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## **B2B CLIENTS' ESTIMATION OF AIRPORT COMPLEXES' SERVICE QUALITY**

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This article analyzes the service quality of airport complexes, which occupy a leading position in the behavioral economy and are accompanied by increasing safety needs. The peculiarities of the domestic and European airline market are the following prerequisites for the study: the increasing capacity of flights, the growth of air transportation because of the introduction of powerful low-cost airlines to the market, and the development of technical equipment and services at airport complexes. The theoretical basis of the study is the doctrine of the development of perfect monopolistic competition, where the main factor of competition is the qualitative provision and service of, in particular, air carriers. The purpose of the study is to determine the position of selected airport complexes according to the criterion of quality of B2B airport service. The research method was a representative survey of air carriers and a comparative analysis – allow us to rank the providers of airport services. In this work, in order to prove the purpose, the methodology of B2B clients' evaluation of the quality of airport complex services, ground, and airport servicing of airplanes was used with the help of the main groups of criteria. These criteria are the following: aerodrome and airport safety; aviation ground handling, settlement, and settlement of cargo and mail; organization of support of aircraft fitness, provision of fuel and lubricants, promotion of carrier flights, etc. The results of the study revealed the weak sides of quality assurance at Zaporizhzhia International Airport: in maintaining the airworthiness of aircraft, in the organization of settlements and processing of cargo and mail, and in the ground handling of aircraft. The results of the study show that the quality of services at Zaporizhzhia International Airport in the market of air transportation services is rated at an average level for Ukraine, with a tendency for improvement.

**Keywords:** quality management, marketing research, airport complex, service quality assessment, B2B

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## 1. THE RESEARCH PREREQUISITES FOR SERVICE QUALITY AT AIRPORT COMPLEXES: THE AIRLINE TRANSPORT TENDENCIES IN THE UKRAINIAN MARKET

The Open Skies Agreement is in force in the European Union. The development of the largest airlines is due to routes within this territory. For example, Ryanair's low-cost airline carries more than 100 million passengers a year. In January 2017, Ryanair became the largest European airline, overtaking Lufthansa with 117 million passengers versus Lufthansa's 110 million. Moreover, in August 2017, the company announced that it carried the billionth passenger (*Ryanair...*, 2017).

Despite the passenger traffic increasing in Ukraine, the number of carried passengers remains low when compared to the rest of Europe, America, or a number of Asian countries. According to the State Statistics Service, in 2018 Ukrainian airports served 20.55 million passengers, which is 25% more than in 2017. According to the Ministry of Infrastructure the volume of air cargo and mail transportation increased by 21%. Global market growth of air transportation averages 4.5–5.0% per year, according to IATA, in comparison with the previous period. However, despite the higher rate of growth of the Ukrainian market, its size remains relatively low, compared to the markets of Europe and the USA.

The Ukrainian airline market has its own specificity, determined not only by the number of passengers, but also by the quality of development. In the first half of 2019, Ukraine occupied the second place in Eastern Europe, in terms of the number of passengers carried. It amounted to 10.7 million people (Table 1).

Table 1. Dynamics of operating activities of individual airports in Ukraine  
for the 1st half of 2019

No.	Name of the airport	Number of passengers, million people	
		1–2018	1–2019
1	Boryspil International Airport, Kyiv	5.58	6.71
2	International Airport named after Sikorsky, Kyiv	1.15	1.33
3	Lviv International Airport named after D. Halytsky	0.65	0.95
4	Odesa International Airport	0.34	0.59
5	Zaporizhzhia International Airport	17.7	0.23
6	Dnipro International Airport	0.11	0.15

In this ranking, which includes 10 countries, Ukraine is ahead of Romania for the first time, but it is significantly behind Poland. The number of carried passen-

gers is about 22.3 million people (Morga, 2019). Boryspil International Airport is the leader among the domestic airports. It has been ranked sixth among the largest airports in Eastern Europe. In the first half of 2019, it served 6.7 million passengers. This is 20% more than in the first half of 2018. But by the end of the year, Ukraine's largest airport may rise in the ranking, as it has served more passengers in May and June than Bucharest and Budapest. The second largest Ukrainian airport is the International Airport named after Sikorsky, Kyiv. It served 1.33 million people. This is 16% more than in the same period the previous year.

