT 258.5 billion).

In 2023, KTZh worked actively to overcome the problems associated with the disruption

of traditional transportation and logistics chains. As part of this work, measures were taken to adapt and optimize transport flows in the context of the changing geopolitical environment and logistical challenges.

In general, the efforts of KTZh and the Government made it possible to maintain the attractiveness of Kazakhstan's transit corridors in difficult geopolitical conditions, forming a new framework for the country's transport and logistics complex.

By 2023, the volume of container transit transportation reached 1,282 thousand twenty-foot equivalent units (hereinafter – TEU), which is 13.6% more compared to the previous year.



### INFRASTRUCTURE MODERNIZATION

Within the framework of the National Project "Strong Regions – Driver of the Country's Development" and in accordance with the Concept of Development of Transport and Logistics Potential of the Republic of Kazakhstan until 2030, construction of second tracks on the Dostyk – Moyinty section was started in November 2022. The purpose of this project is to increase the throughput capacity of this section and stimulate the transit potential of Kazakhstan.

The implementation of the project on construction of the second line with a total length of 836 km will increase the number of cargo trains five times – from 12 to 60 pairs per day. This will be a significant step in strengthening the country's export capabilities and will expand transportation opportunities for Kazakh exporters in this direction.

Construction is scheduled for completion in 2025.

In 2023, the construction of the following infrastructure projects was launched:

- ◆ "Construction of Almaty bypass railroad line";
- ◆ Construction of the Darbaza-Maktaaral railroad line;

- ◆ Construction of the third border railroad crossing "Bakhty" on the Kazakhstan-China border with access to the existing railroad section "Semey – Aktogay".

The purpose of the projects is to increase the capacity of the sections and the transit and transportation potential of the country.

As part of KTZh's transformation into a full-fledged transportation and logistics company and to increase the volume of transit cargo traffic, work has been done in the following key areas:

#### Partnerships and strategic alliances:

- ◆ For the development of the TITR route, KTZh, together with Azerbaijan Railways CJSC and Georgian Railway JSC, established Middle Corridor Multimodal Ltd on the basis of the Astana International Financial Center.
- ◆ A memorandum was signed between RZD Logistics, KTZ Express and TLC Turkmenistan to establish a joint venture for the development of the North-South transport corridor.
- ◆ An agreement was formalized with Abu Dhabi Ports Group to create a multimodal route Kostanai – Kuryk – ports of Anzali, Bandar Abass (Iran) – Khalifa Port (Abu Dhabi).

- ◆ "United Transport and Logistics Company – Eurasian Rail Alliance" JSC, which is a joint venture with Russia and Belarus, continues its operations on the China-Russia-Europe transit route.

#### Development of logistics capacities:

- ◆ A cargo terminal was opened in Xi'an, becoming a key hub for sending container trains to Kazakhstan, Central Asia, Europe, Turkey and Iran.

#### Digitalization and innovation:

- ◆ In May 2023, KTZh Express JSC and PSA formed a joint venture, KPMC Ltd, aimed at developing the TITR route and creating a digital trade corridor.
- ◆ KTZh, cooperating with global leaders in digitalization such as Huawei, Wabtec and PSA, launched the Smart Railway project.

Overall, KTZh's efforts in 2023 were aimed at creating the conditions for further growth of transit potential and strengthening the country's export opportunities.

<sup>20</sup> The financial indicators for 2022 are as per the Company's 2022 Consolidated Financial Statements

<sup>21</sup> The methodology specified in the GHG Protocol Scope 2 Guidance has been applied to the Scope 2 calculation.



PASSENGER TRANSPORTATION

IN 2023, RAIL PASSENGER TURNOVER DECREASED BY 1.5% COMPARED TO 2022, ACCOUNTING FOR 22% OF TOTAL PASSENGER TURNOVER.

