

# Air Transport in Chechen Republic: Retrospective, Condition and Development Potential

ahmed.ustaev@mail.ru

Ustaev A.L.

Department of Economic and Social Geography  
Chechen State University  
Economic Research Laboratory  
Kh. Ibragimov Complex Institute of the Russian Academy  
of Sciences  
Grozny, Russia

Mukaeva L.A.

Department of Economic and Social Geography  
Chechen State University  
Grozny, Russia  
mukaeva\_l@mail.ru

Soltakhmadova L.T.

Department of Economic and Social Geography  
Chechen State University  
Grozny, Russia  
soltakhmadova@mail.ru

**Abstract** – The article studies step-by-step development of air transport in the Chechen Republic. The urgency of resumption of both local and interregional flights is underlined. Besides, the article describes the impact of competition between airlines as well as cost related trends, the profitability of air transportation, the possibility of reducing airline tariffs in conditions of limited solvent demand of residents of the Chechen Republic. There were defined the opportunities for the inclusion of Grozny airport into the system of international communications.

**Key words** – transport and logistics complex; local and interregional flights; cost; passenger tariff; low cost airline; competitive environment.

## I. INTRODUCTION

Air transportation in the Chechen Republic has been developing since 1927, the time when the airport was built in Grozny. The flights Moscow – Mineralnye Vody – Grozny – Baku – Tbilisi were quite regular at that time [2].

In 1975, there were flights to 11 Russian cities from Grozny airport. In 1990, there were direct flights from the capital of the Republic to 33 cities of the Union. The flights were made to Moscow, St. Petersburg, Almaty, Ashgabat, Tashkent, Baku, Yerevan, Kishinev, Kiev, Samara, Tyumen, Ufa, Lvov, Donetsk, Rostov-on-Don, Yekaterinburg, Elista, Simferopol, Adler and other directions. Among those cities there were former capitals of the Union Republics, the centers of oil-producing regions and the resort and spa regions of the country.

In 1977, a new airport in the city of Grozny, one of the largest in the North Caucasus, equipped with the latest navigation technology and the capacity of 600 passengers per hour began operating. The pilots of Grozny squadron made more than 40 flights a week. This airport was built as a backup for the gateway of Caucasus – Mineralnye Vody with the aim of unloading it in a busy south direction. It was also taken into account that the meteorological conditions in Grozny are more stable than in Mineralnye Vody.

In 1990, the share of the air transport accounted for 17% of the passenger traffic in Chechen-Ingushetia. The pilots of the Chechen Republic carried out a great deal of work to help physicians, oil workers, forestry and agriculture, as well as to dust the reservoirs in order to combat malaria. The pilots of the Republic treated the forests and fields with pesticides and mineral fertilizers from the air each year the area of which was over 1 million hectares (of which 400 hectares were in the Chechen-Ingushetia). These works were carried out in neighboring regions, i.e. in North Ossetia and Kabardino-Balkaria, in Dagestan and Krasnodar Territory, in the Astrakhan and Volgograd regions, as well as in the Union republics of the country, i.e. in Azerbaijan, Turkmenistan and Kazakhstan.

In early 1990s, before the transition of a peaceful domestic political crisis to a military and political one, at the end of 1994, air communication from Grozny was carried out with the capital of the country and with several major cities of the Russian Federation (St. Petersburg, Rostov-on-Don and others), as well as with foreign countries, i.e. Turkey and the countries of the Persian Gulf.

## II. CASE STUDY

Stigl Airlines had several aircraft, there were flight crews, and flight support was provided by national dispatch services.

For some time since 1999, when the airport had not been operated, the residents of the Republic used the services of the airports Magas (Ingushetia), Makhachkala, Beslan, Mineralnye Vody. During the crisis, the airport lost all aircraft equipment; the objects of aviation navigation support and ground equipment were completely destroyed. Highly qualified specialists had left the region.