The third airport in the country is Lviv International Airport named after D. Halytsky. By the end of June, nearly 950,000 passengers had passed through it. This is 45% more than in the same period the previous year. Lviv International Airport, named after D. Halytsky, overtook Poznan and Bratislava in terms of the number of passengers served. The fourth top airport is Odesa International Airport, where the passenger flow is expected to exceed 1 million people in 2019 (*Ukraina...*, 2019).

For the first half of 2019, Zaporizhzhia International Airport and Dnipro International Airport also have positive growth dynamics in passenger traffic: 231 thousand passengers, a 30% increase over the previous year, and 149 thousand passengers, a 34% increase, respectively. It should be noted that in Ukraine the main increase in passenger traffic is not in domestic, but in international traffic, including the offer of low cost airlines. It should be noted that the transportation market in Ukraine is not well-structured. The major share of air transportation occurs at the Boryspil International Airport, Kyiv. In 2018, it carried 61% of the transportation market, which demonstrates the need for the development of an internal network of airports and their business activity.

In terms of structure, revenue from non-aviation activities worldwide makes up 46% of total airport revenue. In major Western airports, commercial revenue can account for up to 70% of total revenue: at Incheon airport in Seoul 70%, at Changi airport in Singapore 55%, as mentioned in *High Services* in 2018. The emergence of low-cost carriers, aggressively competing not only with each other, but also with traditional airlines, the opening of a number of flights from minor airports, liberalization of aviation legislation within Europe and rising prices of aviation fuel have many consequences. All these factors have led to a significant reduction in ticket prices, but also to a decrease in airline profits and an increase in the load factor.

In our view, the strong increase in air transportation is caused by the introduction of a visa-free regime with the EU and the launch of several low points in Ukraine, where the share of international connections has increased up to 30%. Considering the market situation of the airport complex services and the specific nature of the business entities, it should be noted that in the current conditions, the key factor for improving the efficiency of the airport services market is the quality of service. The existing standards of service quality at domestic airport complexes meet a low level of requirements to the consumer standards of modern world airport complexes.

## 2. THE THEORY OF THE SERVICE QUALITY ASSESSMENT OF AN AIRPORT COMPLEX

The theoretical basis of the study is Joan Robinson's doctrine of 1933 on the development of imperfect and perfect monopolistic competition, where the main factor of perfect competition is non-monetary, the foundation of which is the quality of services. For the producers of goods and services, the quality aspect is the main index for their competitiveness and business management effectiveness.

Wells (2000; 2004), Young (2004, 2010) as well as Horonjeff et al. (2010) focused their research on the general issues of airport complex management. Polish scholars study the quality of airport services in various aspects such as flight traffic engineering (Malarski, 2006), security evaluations against terrorism (Kucharek, 2019), airport security (Nowak, Pośluszna, 2019), packaging quality at flight freight transportation (Tkaczyk, Banasiak, 2019).

Evaluations of airport passenger services were studied by Pawlak-Burakowska, Urbanek, Błaszkiwicz (2014), Skorupski, Malarski (2012), Górecka, Sztanderska, (2015), Wolny, Wolniak (2018). Some aspects of the assessment of airport services are reflected in the contemporary works of Russian and Ukrainian scientists such as Kubichek (2017), Pavelko (2018). In order to improve the management quality of the services sector and to determine the forms and methods of improving the quality of passenger and cargo services, it is necessary to have end-consumers and intermediaries in modern airports comprehensively assess the quality of internal business processes, in particular at land and air transport enterprises. "The transport services market is currently growing. New airports and new carriers are emerging, which also results in increased demand for a variety of transport services, including in the aviation sector, thus conditioning customer satisfaction. That is why it seems important to monitor the processes involved in providing air services of the appropriate quality and to continually assess and test the quality level" (Stoma, Dudziak, 2018, 27).

Of interest are recent studies by scientists on ways to study the level of airport users' satisfaction with the services of air carriers (Hong, Choi, Chae, 2020), as well as a method of a multidimensional approach to measuring the quality of service at the airport (Bezerra, Gomes, 2016), and the role of the quality of airport service in the choice of airport and destination (Prentis, Kadan, 2019). However, the problem of quality of service of air carriers, which affects their choice of airport, is insufficiently covered, first of all, due to the quality parameters of assessing the quality of ground and airport services. This study is carried out in order to partially fill this gap in the domestic scientific space. Therefore, the study is necessary not only to provide feedback, but also it is important for the management of airport quality services to consumers and intermediaries. It is necessary for control and optimization of all airport work modules: passenger flow harmonization, the different types of maintenance, rotation flights. Similarly, the planning and management

of aerodromes consist of studies on key needs and accessories, resources involved, etc.