Revenues from passenger transportation for 2023 amounted to

101.7

KZT billion

KTZh's subsidiary, Passenger Transportation JSC, is actively working to create comfortable conditions for passengers. Given the length of railroads in Kazakhstan, this is a key aspect in maintaining the image and attractiveness of this business sector in KTZh. The Company carefully studies passenger preferences, a feedback system is actively functioning, and complaints about the quality of service are carefully recorded and analyzed. Measures are also being taken to renew the car fleet.

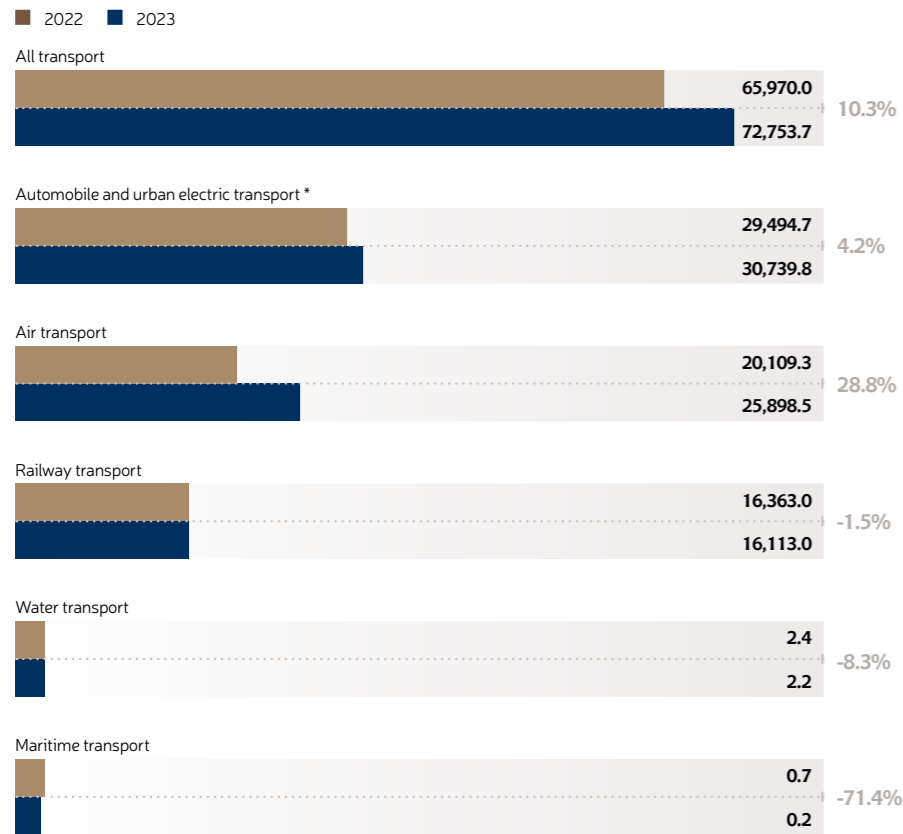
The Company's passenger turnover in 2023 decreased by 4.2% compared to the 2022 level and amounted to 11,831 million p-km (12,353 million p-km in 2022). The decrease in passenger turnover was due to the reduction in the frequency of some routes from daily to alternating daily service, as well as the cancellation of a number of trains.

The number of passengers dispatched by Passenger Transportation JSC in 2023 amounted to 13,681 thousand passengers (14,073 thousand passengers in 2022), including:

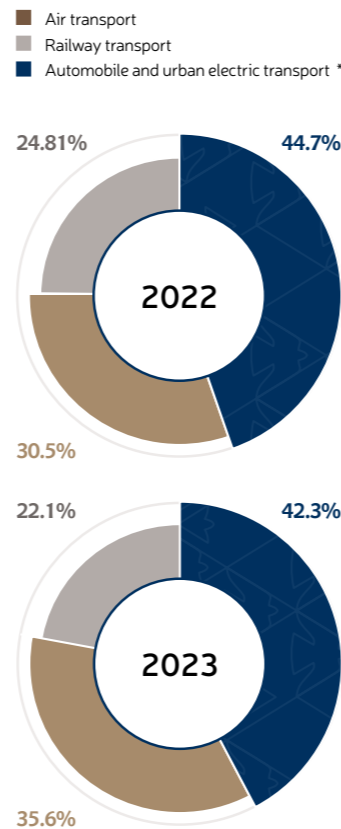
- on the trains formed by Passenger Transportation JSC -11,178 thousand passengers;
- Suburban Transportation branch – 2,338 thousand passengers;
- by trains of other railroad administrations – 165 thousand passengers.

Revenues from passenger transportation for 2023 amounted to KZT 101.7 billion, which is 15% higher than in 2022. The increase was due to a 2.6-fold increase in passenger turnover on interstate and transit routes, as well as a 7% increase in tariffs from January 1, 2023.

PASSENGER TURNOVER OF KAZAKHSTAN IN 2023 BY TYPE OF TRANSPORTATION, MILLION P-KM



SHARE IN TOTAL PASSENGER TURNOVER, %



Note: Statistical data on the Transport sector from January 2023 are formed taking into account the change in the methodological approach to the formation of indicators of individual entrepreneurs engaged in commercial transportation of goods and passengers by road transport. In order to obtain comparable data with the same period of the previous year, the main indicators of the Transport sector for 2022 were reformed.

NEW ROUTES

As part of the tasks set for Passenger Transportation JSC to unload the Astana-Shu railway section to meet the traffic schedule and increase the route speed, measures were taken to introduce a batch schedule by organizing a circular movement of Talgo trains and combining passenger train strings:

- Replacement of standard cars with Talgo on trains No.9/10 Astana-Almaty and No.71/72 Astana-Shymkent;
- Increasing the frequency of trains No.11/12 Almaty-Shymkent, No.25/26 Almaty-Shymkent, No.46/45 Pavlodar-Turkestan to a daily service, and train No.1/2 Almaty-Tashkent to every other day.
- Extension of the route of train No.613/614 Uralsk-Beyneu to Mangistau station.

Due to the implementation of these measures, the residents of the regions have felt positive changes as the trains have increased their frequency of service, which directly stimulates the development of the regional economy.

In addition, Talgo fast trains give impetus to the development of tourism and are in great demand not only by local residents, but also by visiting guests and tourists.

In Talgo trains, passengers can use the services of the dining car. The Grand and Grand PMR class cars (for persons with disabilities) have shower cabins. Passenger Transportation JSC constantly renews its car fleet: from 2010 to 2023, the Company purchased 1,326 cars.

In 2021, Passenger Transportation JSC launched a pilot project to sell railway travel documents exclusively for women, including boys under 7 years of age.

Thus, one compartment car "Women's carriage" each in the following passenger trains of the Company is involved:

From October 2021:

- No.77/78 communication "Almaty-Mangistau", carriage No.07;
- No.351/352 communication "Almaty-Oskemen", carriage No.10.

From February 2022:

- No.45/46 communication "Pavlodar-Turkestan", carriage No.09;
- No.37/38 communication "Mangistau-Seimei", carriage No.06;
- No.47/48 communication "Atyrau-Nur-Sultan", carriage No.06.

Due to the demand for this service, the Company organized additionally in three passenger trains from the beginning of the summer period of 2023:

- No.33/34 communication "Almaty-Aktobe", carriage No.06;
- No.4/3 communication "NurSultan-NurlyZhol-Almaty", carriage No.17;
- No.71/72 communication "NurSultan-Shymkent", carriage No.10.

Since the introduction of the pilot project, 289,242 people have used the service, including: in 2021 – 13,414 people, in 2022 – 114,068 people, in 2023 – 161,760 people.

