

**Problems of modern airport development**

*The article is devoted to the problem of improving the quality of airport work structure, particularly in Kyiv. The work proposes a development strategy, as well as from the marketing side, and management of non-aviation revenues. Also, in this work problems are considered from the point of view of ecology, improvement of technology, expansion of the airport infrastructure.*

In the 90's there were almost 50 airports throughout the territory of Ukraine. The largest number of passengers is Boryspil airport. Through its terminals passed more than 8 million people. In the second place is the airport "Zhulyany", which took 1 million 127 thousand passengers. In the third place, the airport "Odessa", which was used by 1 million 33 thousand passengers. From Lviv, there were 738 thousand passengers on the fourth place. The fifth place at Kharkiv airport. Almost 600 thousand passengers passed through his terminal. Today, Boryspil Airport serves 66% of air passengers served in our country.

Truly seriously, the state was thinking about the development of "Borispol" in 2010, on the eve of the European Football Championship 2012. However, the time factor played a negative role - both planning and the implementation of the conceived left much to be desired. It turned out that at that time (and for the current one too) infrastructure it is impossible to turn the Boryspil airport into a European transit airport, the so-called hub. Putting into operation of the terminal "F", as well as terminal "D", which did not bring Boryspil airport closer to a complete hub. The terminal "F" has a low bandwidth, and the terminal "D", despite a good bandwidth, has a non-lethal layout. The fact is that the terminal "D" is physically impossible to unblock with the terminal "B".

As a result, it turns out that the points of service of passengers are scattered over an overly large area, the time for the service of transit passengers is several hours, which in the root undermines the very idea of the airport-hub.

At the main air station of the country - the airport "Borispol" recently not everything is going as smoothly as we would like. However, despite all this, the airport, as before, remains one of the best air hubs in Eastern Europe. In the new terminal, there are advantages that the modern air terminal complex has - from comfortable waiting rooms to a modern security registration and control system. Unfortunately, according to the original project, the new airport terminal did not intend to service domestic flights and was guided only by international passenger traffic. In this regard, it will take time to finalize the project.

Such changes are very important, first of all because "Borispol" is oriented to the hub model of development. After the reconstruction of the terminal "D" and the transfer of all international and domestic flights to it, it is planned to create a completely new product at the airport "Borispol" based on terminal "F" - a terminal for servicing low-cost companies and charter flights.

This terminal complex was originally planned as a terminal for budget carriers, where there are no aeromosts (this is an additional service that is not used by budget companies), it is as simple and convenient for carrying out all necessary formalities. Terminal B in the coming years will function as a terminal serving international and domestic flights.

What does not change in Boryspil is a monopoly. In Boryspil, monopolized markets for most services, such as baggage handling, maintenance of airplanes on the platform. The choice of companies providing board meals and meals for passengers at the airport. Ground handling at terminals and on the platform, aviation and non-aviation service complex at passenger terminals, power supply, aviation security, advertising, and object security - all this is done by companies that are "unique and unique" for the airport. Hence the low quality of services provided by passengers and airlines and high prices. Considering the location of the airport - far from the metropolis - "Borispol" can not be considered "problematic" from the point of view of the environment. A whole range of actions has been developed and implemented, aimed at reducing the negative impact on the environment. Environmental specialists regularly monitor the radiation situation, focusing on protecting water bodies, controlling environmental performance in the use of equipment. In July 2012, in Boryspil, representatives of Germany and Ukraine conducted a research experiment in which they studied the state of air due to the emission of aircraft engines within the airport. The result of the research revealed - all the indicators were within the norm.

The issues of ecology and noise impact, rather, relate to airports located within the city. Passage of air routes over populated areas creates an additional noise load, which, accordingly, affects the ordinary life of citizens. For example, in Europe, most of the airports within the city are closed for night flights.

In addition, there are cases when airports in cities because of a violation of the ecological situation ceased their activities forever.

Today, the level of security is the first and main priority of the Boryspil airport. The work is carried out both on updating of a technical condition and on updating of software systems, which serve passengers and work with personnel. The human factor in safety matters, as shown by the analysis of photo aviation adventures in recent years, is basic. There is a constant updating of technology. Several new detectors are purchased annually, several new software for service, for analysis. The video control area is expanding. Work is underway on baggage checking systems for security. This is a daily work. For today in "Borispol" it is provided practically full control over luggage at all stages of its service. Also, reorganization of structural units that control the acquisition, transportation, loading on board of baggage, terminals and on the platforms is conducted by constant video surveillance. In the current year, in the restricted access zone, we additionally installed 67 video cameras and 150 video cameras are planned to be installed, where it is impossible for technical reasons to conduct video surveillance, personal control is carried out by internal security officers. This year, the airport on certain days went up to exceed the capacity of the terminal "D".

Those indicators that were laid in the construction of the terminal achieved and this suggests that preserving the growth of passenger traffic will lead to the need to expand the infrastructure of the Boryspil airport.

First of all, implementation of those projects that will increase the capacity of the terminal. In the first place, this will put in order the infrastructure of the road and the risers near the terminal. It is planned to put into operation half of the unfinished parking, which everyone sees. Parking for 1000 cars next year will allow unloading the station square. The second A new luggage compartment will be put into operation, which will increase the area for luggage delivery and will reduce loading during luggage delivery at peak hours. Three additional gateways will be created for the exit of passengers with boarding. The next step is to begin work to expand the platform for additional platforms for the servicing of aircraft in close proximity to the terminal "D". And the work on expanding the gallery of the terminal "D" will be commenced to increase aero bridges. Non-aeronautical activities deserve attention in particular in the context of the conflict around the call Ryanair to Ukraine. Lowcosters are trying to get the lowest tariffs for aviation services (\$ 7.5 per passenger for Ryanair in Borispol), and the airport can cover losses through the growth of non-aviation revenues. Including due to the growth of passenger traffic from low cost-carriers.

Also, taking into account the advantages of EU legislation, it is allowed to optimize the personnel due to the maximum combination of posts, in particular firemen perform the functions of drivers of aerodrome equipment (snow-removal equipment in winter). In Ukraine, this direction has problems, because at the legislative level, this phenomenon is not settled.

**Conclusions.** In accordance with the aforementioned forecasts, all world airports are constantly developing: they are reconstructing terminals, increasing the number and quality of the airfield infrastructure. Therefore, it is extremely important to analyze the problems of Ukrainian airports and, in particular, Kiev and give conceptual proposals for their further development, so it is necessary to implement the following proposals:

1. Develop a strategy for the development of the aviation industry in Ukraine with clear goals, deadlines, responsibility for the result.

2. Stimulate the attraction of private capital to airport management.

3. Develop a marketing strategy for the promotion of Ukrainian airports. Any investor is much more interested in seeing the all-Ukrainian picture of perspective objects of aviation infrastructure and related industries than talking about investing in a single airport.

4. To reconstruct the airfields of Ukraine. Ideally - to close the issue with the reconstruction of airfields for 20-25 years, moving to cement concrete monolithic coatings. It is also necessary to expand ("Borispol") and build from scratch (most regional airports) new terminal complexes for spatial design technologies.

5. Implement a comprehensive strategy for managing non-aeronautical revenues, such as renting space, hotel services, entertainment for transit passengers, postal and logistics services.

6. Improve the efficiency of personnel management at airports in Ukraine.

## References

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