The purpose of this study is to rank ground and airport services by assessing the service quality of the airport complex. The object of the research is the service quality of the airport complex for passengers and airlines. The subject of the work is marketing methodical approaches and tools for assessing the quality of providing airport services to clients.

Disclosure of the purpose of the work requires an understanding of the essence and content of the conceptual apparatus. The airport complex is an integrated enterprise that specializes in providing a full range of services for airlines and passengers of the company, as well as providing customs, border and sanitary and quarantine control. To fulfil its functional purpose, the airport complex includes an airport with a runway, an air terminal complex with cargo and passenger terminals, objects of enterprises of different ownership forms of various ground and airport services of airlines, passengers and cargo carriers, customer service offices.

It is well known that the components of quality include management quality; quality of processes; product quality; quality of resources; quality of staff; quality of life. In the concept of "quality of service", there are two sides: quality of result and quality of service (Fig. 1).

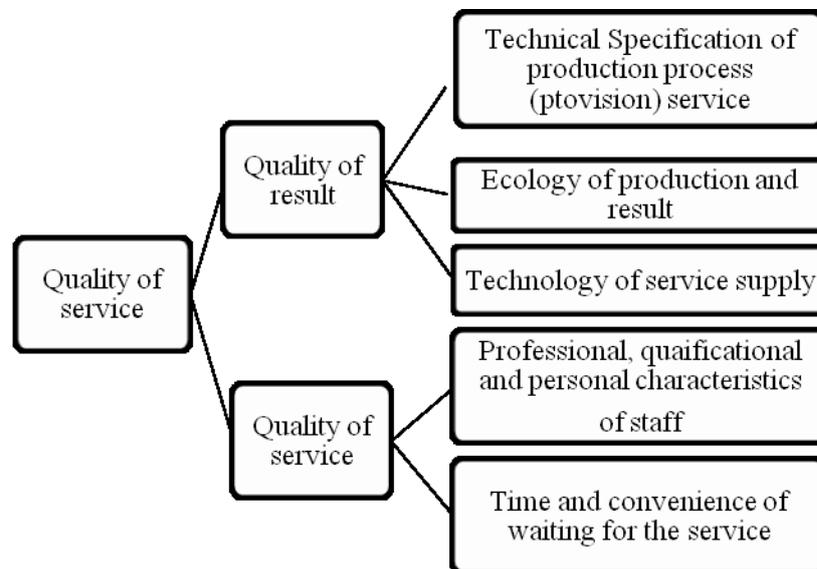


Fig. 1. Components of the concept of "quality of service".

Source: Abramov, 2011

Most authors consider the users of airport structures to be: passengers; shippers (individuals and legal entities); carriers (airlines) and operators (Kubichek, 2017). However, in our opinion, the classification should be made in accordance with the current theory of consumer segmentation, which distinguishes two main segments: B2B and B2C. B2B (business to business) is a market sector, in which the organization is a customer of another organization. Whereas, the B2C market involves the interaction of the organization with end-consumers (Vasilevskij, 2009).

The main consumers of airport services are airlines that pay for the use of ground infrastructure such as fees from airlines for take-off services, aircraft refueling, parking, security, noise level. This group of consumers of airport services is the most important because it has a decisive influence on its position on the market (Jaroshevich, 2010). Today the B2B market is characterized by a high level of competition and a number of features, among which are: a high degree of involvement of participants, influence of personal relationships, as well as a mostly collegial nature and a multi-stage decision-making process.

Currently, the main regulatory frameworks in the field of airport service quality are the implemented standards of the ISO 9001 Quality Management System and the requirements for ISAGO aviation security, and there are no rules governing the quality of services from the point of view of the customer-oriented approach, as well as the quality control system of the airport complex. In the current situation, the operators of the airport services market are faced with the problem of a lack of common approaches, criteria and methods of assessing the quality of airport services and, as a consequence, the need to develop independent mechanisms for regulating service activities.

### **3. METHODOLOGY OF RESEARCH OF B2B CONSUMER SEQUENCES OF AIRPORT COMPLEX SERVICES**

Traditionally, the first stage involves the study of the main actors in the market for airport structure services in marketing research: consumers with segmental groups (Kumar et al., 2018). On the other hand, as mentioned above, the key consumer groups for the airport complex are the following two segments: B2B and B2C. The B2B segment is formed, mainly, by airlines, which generate a significant share of revenue from aviation activities. Passengers, who are the main source of revenue from non-aviation activities, mainly represent the B2C segment.