As part of the implementation of the loyalty program in the pilot mode from March 14, 2022 Passenger Transportation JSC launched a discount card "Altyn", which provides a 25% discount for travel in standard passenger cars and "Talgo". The card can be purchased at the Company's ticket offices and costs KZT 19,999.

COMFORTABLE CONDITIONS FOR PASSENGERS

In 2023, 102 railcars were added to Kazakhstan's passenger rail fleet. In 2024, it is planned to deliver 62 new railcars and purchase approximately 50 railcars. In addition, in the period from 2025 to 2030, it is planned to purchase more than 600 new cars from ZIKSTO JSC and Stadler Kazakhstan LLP, all of which will meet international standards. After delivery of these cars, the fleet will be renewed by two thirds.

In 2023, the passenger railroad fleet of Kazakhstan was replenished by

102

railcars





CARGO TRANSPORTATION

Cargo turnover of all types of transport in 2023 amounted to 501,340.9 million ton-km, which is 3.1% higher than in 2022.

Rail transport remains the main player in cargo transportation, accounting for 65.2% of the country's total cargo turnover. Rail cargo turnover in 2023 increased by 4.8% to 326,811.7 million ton-km.

In 2023, the Company recorded a tariff cargo turnover of 262.4 billion ton-km, which is 7.0% higher than the previous year's figure of 245.2 billion ton-km. This growth was achieved due to an increase in cargo turnover on all routes.

In the structure of types of communications, cargo turnover was as follows:

- ◆ In intra-republican traffic, there was an increase of 1.1% due to a 1.7% growth in the average distance of cargo transportation, including iron ore, oil products, grain, non-ferrous ores and metals, cement and limestone for fluxing.
- ◆ In terms of exports, cargo turnover increased by 6.5% due to a 9.0% increase in the average distance of cargo transportation. This increase was due to higher transportation of iron ore, crude oil, grain, chemicals, fertilizers, non-ferrous ore and cement;
- ◆ For imports, cargo turnover increased by 13.9% due to an 11.1% increase in the volume of cargo transportation. The increase affected all cargo nomenclatures except coal, construction cargo, ferrous metal scrap and non-ferrous ore.

- ◆ As for transit, the increase amounted to 16.5%, which was due to an 18.0% increase in transportation volume. There was an increase in transportation of oil from Russia to Uzbekistan, oil products from Russia to CA countries, grain from Russia to Kyrgyzstan, chemicals from China to Uzbekistan and Russia, from Russia to China, fertilizers from Belarus to China and from Russia to CA countries and China, non-ferrous metals from Russia to China (copper) and Uzbekistan (aluminum), ferrous metals from Russia and China to CA countries, as well as other cargoes: wood from Belarus to China and Central Asian countries, machinery and equipment from China to Russia, Belarus and Central Asian countries, fruits and vegetables from Uzbekistan to China.

In 2023, compared to 2022, there was an increase in cargo turnover of the following cargoes:

- ◆ chemicals and fertilizers – by 21.7%;
- ◆ petroleum products – by 19.8%;
- ◆ grain – by 17.9%;
- ◆ ferrous metals – by 11.7%.

In 2023, the Company recorded a tariff cargo turnover of

**262.4**

billion ton-km

ALTERNATIVE TRANSPORTATION ROUTES

In August 2022, Kazakhstan's President Kassym-Jomart Tokayev put forward an initiative to develop TITR. Throughput capacity of TITR is about 6 million tons per year, including up to 80 thousand containers.

In 2023, about 2.8 million tons of cargo was transported along the TITR route, which is 86% higher than in 2022, and almost five times higher than in 2021. The growth was due to a multiple increase in Kazakhstan's exports along this route, which grew 2.5 times compared to 2022.

In order to increase the capacity of TITR, measures are being taken synchronously with all participants of the route to remove infrastructure constraints, as well as the integration of national digital systems.

At the end of 2022, a roadmap to remove bottlenecks on the TITR route was approved at the governmental level of Kazakhstan, Azerbaijan, Turkey and Georgia. Today, active work is underway to implement this roadmap by all participants.

