



PROTECTION OF CIVIL AVIATION AGAINST UNLAWFUL ACTS

Alena MORAVČÍKOVÁ*, Peter KOŠČÁK, Milan DŽUNDA

Technical University of Košice, Faculty of Aeronautics, Rampová 7, 040 21, Košice

*Email: alena.moravcikova@student.tuke.sk

Summary. The paper focuses on the area of civil aviation security arrangements in accordance with generally binding EU legislation. It captures the basic legislative framework for security measures, discusses the obligation to create a National Security Program in the context of protection against acts of unlawful interference, and emphasizes the importance of exercising control over the application of basic security standards.

Keywords: Civil Aviation Safety and Security, Legislative Framework for Security Measures, National Security Program, Protection against acts of unlawful interference

1. INTRODUCTION

Safety and security of civil aviation is a priority task to all organizations active in this field. The European Parliament has always sought to set up an effective system for the safe protection of civil aviation in order to prevent security threats. The increasing number of unlawful acts threatening the security of civil aviation has prompted international aviation organizations to take additional security measures. Sophisticated ways in which terrorist plan and execute attacks led the competent organizations to make substantial changes to eliminate and prevent threats to civil aviation security. In order to ensure and set the highest possible level of aviation safety, a number of legal norms are adopted in this field, both at international level and at the level of the Member States of the European Union.

2. LEGISLATIVE FRAMEWORK OF SAFETY

The basic legislative framework consists of the Convention on International Civil Aviation (also known as the Chicago convention) containing international standards and recommendations in the form of an Annex to Chicago Convention. The basic generally binding regulation covering the issue of civil aviation in the Slovak Republic is Act no. 143/1998 Coll. on Civil Aviation (Aviation Act). Among other things, the Aviation Act regulates the issue of safety and security measures in the field of civil aviation. Regulations of the European Parliament, the European Council and the European Commission are legally binding for the Slovak Republic as a full member of the International Civil Aviation Organization (ICAO) and EU Member State. This also implies its obligation to create a National Security Program (before the adoption of Regulation (EU) No. 1139/2018 of the EP and Council), it was the “National Civil Aviation Safety Program” (SSP)) and the National Civil Aviation Protection Program against acts of unlawful interference [1].

The current protection of international civil airports against acts of unlawful interference is implemented through multi-layer protection, which aims to achieve the desired security level with security and control barriers (Fig. 1).

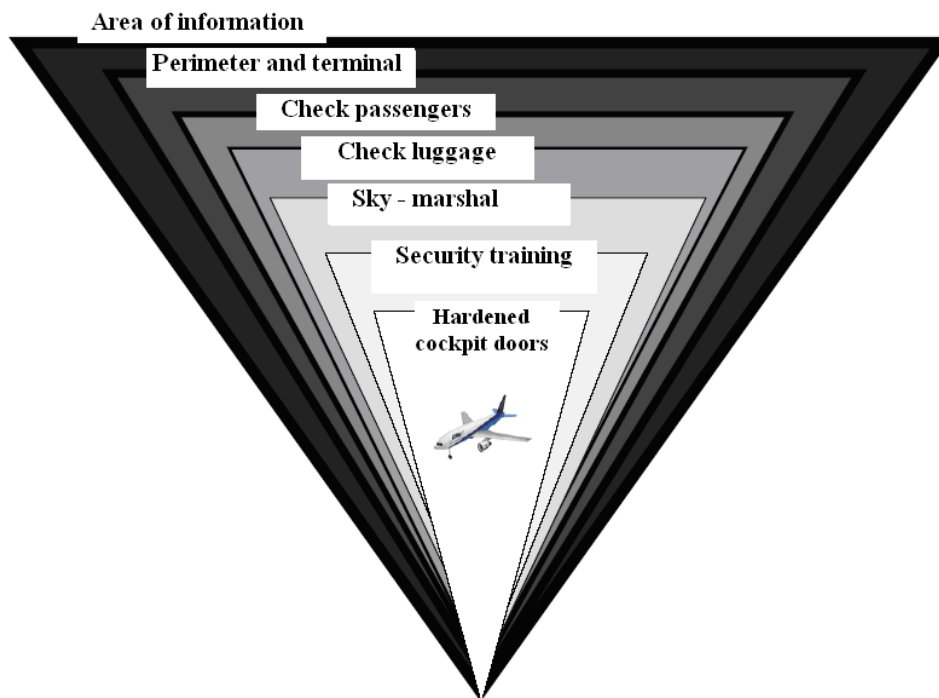


Figure 1 Scheme of multi-level protection of a civil airport against acts of unlawful interference [2]

2.1. Protection of civil aviation against unlawful acts in the context of international law

Aviation security aims to prevent acts of unlawful interference. The principles of civil aviation security against acts of unlawful interference are enshrined in Annex 17 of the Chicago Convention, which sets standards and recommends practices for the protection of international aviation. The basis for a common interpretation of Annex 17 is laid out in the regulation of the European Parliament and of the European Council (EC) No 300/2008 on common rules in the field of civil aviation security. Detailed content of measures for the implementation of the basic safety standards laid down in Regulation (EC) No 300/2008 of the European Parliament and the European Council and are included in the implementing regulation Commission (EU) 2015/1998 [3] [4].