Being one of the priority objects, the airport in the Republic was restored in October 2006. In March 2007, the commercial activities began in the airport. The runway is designed for modern heavy aircraft. Currently, TU-134, TU-154, YAK-42,

AN-24 aircrafts are in operation. The total capacity of the airport is 550 passengers per hour, and the capacity of cargo terminal is 22 tons per day. The passenger throughput in Grozny airport amounts to 1.5 million passengers a year. Passenger and freight transportations, including technical services are provided by Vainakh-Avia and the airline Grozny-Avia, which is the ship owner. The resumption of air traffic from Grozny has significantly expanded the capabilities of population and representatives of business and tourists in the implementation of interregional and international social and economic relations.

Besides, it had a positive effect on its all-Russian and international image.

In November 2009, the Interstate Aviation Committee (IAC) issued a certificate to airport Grozny and assigned the status of international airport. The first was a flight for the delivery of pilgrim-tourists from the Republic to Mecca.

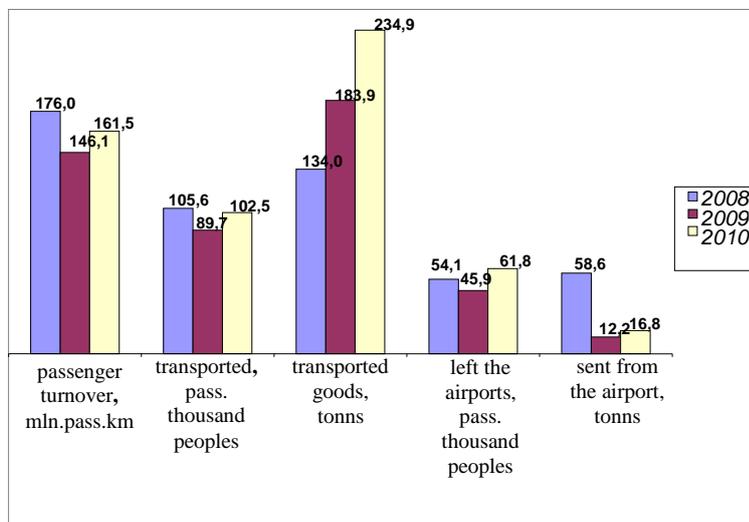


Fig. 1. Air transport of Chechen Republic, 2008-2010

For the period from 2007 to 2010 about 368,000 passengers were served by Grozny airport. Out of this number 19.5 thousand people – international airlines; 348.5 thousand people – domestic airlines; 574 tons of cargo were transported. Revenues from the airport services amounted to more than 210 million rubles. Passenger transportation by air in the Chechen Republic is growing steadily – from 106 thousand people in 2008 to 1,777 thousand people in 2014, i.e. 1.7 times more [7, p.117].

In 2015, Grozny-Avia made 2.3 thousand flights, serviced 248,000 passengers of which 41,000 passengers made their international flights. Moreover, 654 tons of commercial and postal cargo were handled, revenue from the airport services amounted to 96.5 million rubles [4]. However, the aircraft has not yet become an environmentally friendly transport. Domestic aircraft do not meet international requirements established by the Kyoto Protocol on the level of greenhouse gas emissions into the atmosphere. Innovative processes are taking place in the field of significant increase in the efficiency and environmental friendliness of air transport. Norwegian pilots announced the transition of local airlines to electric aircrafts [1].

Air traffic is dependent on weather conditions. Moreover, there are safety issues.

Among limiting demand factors is high tariffs for services. The transport mobility of the population of the Chechen Republic is largely hampered by the level of its income and very limited solvency. Hence, the segment of people who demand the services of all types of transport and especially the most expensive services of air travel is very narrow.

Meanwhile, for various reasons, the tariffs for passenger transportation from the Republic are 25-30% higher in comparison with the neighboring airports in Magas, Beslan or Makhachkala. An economy class ticket for the Grozny – Moscow route costs from 5,410 rubles to 8,075 rubles. Accordingly, a business class ticket costs from 11,200 rubles to 15,075 rubles. As a result, quite often, residents and guests of the Republic prefer to fly from the airports of neighboring cities and return there as well.