The main infrastructure projects are the development of railroad and port infrastructure along the entire TITR corridor. It is planned that the implementation of the roadmap will increase the throughput capacity of the route to 10 million tons.

One of the key projects of the roadmap is the construction of an international container hub in the port of Aktau, which is capable of becoming a driver of container transportation growth.

To intensify transit traffic in the East-West direction, the construction of the Kazakh-Chinese "Dry Port" in Xi'an was launched in May 2023 with the participation of the Head of State of Kazakhstan. The test run of trains in the direction of Absheron took place already in December 2023.





**ON THE ESTABLISHMENT OF A JOINT VENTURE WITHIN THE FRAMEWORK OF TITR**

FOLLOWING THE OFFICIAL VISIT OF THE PRESIDENT OF THE REPUBLIC OF AZERBAIJAN TO THE REPUBLIC OF KAZAKHSTAN ON APRIL 10, 2023 IN ASTANA, THE HEAD OF STATE INSTRUCTED TO WORK OUT WITH THE AZERBAIJANI SIDE THE ISSUE OF ESTABLISHING A JOINT VENTURE (SINGLE OPERATOR) ON THE TITR AT THE SITE OF AIFC.

On October 26, 2023 in Tbilisi, KTZh, Azerbaijan Railways CJSC and Georgian Railways JSC signed an agreement on the establishment of a joint venture "Middle Corridor Multimodal Ltd." on a parity basis.

On November 16, 2023, Middle Corridor Multimodal Ltd. was incorporated as a private company under the AIFC. The establishment of this joint venture will enable:

- ◆ provide one-stop-shop services;
- ◆ guarantee delivery time and cost;
- ◆ pursue a coordinated policy on the development of multimodal service to increase cargo traffic in the direction "China-Europe/Turkey-China".

The eastern direction of the North-South international transportation corridor attracts the attention of shippers as a promising alternative route for delivering goods to the markets of Iran, India and the Persian Gulf countries.

Transit in containers along these routes increased by 14% compared to 2022 and reached 1,282.3 thousand TEU.

The main share in transit container transportation is the route "China – Europe – China", which occupies 73% of the total volume.

However, despite this interest in 2023 showed a decline. Compared to 2022, the volumes decreased by 18% amounting to 402.3 thousand TEU.

At the same time, efforts have been intensified to increase transit cargo traffic through TITR, as well as through the North-South corridor. Special attention is paid to increasing cargo turnover towards India and the Persian Gulf countries, mainly through Iran and the port of Bandar Abbas.

On December 15, 2023, a consortial agreement was signed with an investor for the project "Construction of the Ayagoz-Bakhty railway line". The project was launched on December 20, 2023.

**ESG PRINCIPLES**

On December 22, 2023, the independent rating agency S&P Global assigned KTZh an ESG rating of 54 points out of 100 as part of the Global Corporate Sustainability Assessment.

KTZh's scores for ESG components are as follows: environmental – 61 points, social – 59 points, and corporate governance – 40 points. The average indicator in the Transport and Transportation Infrastructure industry was 26 points, which allowed KTZh to enter the top 15% of the best companies in the industry in the S&P Global Corporate Sustainability Assessment rating.

The assigned rating reflects the Company's ESG efforts and confirms its commitment to high standards in the areas of the environment, social responsibility and corporate governance. The results of the KTZh rating by S&P Global are available on the S&P Global website at the following link: S&P Global ESG Scores.

**PLANS FOR 2024**

In 2024, the Company plans to:

- ◆ increase operational cargo turnover to 295.4 billion tons-km, up 9.5% compared to 2023;
- ◆ continue construction of the railroad line bypassing Almaty station;
- ◆ continue construction of the second railroad line on the Dostyk – Moyinty section;
- ◆ continue construction of the Darbaza-Maktaaral railroad line.