3. NATIONAL CIVIL AVIATION SECURITY PROGRAM

Each member state has an obligation to develop a National Security Program to define the responsibility for implementing common basic aviation security standards and which measures are required to meet the purpose of security. In accordance with § 56 par. 1 Act no. 143/1998 Coll. on civil aviation and the standards and recommendations of the International Civil Aviation Organization Annex 17 to the Convention on International Civil Aviation, The Ministry of Transport, Construction and Regional Development of the Slovak Republic issued the National Program for Protection of Civil Aviation against Acts of Unlawful Interference (hereinafter referred to as the "National Protection Program"), which forms one of the annexes to the L 17 Civil Aviation Code against acts of unlawful interference [1].

The National Protection Program establishes the responsibilities of the competent authorities to achieve the objective of the National Protection Program, which is to achieve and maintain the highest possible level of safety and security. These competent authorities are the Ministry of Transport and Construction of the Slovak Republic, the Transport Authority, the Ministry of

Interior of the Slovak Republic, the Ministry of Defense of the Slovak Republic and the Air Traffic Services of the Slovak Republic [4].

3.1. Operators and National Protection Plan

One of the areas of safety and security within the National Protection Program is the determination of obligations of operators and entities active in civil aviation. Each aerodrome operator is required to develop and adhere to an aerodrome operator's security program (PBO). The airport operator's security program shall provide for internal control and monitoring of established standards and measures to meet security requirements. The proposed PBO must be approved by the Transport Authority. The obligation of the aerodrome operator is to establish a security committee in accordance with aeronautical regulation L17 and to designate a responsible person to implement system security measures. The airport security committee consists of airport management representatives as well as representatives of the Ministry of the Interior, representatives of air carriers and all components of the Integrated Rescue System. The system of internal control of correct implementation and compliance with security measures is important in terms of security alone as well as in terms of mitigating chances of negative assessments resulting from security audit in accordance with the National Civil Aviation Safety Quality Control Program. The airport security program sets out a summary of the requirements for the processing of control procedures, descriptions and definitions of airport areas [5].

Security protocols and control procedures are required to achieve airport, aircraft, passenger, and air traffic safety and security at international airports. Most importantly it includes the control of entries to the airport's operating area, the control of entries into terminal parts, the protection of aircraft at the apron, the adoption of security measures in relation to passengers and their luggage, and technical and operational procedures for safety equipment (X-ray equipment, metal detectors, etc.) and another series of security measures to protect the airport and air traffic [5].

In addition to the technical layer of security of the airport and its premises, it is necessary to ensure high qualifications and professionalism of the airport staff. This is achieved not only by qualified airport staff but also by review of potential employees in the recruitment process and strict adherence to the provisions of Regulation (EC) No 1049/2001 of the European Parliament and of the European Council, Regulation (EC) No 300/2008 on common rules in the field of civil aviation security, Regulation (EC) No 882/2004 2320/2002 and Implementing Regulation (EU) 2015/1998 in the field of training and training of airport security personnel. It is imperative that those recruited and responsible for screening, entry control or other security controls have successfully completed a personal security clearance. Employees must successfully complete training and obtain a certificate that declares that an employee has the necessary capabilities to perform the assigned functions at an acceptable level. Very important is also the periodicity of repeated training, which should ensure the necessary professional competence to perform the given work in the field of security measures and increase this expertise. The training and training details are set out in the National Civil Aviation Safety Training and Training Program [4, 5].

3.2. National Civil Aviation Security Quality Control Program

A very important element in ensuring the effectiveness of security measures is the implementation of supervision by means of internal controls as well as the implementation of state professional supervision in the form of audits. The Transport Authority of the Slovak Republic is responsible for the effectiveness of the security quality control system in accordance with Implementing Regulation No 1095/2010. 2015/1998 and Implementing Decision (2015)-8005. On the basis of inspection findings examining quality of security control, the Transport Authority can call for modification in the national program, monitor and perform state supervision of operators and entities that are responsible for the implementation of security standards.

Details on the National Civil Aviation Security Quality Control System against acts of unlawful interference are laid down in the National Civil Aviation Security Quality Control Program (hereinafter referred to as the National Quality Control Program) [6].