It is known that when making a decision, two thirds of passengers are guided precisely by the price of tickets. For example, currently in the country 70% of passengers are transported by rail in the passenger car with reserved seats and sitting carriages, whereas only 30% take compartments and VIP carriages. In the Chechen Republic this number is 85 and 15 percent, respectively.

The air tariffs or air fares for transportation in the republic largely depend on the presence or absence of a competitive environment. So, in 2013-2014, it was only a public joint stock

company Grozny-Avia Airline that operated on the Grozny – Moscow (Vnukovo) route. The average passenger load factor was 85.7%. Due to the Red Wings Airlines appearance on market, passenger load factor has dropped to 73%. At the same time, the average one-way fare fell from 7,500 rubles to 4,500 rubles [4].

In 2015, the Utair company also reached this route (Boeing aircraft - 737-500). The airline's tariff is much lower; however, it is unprofitable even with 100% passenger load. In 2015, the Grozny – Moscow line generated 60% of all traffic of the North Caucasus carrier. This is primarily due to the insufficient level of economic development in the region and, accordingly, interregional economic relations.

The level and dynamics of profitability indicators are influenced by factors that shape the company's profit, i.e. price, quality and structure of sales, as well as production costs and sales.

In 2015, the profitability of sales had increased 4 times for the period of two years. Total sales profitability had also increased by 4.8% [4].

The cost of the passenger fare is determined on the basis of the cost of the flight hour, which, in turn, arises from five main components: airport fees, air-fuel, aircraft navigation maintenance fees, cost of aircraft ownership, maintenance and repair, wage fund of aviation personnel. Three components have the largest share in the air travel cost: the cost of airport services (according to various estimates it is 15-30% in the cost structure); leasing payments (20-30%).

Air transport is one of the most knowledge-intensive activities ensuring high level of safety. However, this issue deserves a close attention. The safe life of the aircraft reaches tens of years. The range of aircraft service life in Russian airlines is from 5.2 years (Aeroflot Airlines) to 37.8 years (Tomskavia Airlines). The average life of an aircraft of Grozny Avia Airlines is about 25.9 years [7].

Particular attention should be paid to the fact that air transportations take the second place after car transportations in terms of the volume of tourist turnover in the Chechen Republic.

In many countries all over the world the low-cost airlines have become widespread because of the low and socially oriented tariffs for passengers. By means of legislative and other measures many states create the conditions for the introduction and promotion of low-cost airlines, i.e. social tariffs for mass passenger flow. In the USA and European countries about 50% is accounted for the air transportations taking into account fairly high level of average per capita income of population and social tariffs. In particular, major Western discount airlines exclude some airport additional services. For example, a shortened aircraft maintenance schedule ensures an increase in flight time and, ultimately, increase in the number of tickets at affordable prices for customers. They use also small airports, landing sites and avoid feeding passengers on board.

The Russian low-cost airline Pobeda (Victory) is considering the installation of standing seats on the boards of

new aircrafts, which will make it possible to add up 20% of passenger load.

The flight crew and attendants of the airport Grozny are international. Since the days of the Second World War we know the following names: D. Akayev (commander), Lyali Nasukhanova (fighter jets pilot). In previous years, there were pilots among who we find Akhmed Imadayev, S. Magomadov, A. Akhmadov. Nowadays, among current flight crew there are experienced Hussein Evmurzayev, U. Aldamov, A. Abdulaziev, L. Ismailov, second pilot Larina Evmurzaeva. There are 18 Chechen women among 28 flight attendants.

In the coming years, the agenda for the development of the Republic's air transport will obviously be the issue of the revival of local republican and interregional airlines. Social fares on local airlines would allow flights to remote and inaccessible mountainous areas, as well as to remote points in the semi-desert zone of northern regions. Along with many very important functions that small aircraft have been performing in previous years it could be out of competition and in emergency situations.

A high-mountain all-year-round resort Veduchi is now open for tourists. If the hotel reaches the appropriate level and quality of services, it could be a VIP air service associated with Grozny.

The work on the resumption of flights of small aircraft has already begun. The most favorable conditions for public and private cooperation are in the field of small aviation.