The second stage of assessing the quality of services of the airport complex is “The development of the necessary expert survey of B2B clients of the airport complex. The main task of the questionnaire is to determine the level of satisfaction with the quality of services of the airport complex at each stage of the process of service provision and identification of bottlenecks.

In order to obtain an objective assessment of the status of airport services for airlines and the directions for improving the operational management of Zaporizhzhia International Airport, an expert survey of all 12 representatives of air carriers (B2B segment) was conducted: International Ukrainian Airlines (IUA); Motor Sich; Turkish Airlines; Pegasus Airlines; Atlasglobal; AzurAir; Bravo Airways; AndaAir; WINDROSE; YanAir; SkyUp; LOT Polish Airlines S.A. Three categories of respondents were surveyed on the satisfaction with the quality of services of the airport complex. In particular, these are three representative groups: representatives of the management of the carrier companies, who have concluded the agreements on air transportation of passengers and cargo; flight crew representatives; airline representatives in Zaporizhzhia. Six profiles for each carrier were reviewed. The total number of respondents is 72 profiles, which is full coverage of the local air carrier market. The basic methodology for conducting the marketing survey was the methodological development of the AEVT Committee on Airport and Ground Service of the Russian Federation (*Delovoj...*, 2013), which is generally correlated with several other criteria for the evaluation of airport complexes (Pavelko, 2018, 36). In contrast to the classic methods of consumer research (Kumar et al., 2018; Iacobucci, Churchill, 2018; Malhotra, 2006), this technique is already adapted to the industry and service specific activity of airport complexes. and covers 12 evaluation criteria and 56 indicators of expert service quality research.

According to airline experts, it is also necessary to assess the level of competition in the provision of airport and ground services. For this purpose, one of the leading airports in the country was selected for comparative analysis: the International Airport named after Sikorsky, Kyiv, as well as Dnipro International Airport and Zaporizhzhia International Airport.

Table 2. Scale of airport service quality assessment

Score	Characteristics of quality service level
0	the service is missing
1	the service is provided for the first time, the quality is poor
2	service provided, quality of service satisfactory, tendency to deteriorate
3	service provided, quality of service satisfactory, tendency to improve
4	the service is provided, the quality is good
5	the service is of the highest standard

The research methodology based on the results of the sociological research provides:

- a survey of consumers of B2B airport services according to 11 criteria and indicators according to a rating scale from 0 to 6,
- a method of calculating the arithmetic mean of the average score on the quality of service,

- a method of calculating the arithmetic mean of assessing the quality of services for B2B ground and airport services.

The analysis and assessment of the quality of airport service of the investigated airport complexes were performed on a six-point scale (Table 2).

#### 4. RESEARCH RESULTS AND THEIR INTERPRETATION

In total, in the period from July to September 2018, 61 of 72 questionnaires were completed, accounting for 85% of the general sample of respondents. The analysis of the evaluation results (Table 3) leads to the conclusion that the expected highest score (3.38) was received by the International Airport named after Sikorsky, Kyiv. The second position with a score of 2.67 points was occupied by Zaporizhzhia International Airport and Dnipro International Airport got the lowest results in almost all positions. The average score was 2.5.

Table 3. Map of the results of the survey of air carriers regarding the quality of ground and airport services

Criteria and indicators for assessing the quality of services	Arithmetic mean score		
	Zaporizhzhia International Airport	International Airport named after Sikorsky, Kyiv	Dnipro International Airport
1	2	3	4
The presence of competition in the selection of airport and ground services			
The ability to perform service efforts by airlines	2	3,5	1
Ground handling of aircraft			
Aircraft reception	3	4	2
Internal cleaning of aircraft	1	2	1
Cargo handling	3	3	2
Board food	3	4	3
Fuel supply	4	4	4
<i>Arithmetic mean score of «Ground handling of aircraft »</i>	2,8	3,4	2,4
Airport safety			
The state of coverage of the steering track	3	4	3
Availability and quality of appropriate markings	4	4	4

