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*V.S. Saichuk, PhD, O.A. Borysiuk, PhD*
*(National Aviation University, Ukraine)*

**The quality of aviation services in tourism as a factor of aviation safety: the experience of European Union countries**

*The report examines the impact of aviation service quality on aviation safety, based on the experience of European Union countries. Current trends in improving passenger services, aircraft maintenance, and innovations in air traffic management are analyzed. It demonstrates that high service quality reduces the risk of incidents and increases the overall level of aviation safety.*

The growing role of air transport in the tourism sector, particularly in European Union (EU) countries where aviation is a key mode of transport for international travel, highlights the importance of ensuring a high level of service quality in aviation. The quality of aviation services is a crucial factor in maintaining flight safety, especially in the context of increasing passenger traffic and complex operational processes.

It is important to note that the concept of aviation service quality encompasses not only passenger service but also aircraft maintenance, crew qualifications, ground services, and strict compliance with safety regulations. Deficiencies in service delivery, such as poor handling of passengers, inadequate response to emergencies, or insufficient aircraft maintenance, can create conditions that compromise aviation safety.

Quality indicators and challenges related to providing high-quality products (services) are specific to each industry, particularly in tourism as a multi-component system that combines diverse elements of production and service consumption: the tourism-resource subsystem, the tourism-production subsystem, the tourism-infrastructure subsystem, the general infrastructure subsystem, and the tourism-management subsystem. This specific nature of tourism influences approaches to understanding the content and criteria for evaluating the quality of tourism services [1].

The European Union has a stringent regulatory system in the aviation services sector aimed at maintaining high standards of quality and safety. Regulation (EC) No 261/2004 establishes passenger rights in cases of denied boarding, flight cancellations, or long delays, guaranteeing adequate services and consumer protection. Additionally, Regulation (EU) No 2018/1139 outlines general rules for ensuring flight safety, covering issues such as aircraft maintenance, air traffic management, and the monitoring of aviation infrastructure [2, 3].

Aviation transport in the EU plays an important role in tourism, especially for popular destinations such as Spain, Italy, and Greece, where high seasonal demand creates additional challenges for infrastructure. Managing tourist flows requires a balanced approach to improving service quality to avoid overloading and ensure safety. The use of advanced technologies, such as automated air traffic management systems, contributes to increased efficiency and safety of aviation services.

Examples of successful practices from EU countries demonstrate the importance of a systematic approach to service quality. In Germany, high coordination between airlines, airports, and regulators helps maintain consistently high safety indicators. In France, special attention is paid to innovations in passenger and ground operations services, which positively impacts overall aviation safety. Schiphol Airport in the Netherlands is a model of efficient passenger flow management and the integration of environmental standards alongside safety norms.

Improving the quality of aviation services to ensure flight safety includes the implementation of innovative technologies such as the digitization of aircraft condition and risk monitoring processes, as well as the enhancement of personnel qualifications, particularly technical specialists and crews. Improving communication between airlines and ground services is also crucial for rapid response to potential threats.

Based on data on incidents per 1 million flights and the quality of aviation services obtained from EASA and IATA reports for 2022-2023, several important conclusions can be drawn [5, 6]:

1. The data shows that countries with higher aviation service quality scores, such as the Netherlands and Sweden, have a lower incidence rate per 1 million flights. The Netherlands demonstrates the highest service quality (9.0) and the lowest incident rate (0.3 incidents per 1 million flights), indicating a direct correlation between service quality and flight safety.
2. High-quality aviation services include not only passenger service but also aircraft maintenance and effective air traffic management. Countries with high standards in these areas, such as Germany, France, and Austria, also exhibit consistently low aviation incident rates (0.4-0.5 incidents per 1 million flights).
3. The data indicates that innovations in air traffic management and aircraft maintenance directly impact the reduction of incidents. In countries where new technologies and standards are actively implemented, the lowest levels of aviation incidents are observed.

Overall, the EU is experiencing a trend toward improving aviation service quality and flight safety, contributing to a reduction in the number of incidents. Governments and aviation companies are investing in infrastructure improvements, which enhance both safety and passenger service quality.

Ukraine, as a country striving for integration with the European Union, can draw on the experience of EU countries to improve the quality of aviation services and enhance aviation safety. The key areas for development are:

1. The implementation of EU standards, including Regulations (EC) No 261/2004 on passenger compensation and (EU) No 2018/1139 on aviation safety, can be used in Ukraine to improve service quality and passenger rights protection.
2. A key lesson from European experience is the implementation of cutting-edge technologies in air traffic management and regular aircraft maintenance. Investments in these areas reduce the number of incidents and improve flight safety.

3. Active cooperation with EASA, ICAO, and IATA will enable Ukraine to integrate more rapidly into the international aviation safety and quality system by adopting best practices and standards.
4. Ukraine can follow the EU's example in modernizing airports and air traffic management systems, which will improve passenger service quality and reduce aviation risks.
5. Rebuilding damaged infrastructure requires significant financial investments. Ukraine can seek financial assistance from the EU and international organizations, but a challenge remains in the effective use of these resources. Corruption and inefficient management could pose a significant obstacle. Ukraine needs to establish transparent mechanisms for monitoring the use of funds, which was one of the key reforms in some EU countries after the crisis.
6. To apply the EU's experience, Ukraine needs to undertake extensive institutional reforms aimed at improving governance and the rule of law. Reforming the judicial system, decentralizing power, and increasing the transparency of government structures are key tasks Ukraine must focus on for the effective use of EU assistance and experience.
7. Applying the EU's experience requires harmonizing Ukrainian legislation with European norms. This may be a challenging and lengthy process, especially in the context of post-war recovery. The challenge lies in adapting not only economic and social standards but also environmental and technical standards of the EU.

**Conclusions.** Data analysis shows that aviation service quality is a key factor in ensuring flight safety. Countries that place more emphasis on service quality and innovation have lower incident rates, confirming the importance of integrating these aspects to enhance aviation safety in Europe.

Thus, the quality of aviation services plays a crucial role in ensuring flight safety. The growth of tourist flows requires the adaptation of existing quality and safety standards to minimize risks. The experience of EU countries confirms that continuous monitoring and the implementation of innovative solutions are effective tools for maintaining safety and passenger comfort.

The experience of EU countries demonstrates that high-quality aviation services directly impact the level of aviation safety. For Ukraine, the integration of these standards and practices could be the key to enhancing aviation safety and competitiveness in the tourism sector.

Applying the EU's experience to Ukraine's post-war recovery is a promising path, but it requires addressing several issues, including institutional reforms, combating corruption, attracting investment, and implementing social programs. Harmonizing legislation with EU standards and implementing sustainable technologies could be key to successful rebuilding.

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