The airport Grozny is becoming a very active "point of growth" and is being intensively developed due to the establishment of its territorial republican customs service and border control. The customs post in the Chechen Republic has operated for several years in North Ossetia and in Mineralnye Vody. These services directly located in the Republic will significantly enhance foreign economic relations, reduce transport costs and storage of goods, facilitate the implementation of visa requirements, and hence the procedure for the entry and exit from the Republic of foreign and Russian citizens and tourists. In addition, a significant impetus will be given to the development of tourist and recreational centers, as one of the priorities in the strategy for the development of the Republic's economy. It is obvious that as a result the level of investment attractiveness of the Chechen Republic can significantly increase.

A year ago the Government of the Russian Federation approved the Strategy for the Development of Russian Sea Ports in the Caspian Basin, rail and road approaches to them for the period up to 2030. The renewed transport infrastructure – port, automobile, railway, aviation – is a powerful impetus to the development of the territory, which will indirectly affect all sectors of the economy from small businesses and services to industrial production and tourism.

The proximity of the Caspian Sea is a great advantage for the subjects of the North Caucasus Federal District. The seaport of Makhachkala is available for three types of transport developed in the Chechen Republic. This is a direct transport corridor for exporting products to the countries of the Transcaucasus, the Middle East, China and India.



Fig. 2. Take off in Grozny

The transport and logistics complex can become a window for exporting goods from the North Caucasus, including the Chechen Republic (halal meat products, grains and their processed products, and mineral water). In addition, the development of aquaculture, a network of wholesale distribution centers and the processing of Caspian bioresources may be envisaged.

The airports of the North Caucasus have agreed with China on regular tourist flights as an organic part of the newly reviving the Great Silk Road. Due to its geographic position, the airport Grozny has been in demand as a base for refueling aircraft in transit for many years. This is a very important competitive quality that can provide additional income in the airport operations. The runway and navigation systems of the airport Grozny make it possible to take the European Boeing airplanes - A-318, A-319, A-320-200, and A-321. [5.p.128].

The issue related to the implementation of the project of the second stage of reconstruction of the airport Grozny is relevant.

### III. RESULTS

The runway will be extended 600 m and its bearing strength will be about 250 tons.

It is planned to build a half-moon shaped international terminal at the airport of Grozny. The airport's capacity will be increased up to 1.5 million people a year.

There will be improved aviation security systems. The overall infrastructure of the airport will be modernized, as well as radio control for air traffic. Due to an increased flow of tourists, there will be extended regular flights between Grozny – St. Petersburg.

### IV. CONCLUSION

In the future Grozny may become a transit airport hosting transcontinental flights: North – South and West – East [3]. Thus, the air transport hub of the Chechen Republic and its infrastructure are being actively restored and slowly but surely it is becoming part of national and international communication system.

### References

- [1] BBC News Russian, September 5, 2018.
- [2] S.O. Zhev, Development of Economy of Chechen-Ingush Autonomous Soviet Socialist Republic in the Period of Mature Socialism. Grozny, 1984.
- [3] On Approval of Concept for Development of Airfield (Airport) Network of RF for the Period up to 2020: Order of the Ministry of Transport of the Russian Federation and the Minister of Defense of the Russian Federation No. 003/0021 of 05.29.2008. Retrieved from: [http://www.mintrans.ru/documents/detail.php ELEMENT\\_ID = 10173](http://www.mintrans.ru/documents/detail.php ELEMENT_ID = 10173)
- [4] Report of Grozny Airlines, 2015.
- [5] Yu.N. Saraisky, I.I. Aleshkov, Air Navigation. Part I. Basics of Navigation and Use of Geotechnical Tools: Tutorial. St. Petersburg: St. Petersburg State University of Civil Aviation, 2010.
- [6] A.L. Ustaev, Transport Infrastructure. Chapter VI. Economy of Chechen Republic. Grozny, 2013.
- [7] Chechen Republic in Numbers. Short Statistical Compilation. Grozny, 2015.