Table 3 continue

1	2	3	4
The quality of the proper condition of the air-field cover	3	4	3
Organization of work at the site of aircraft parking: availability of stationary power sources, equipped with a centralized refueling system, fire extinguishing, towing and ground equipment	3	4	2
<i>Arithmetic mean score of «Airport safety»</i>	3,25	4,0	3,0
Ornithological support			
Availability of statistics on collisions of aircraft with animals and birds at the aerodrome and in the aerodrome area due to adverse ornithological circumstances	4	4	3
Availability of measures to improve the ornithological situation	3	4	3
<i>Arithmetic mean score of «Ornithological support»</i>	3,5	4,0	3,0
Ground handling of aircraft			
Availability of technological service schedules	4	4	4
Availability and sufficiency of personnel, special vehicles, aircraft refueling equipment, passenger service, cargo handling, aircraft evacuation	3	4	2
Availability of an automated control system	0	4	0
Availability of power supplies of the required power	4	4	4
Quality of passenger service and cargo handling	4	4	3
Adherence to scheduled aircraft maintenance time, the airport's ability to save and/or reduce aircraft turnover time in emergency situations	3	3	3
Statistics of damage to aircraft during ground handling	4	4	3
Organization of the system of work with transfer cargo	3	4	3
The presence of a risk management system	3	3	2
<i>Arithmetic mean score of «Ground handling of aircraft»</i>	3,1	3,8	2,7
Airport service			
Quality of passenger registration	4	4	4
Aircraft alignment	4	4	3
State of the airport complex	3	4	3

Table 3 continue

1	2	3	4
Validity of the stated capacity (waiting rooms, check-in counters, border control, etc.)	3	5	3
Possibility to use own passenger registration system	3	4	3
Availability of automated cargo search system	2	4	2
Service of special categories of passengers, including:	3	4	2
infrastructure for servicing passengers with disabilities	3	4	2
business lounge and VIP lounge	4	4	2
mother and baby room	3	4	2
other	3	4	3
The quality of passenger service at the airport	3	4	3
The quality of cargo handling, incl. transfer	3	3	2
Organization of work at the terminal area	3	3	2
<i>Arithmetic mean score of «Airport service»</i>	3,1	3,9	2,6
<i>Organization of cargo and post processing</i>			
Availability of equipment for the apron handling of heavy loads carried by passenger non-container types of aircraft	2	3	2
The existence of a risk management system	2	3	2
Provision of NSLC (Notification of Special Load to Captain) for special cargo (both dangerous and safe loads)	3	4	2
Willingness of service companies to eliminate the consequences of dangerous goods incidents	3	4	3
Availability of the SITATEX channel for information support of freight traffic	2	4	2
Availability of permits for the handling of dangerous goods by staff in accordance with airport activity certificates	4	4	3
Reporting of incidents involving dangerous goods and detection of unreported or incorrectly declared dangerous goods	2	2	2
Organization of detection of undeclared dangerous goods	3	4	3
Internal cleaning of the aircraft (timeliness and quality of service)	1	3	1
<i>Arithmetic mean score of « Organization of cargo and post processing»</i>	2,6	3,4	2,2

Table 3 continue

1	2	3	4
<b>Provision of fuel and lubricants</b>			
Production capacities of the fuel-filling complex	4	5	3
Discipline of supply of aviation fuel	4	4	4
Quality of delivered aviation fuel	4	4	4
Quality of laboratory analysis of fuel and lubricants	4	5	4
Quality of service of gas station	4	5	4
<i>Arithmetic mean score of «Provision of fuel and lubricants»</i>	4,0	4,6	3,8
<b>Airworthiness maintenance</b>			
Availability of linear service stations	2	4	2
Possibility to create own parking lots for maintenance	1	2	1
Providing technical assistance to carriers (on-call)	2	3	2
Quality of service according to the observations of the aircraft crew	2	3	2
<i>Arithmetic mean score of «Airworthiness maintenance»</i>	1,75	3,0	1,75
<b>Organization of settlements</b>			
Terms of mutual settlements	2	2	2
Introduction of electronic document circulation, exchange of financial documents	2	4	1
Promotion of carrier flights and effectiveness of marketing programs (ground service discounts)	3	3	2
Organization of service in unforeseen situations	3	4	2
<i>Arithmetic mean score of «Organization of settlements»</i>	2,5	3,25	1,75
<b>Provision of spare airfields</b>			
Availability of convenient spare airfields	3	4	3
Organization of ground and airport services at spare airfields; emergency rescue	3	3	3
Organization of servicing of passengers and aircraft in unplanned situations	3	4	3
Emergency and rescue support	4	4	3
<i>Arithmetic mean score of «Provision of spare airfields»</i>	3,25	3,75	3,0
<b>Legal sectoral regulation of service provision</b>			
Violation of the requirements of regulatory documents on airport and ground handling of aircraft	3	3	3
<b>Arithmetic mean score</b>	<b>2,67</b>	<b>3,38</b>	<b>2,5</b>

