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### **Boryspil International Airport competitive environment analysis and the new airport's hub-and-spoke development concept.**

*A comprehensive approach to the analysis of the modern airport competitive environment based on the international practice is proposed. The feasibility study of the new "hub-and-spoke" development concept for Boryspil International Airport is provided.*

In the modern economic environment any company must develop its strategy and succeed in a competitive environment and take part in a competition. And the airports are no exception. The development of airports confirms that they used to be the providers of infrastructure, and should operate in a competitive environment on the global market.

Operating in an open market, airports are obliged to independently find sources of profit. They have to fight for the market share with their competitors - other airports.

In accordance with ICAO Airport Economic Manual (DOC 9562) competition between airports may arise in varying circumstances, for example:

- long-haul hubs competing for origin-destination and transfer traffic;
- multiple airports in large conurbations owned and/or operated by separate entities competing in the same market;
- smaller non-proximate airports actively competing to attract point-to-point, short-haul services, particularly those offered by low-cost carriers (LCCs).

One of the most intense types of competition is between hubs for transfer traffic, taking into account that in this segment, as a rule, large capital airports compete.

Considering the position of Boryspil airport in such a competition we have to state that the following hub airports are competitors of the Boryspil airport:

- main (strong) competitors: Eastern European airports, first of all, Warsaw (WAW) and Moscow airports (DME, SVO, VKO).
- moderate level of competition is identified from the following European airports: Munich, Vienna (these airports are the base for the Star Alliance), as well as the Istanbul airport.

All these airports are currently ahead of Boryspil airport in terms of passenger traffic and are defined as benchmark for the successful implementation of the hub concept.

Most of these hubs have been developed thanks to the transfer passengers generated by the base carriers, for example: Frankfurt and Munich - Lufthansa, Istanbul - Turkish Airlines, Warsaw - LOT, Sheremetyevo - Aeroflot Russian Airlines, etc.

The synergy of the carrier's and airport's efforts creates a joint product that is competitive in terms of price / quality. Implementing the hub development model, airports compete through their base carriers. The base carrier draws passengers to its hub and thus weakens competitors' hubs. Thus, it is not reasonable to count on foreign carriers when developing a hub in Boryspil airport.

*Table 1*

Airports and their base airlines in 2017

Airport	Traffic 2017, million PAX	Base carrier	Base carrier share, million PAX	Base carrier share, %
Istanbul	63,7	Turkish Airlines	43,4	68%
Munich	44,6	Lufthansa	24,5	55%
Sheremetyevo	40,1	Aeroflot	28,5	71%
Vienna	24,4	Austrian	11,8	48%
Warsaw	15,8	LOT	6,8	44%
Boryspil	10,5	UIA	6,3	60%

The share of the competitors' basic carriers equals or exceeds 50%, that confirms the fact - an international hub is created by the carrier, which is the driver of the development of the airport and operates an extensive routes network.

At the same time the analysis proves that Boryspil airport and its base carriers will compete with airports that have a higher volume of traffic and stronger base carriers.

The airport is growing with input of the domestic carriers. More than 75% of the passenger traffic is provided by three Ukrainian air carriers. However, for the purpose of diversification, the airport annually attracts 5-6 new carriers.

The guidelines and the priority measures to be taken for the development of the airport as the international hub are defined in the Boryspil International Airport Strategic Plan for the period of 2015-2019, approved by the Ministry of Infrastructure Regulation No.289 dated 28.07.2015.

Maintenance of the competitive level in the conditions of negative GDP dynamics, low purchasing power of the population and fall in demand for point-to-point flights should be based on the development of the transfer segment, which is

minimally dependent on the economic conditions of the country.

To confirm the above conclusion, we compared the overall passenger flow that includes the transfer passengers with point-to-point flow and GDP per capita (Fig. 1)

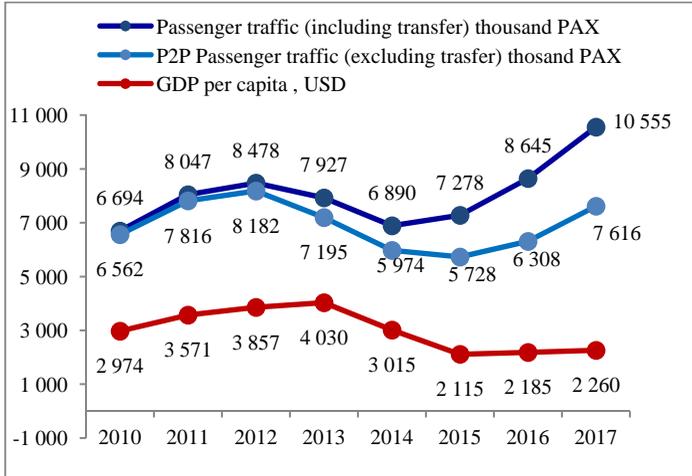


Fig.1 Boryspil Airport passenger traffic and GDP

The implementation of the mentioned strategy aimed at developing an international hub, as well as the implementation of the proposed measures, will significantly increase the competitiveness of the airport.

The right choice made by the airport management aimed at hub concept was confirmed by the Decree of the President of Ukraine No.535 / 2015 which provides for the development of an international hub on the basis of Boryspil International Airport.

### References

1. ICAO Airport Economic Manual (DOC 9562), Third Edition — 2013, [https://www.icao.int/sustainability/Documents/Doc9562\\_en.pdf](https://www.icao.int/sustainability/Documents/Doc9562_en.pdf)
2. Boryspil International Airport Strategic Plan for the period of 2015-2019, approved by the Ministry of Infrastructure Regulation No.289 dated 28.07.2015. [http://kbp.aero/docs/Strategy\\_ukr.pdf](http://kbp.aero/docs/Strategy_ukr.pdf)
3. Decree of the President of Ukraine No.535/2015 <http://zakon2.rada.gov.ua/laws/show/535/2015>