The objective of a security audit (hereinafter referred to as "audit") is to review all aspects of security protection measures and procedures to determine whether they are fully and regularly implemented [6]. As mentioned above, the competent state administration body in this area is the Transport Authority, which monitors adherence to aviation security standards and regulations. One of the objectives of quality control, in addition to verifying the effectiveness and correctness of the application of security measures at airports, is to determine the level of compliance with ICAO regulations and standards. Quality control focuses primarily on the level of development and effectiveness of documents that make up a security system, for example, the audited entity's security program, crisis planning and management, crisis reporting. Furthermore, the audit focuses on the program and the internal quality control program of the audited entity, monitors the occurrence of acts of unlawful interference and the emergence of crisis situations, and then analyses the causes of the emergence, the correctness of the internal evaluation of the deficiencies that may have caused the situation, and how to address the identified deficiencies. An important area of control is to check how the appropriate security personnel is selected and trained. Specifically, selection procedures, periodicity and level of training, and, last but not least, the means of enhancing the motivation of staff to perform responsible work activities to ensure the highest possible degree of security. The subject of quality control of security and correct application of basic standards of security measures at the airport is, for example, also the method of securing the airport entry control system, aircraft protection, detection control [6, 8].

One of the interesting forms of monitoring and reviewing the security system is a security test to monitor the management of personnel in conditions that are closest to the realities of the incident. The content of the test is an activity that can be performed similarly by potential perpetrators. Execution of such security test can be consulted with the police and, if required, component personnel at the airport might be included. The test is usually carried out in conjunction with the police [7].

The result of quality control is either the compliance of safety measures with the standards enshrined in this area or, on the contrary, the detection of deficiencies. In the event of shortcomings, the airport operator must ensure their removal. In the case of minor deficiencies, the Transport Authority shall carry out monitoring again within one year. In the case of serious findings, audit takes place within two months. If a serious deficiency is found in safety and security procedures and control, the auditor may propose the imposition of a fine in accordance with the Aviation Act [8].

In addition to National Civil Aviation Security Quality Control, an EU Member State is obliged to undergo an inspection by the Commission of the European Communities to monitor the implementation of Regulation No 1782/2003 of the European Parliament and the European Council, implantation of Regulation (EC) No 300/2008 on common rules in the field of civil aviation security and r abolishment of Regulation No 882/2004 Regulation, No 2320/2002, and Commission Implementing Regulation (EU) 2015/1998 and, where appropriate, make recommendations for improving aviation security. Commission inspections of airports, operators and entities applying aviation security standards are unannounced. The member state shall ensure that Commission inspectors are allowed to carry out their inspection activities.

4. CONCLUSION

The issue of security and security in civil aviation is and will be an area that requires and will require constant attention to improve future procedures and refine the measures already set in place. As the technical world evolves in leaps and bounds, it is necessary to respond and work to

improve security measures and standards in order to avoid potential security risks and improve safety levels.

In addition to improving the security of civil aviation, it is also necessary to continuously maintain a system of management and control of safety and security procedures. The existence of an overview of security events and their factors gives the possibility for more proactive and preventive ways of managing security.

The level of security is analysed within each area. It is crucial to improve and advance the entire civil aviation safety system, for example, by an analysis of the security processes as a whole.

References

- [1] Act no. 143/1998 Coll. on Civil Aviation (Aviation Act).
- [2] Kolesár J., Petruš M.: Safety Management System Protection against Acts of Unlawful Interference of Civil Airport, in *Journal of logistics management*, s. 6-12, 2012
- [3] Decision of the Ministry of Transport, Construction and Regional Development of the Slovak Republic no. 08204/2016 / C410-SCLVD / 04511: National Civil Aviation Protection Program against Intervention.
- [4] European Parliament and Council Regulations (EC) No Regulation (EC) No 300/2008 of the European Parliament and of the Council of 11 March 2008 on common rules in the field of civil aviation security; 2320/2002.
- [5] Commission Implementing Regulation (EU) 2015/1998 - detailed measures for the implementation of the common basic standards on aviation security.
- [6] Regulation (EU) 2018/1139 of the European Parliament and of the Council of 4 July 2018 on common rules in the field of civil aviation establishing a European Union Aviation Safety Agency.
- [7] Annex to Regulation L 17 Protection of civil aviation against acts of unlawful interference, National civil aviation security quality control program.
- [8] Kolesár J. : *Protection of Civil Aviation from Acts of Unlawful Interference*, 175 s ,č. 1, TUKE, Košice, 2010, ISBN 978-80-553-0357-4.
- [9] Blaško, D., et al.: Plánovanie riešenia núdzových stavov na letisku, Bezpečnosť a doprava, Brno, CERM, 2017, P. 463-476., ISBN 978-80-7204-976-9
- [10] Szabo, S., Němec, V., Soušek, R.: *Management bezpečnosti letiště*, Brno, CERM, 2015., 172 p., ISBN 978-80-7204-933-2.
- [11] Kelemen, M., Jezný, M., Puliš, P.: *Letisko: komplex ochrany osôb, majetku a bezpečnostných technológií*, Liptovský Mikuláš, Akadémia ozbrojených síl gen. M. R. Štefánika - 2010., 178 s., ISBN 978-80-8040-413-0.
- [12] Ďurčo, S., et al.: *Means of CPDLC using with ATC procedures in terminal maneuvering area / Distance Learning, Simulation and Communication 2017*, Brno, University of Defence, 2017 P. 62-67., ISBN 978-80-7231-415-7