According to the results of the quality assessment of services provided by Zaporizhzhia International Airport, the highest number of points was awarded to aviation services: provision of PMM fuel and lubricants (4 points), ornithological support (3.5 points), airfield support (3.25 points) and provision of spare airfields (3.25 points) (Fig. 2). The activities of International Airport named after Sikorsky, Kyiv and Dnipro International Airport are similar, i.e., the highest scores were obtained in the following areas: PMM provision, ornithological support, aerodrome support and provision of spare aerodromes. Given the exemplary importance of the results for further research and the regional patriotism of the authors, the experience of rendering the services of the airport complex for B2B clients of Zaporizhzhia International Airport is more interesting.

Despite the fact that passenger and cargo services are provided by JV Zaporizhandling LLC together with the Ukrainian Handling Company LLC, air carriers estimate that one of the major disadvantages in the field of airport services is the lack of competition (2 points). The lack of competition in airport services is linked to state monopoly policies, when national state-owned companies or entities provide services. Aircraft alignment is carried out solely on its own. In December 2018, the employees of Zaporizhandling LLC received training in aircraft alignment. Ground-based aircraft maintenance, except fuel supply, is also characterized by a lack of competition.

There is no competition in the area of cargo handling and their control. In particular, there is no competition in passenger registration. Cargo is handled by the airport on its own. In fuel supply, competition is mainly between fuel suppliers. There is no practice of organizing their fuel security.

Avia-Service LLC provides catering. Its service is currently undergoing state certification at the State Aviation Service. There is also no practice of organizing on its own. According to experts, competition is possible in the following types of services: delivery of aviation fuel, registration of passengers, reception-issue of aircraft, cleaning of aircraft, servicing of passengers.

In the area of aerodrome support (3.25 points), the most problematic is the condition of the cover of the steering track (RD), the main steering track (MRD) and parking spaces (MS). Although systematic maintenance work is in progress, RD, MRD, MS coatings require major repairs, which have been completed in 2019. However, Class 1 and 2 Western aircraft have a high relative impact (coverage) on coverage (ACN), which is why the operating mode of the coatings and the take-off mass of the aircraft are limited.

Due to the low number of artificial airfield covers classification numbers (33/R/C/W/T), airlines are not able to operate on modern BOEING airliners. Therefore, the airport can serve aircraft of 3 and 4 classes. The marking of the airfield cover is satisfactory. However, in the winter there are problems associated with clearing the airfield of snow and ice. The condition of the equipment used on the MC is unsatisfactory. It is characterized by a high degree of wear.

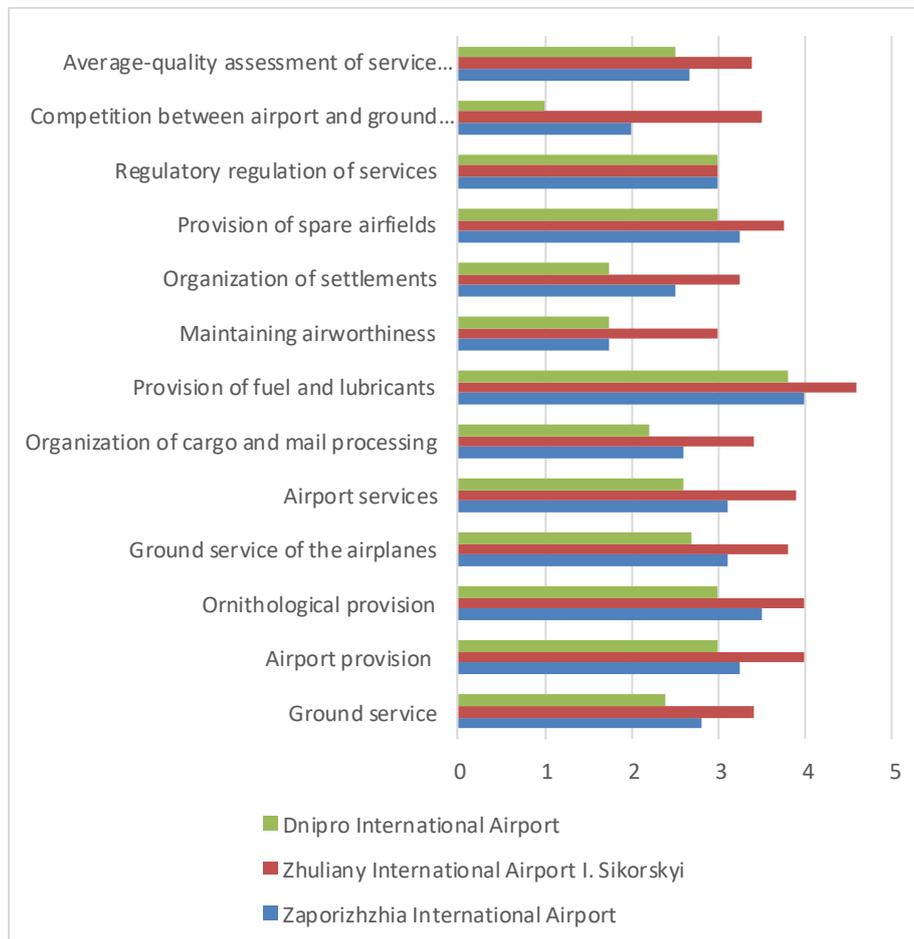


Fig. 2. Expert assessment of the quality of B2B airport services at selected airport complexes

Ground Aircraft Service received a score of 3.1 points. Modernization and upgrading of equipment, in particular ground-based power supplies (GPUs), passenger ladders, platform buses, special anti-icing equipment, ground handling equipment, etc. is very slow. The risk of unplanned situations and flight delays, when landing at an airport with a malfunctioning auxiliary power plant, is increased by the lack of ground power sources and an air launch facility. The low qualifications of staff, lack of automated baggage handling systems are the main drawbacks in the organization of luggage handling systems.

According to the service "Internal cleaning of PS salons", the tariffs are inflated. There is no differentiation of tariffs depending on the duration of the flight. There is no practice of organizing on its own. In addition, consequently, the airlines

are dissatisfied with the quality and time spent for providing this service. The problems, highlighted by the respondents, are the following: the lack of modern equipment, inventory, and special equipment needed for high-quality and fast cleaning of the aircraft.

Despite the reconstruction of the airport, there remains a problem regarding the design, which lacks check-in counters and security controls. The main factors affecting the speed of passenger service are uneven airport loading, lack of infrastructure, and significant financial problems. Despite the introduction of the registration system in the REGINA system, only the public access platform has been launched. It is certainly a positive thing, but the tariffs for providing this service are several times higher than the rates at foreign airports. There is no infrastructure at the airport for handling luggage. It is also unsatisfactory to organize work in the terminal area.

Despite these shortcomings, the experts noted positive trends in the field of airport services. They are the following: installation and operation of their own registration system; improvement of the quality of service for passengers and aircraft crew members, the purchase of buses for passenger transportation, the installation of a luggage carrier, and the provision of centering and loading control services for the aircraft.

The lowest rating (2 points) in the Airport Services area was obtained from the automated baggage search service. In the area of cargo and mail processing the respondents named the lack of necessary equipment as the main problem. Processing is unspecialized and performed manually, which is likely caused by the small amount of work.

One of the lowest ratings was for Flight Maintenance (1.75 points). The availability of linear maintenance stations at the airport complex (including trained personnel, maintenance equipment, etc.) was rated as “unsatisfactory”. The creation and certification of maintenance at an airport is limited by the lack of financial resources, production space, and the high cost of their lease.

According to the carriers, the assessment of the quality of settlement is below average (2.5 points). The approach to the formation and implementation of marketing programs in order to encourage carrier flights is formal, excluding discounts on ground handling. According to the Order of the State Aviation Service, the airport manager has the right to make the decision on granting discounts of up to 70% to the airlines. However, in practice, this opportunity is hardly used, as it is quite difficult to justify granting such discounts to controlling bodies in terms of taxable profit.

Thus, according to the calculations, the average assessment of the quality of airport services of Zaporizhzhia International Airport is 2.67 points. The State Enterprise International Airport named after Sikorsky, Kyiv, has 3.38 points. Dnipro International Airport has 2.5 points.

## 5. CONCLUSION

To summarize, it should be noted that the assessment of the quality of service of the airport complex is an essential element of the quality management system. It controls the service quality of the airport, provides a base for analysis and management decisions, and provides the feedback needed for the sustainable development of the airport complex. Currently, there is a clear tendency to improve the quality of services of airport complexes. At the same time, in terms of technology, personnel training and equipment, the backlog of European airports is an enormous problem. The best motivator and regulator of quality and cost of services is the presence of competition in airports, which is practiced. At present, there is a clear tendency to improve the quality of services of airport complexes. The analysis of the results of the evaluation leads to the conclusion that the expected highest score of the five possible points, was received by International Airport named after Sikorsky, Kyiv (3.38). The second place, with a score of 2.67 points, is occupied by Zaporizhzhia International Airport. Dnipro International Airport received the lowest scores in almost all categories and the average score is 2.5. According to experts' assessments, the International Airport of Zaporizhzhia and the International Airport of Dnipro are positioned on the market of air transportation services at an average level of service quality with a tendency to improve. The service quality of the International Airport named after Sikorsky, Kyiv is rated as above average.

The conducted service quality assessment determined the competitive advantages of the services provided by Zaporizhzhia International Airport: the highest quality points were obtained by aviation services providing fuel and lubricants PMM (4 points), ornithological support (3.5 points), airfield safety (3.25 points) and spare airfields (3.25 points). The following services of Zaporizhzhia International Airport were rated as below average: maintenance of airworthiness (1.75 points); settlement of settlements (2.5 points); organization of cargo and mail processing (2.6 points); ground handling of aircraft (2.8 points).

With the completion of construction of the new airport terminal complex, modern terminals and a reconstruction of the runway, Zaporizhzhia International Airport is expanding the representation of domestic and foreign air carriers/partners. It also intends to cooperate with budget airlines, which are extremely important for the development of regional air transportation.

At the end of the analysis it should be noted that almost a year has passed since the beginning of the Covid-19 pandemic. Among the most affected and unprofitable sectors of the economy in Ukraine and around the world is the air transportation of passengers and cargo. New realities have radically changed the transportation market, which is not rhythmically asynchronous in the provision of services. The issues of market transformation and quality assurance of services need deep rethinking and research in subsequent publications.

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## OCENA JAKOŚCI USŁUG ŚWIADCZONYCH W PORTACH LOTNICZYCH PRZEZ KLIENTÓW B2B

### Streszczenie

Artykuł jest poświęcony ocenie jakości usług portów lotniczych, która zajmuje przodującą pozycję w ekonomii behawioralnej ze względu na rosnące potrzeby w zakresie bezpieczeństwa. Podstawę badań stanowiły charakterystyczne aspekty krajowego i europejskiego rynku linii lotniczych: rosnąca liczba przewozów lotniczych, stymulacja przewozów lotniczych podyktowana wejściem na rynek potężnych tanich linii lotniczych, rozwój wyposażenia technicznego i usług świadczonych w portach lotniczych. Podstawę teoretyczną badań stanowi doktryna rozwoju doskonałej konkurencji monopolistycznej, w której głównym czynnikiem konkurencji jest jakościowe świadczenie usług, w szczególności przewoźników lotniczych. Celem pracy jest określenie lokalizacji wybranych kompleksów lotniskowych według kryterium jakości obsługi lotniskowej B2B. Metodą badawczą było reprezentatywne badanie przewoźników lotniczych i metoda analizy porównawczej, która pozwala na pozycjonowanie świadczących usługi lotniskowe. Pragnąc osiągnąć postawiony cel, w niniejszym opracowaniu wykorzystano metodykę oceny przez klientów B2B jakości usług świadczonych w portach lotniczych, jak też obsługi naziemnej i lotniskowej samolotów z uwzględnieniem wyróżnionych grup kryteriów. Tymi grupami są: wyposażenie lotniska, naziemna obsługa samolotów, organizacja rozliczeń i obsługi ładunków oraz poczty, organizacja wsparcia sprawności technicznej samolotów, zaopatrzenie w paliwo i środki smarne, promocja lotów przewoźników itp. Wyniki badań ujawniły słabe strony w zapewnieniu wysokiej jakości usług świadczonych przez „Międzynarodowe lotnisko Zaporozże”, które są związane z utrzymaniem zdolności samolotów do lotów, obsługą naziemną samolotów, a także organizacją rozliczeń i obsługą przewożonych ładunków. Biorąc pod uwagę poziom jakości usług, „Międzynarodowe lotnisko Zaporozże” sytuuje się na rynku przewozów lotniczych jako przedsiębiorstwo o średnim dla Ukrainy poziomie obsługi naziemnej i lotniskowej linii lotniczych z tendencją do poprawy.

**Słowa kluczowe:** zarządzanie jakością, badania marketingowe, port lotniczy, ocena jakości usług, B2B