

SAFEGUARDING CIVIL AVIATION AGAINST OF UNLAWFUL AND ITS IMPACT ON HANDLING OF PASSENGERS AND BAGGAGE

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Annotation: The dissertation has main and sectional targets. Sectional target is analysis of legal norms in the field of civil aviation against of unlawful interference since 2010. Main target is comparing handling passenger and baggage at two Slovak airports (airport Kosice and Poprad-Tatry).

Keywords: Security, Civil Aviation, Aviation Law, Passengers

1 SAFEGUARDING OF CIVIL AVIATION

Safeguarding civil aviation against of unlawful is the topic which is contained in many international standard, European and national law. With development of civil aviation law are associated by the competent authorities and organisations. Each of them is creator. Aviation organisations divided into two main groups, government organisations (association of states, state representation, which are formed by international agreement) and non-government organisations (association of legal entities or individual entities. The differences between government and non-government organisations are in establishing institutions, mode of formation (international agreements or civil law agreements). The existence organisations and competent authorities are necessary. Mission of organisations is creating uniform rules. Subsequently legal norms are transposing into national law by competent authorities.

2 ENTITIES AND LEGAL NORMS OF SAFEGUARDING CIVIL AVIATION

2.1 Entities of safeguarding civil aviation

Entities in civil aviation have three levels, international, European and national level. **International entities** are International Civil Aviation Organisation, International Air Transport Association, Airports Council International, International Federation of Airline Associations and International Criminal Police Organisation. Each of them have specific task for safeguarding civil aviation. The vision of International Civil Aviation Organisation - ICAO is growth of civil aviation at global level in security. The most important document is Convention of International Civil Aviation. International Air Transport Association - IATA is a type of non-government organisation and the main target is promotion and development reliable, safe and efficient air transport. Airports Council International - ACI represents the interest of airports. The targets are maximizing of contributions for safety development, environmental conservation. Task is establishing cooperation with all segments of the aviation industry, even with stakeholders (governments, international organisations). Assistance airports on the impact of legal norms support and help each other airports, providing knowledge. International

Federation of Airlines Pilots Associations - IFALPA is non-government organisation for the protection of commercial pilots. Target is protecting interests of pilots, support high standards of aviation safety. International Criminal Police Organisation – INTERPOL is non-government agency with promotes international police cooperation in combating transnational crime as target. **European level** is formed by European Union, European Civil Aviation Conference and European Aviation Safety Agency. European Union is an integration group, whose members are countries in Europe. EU creates regulations, directives and decisions in aviation industry. European Civil Aviation Conference - ECAC is intergovernmental organisation. Main mission is support of safety development, efficient and sustainable air transport system main table at European level. The main task is to provide training in aviation safety, focusing on European rules and regulations. European Aviation Safety Agency – EASA established by Council Regulation no. 1952/2002. EASA provides supporting compliance with safety at high level, possibility of free movement of goods, persons and services, assistance to Member States in fulfilling the obligations to ICAO. **National level** is formed by Transport Authority, Ministry of Transport, Ministry of Defence and Policy Force. Transport Authority of the Slovak Republic – national authority in the field of civil aviation provides §48 of the Aviation Act. For example: performs the function of state control, the function of special building civil aviation authority and functions of the competent authority under special regulations. Duties of Ministry of Defence and Ministry of Interior is licensing of aviation personnel, overseeing the professional competence of staff providing aircraft flight management of air traffic services. Police Force is participates in civil aviation, while cooperating with the Ministry of Defence and Ministry of Interior. Involved recognizing and dealing with crisis situations.

2.2 Legal norms of safeguarding civil aviation

Legal standards in the field of civil aviation rules are also as entities at the international, European and national level. The most important act on international level is Convention of International Civil Aviation; know as Doc 7600/8 made by ICAO. Convention created on 7th Dec 1944 at the Chicago Conference and for this reason the name is synonymous with the Chicago Convention. The Chicago Convention is composed of IV parts, 96

articles and XIX annexes. Another document is Policy Handbook, Chapter 7 – The Security at Airports made by ACI. Handbook contains legal norms as Annex 17 of Chicago Convention, ICAO Security Manual, and Doc 8973. It defines the responsibility of the state to civil aviation, which consists of full responsibility to protect citizens from terrorist attack or other attack of unlawful interference with civil aviation. The European level is made by European Union regulations and decisions. Regulation EP and Council no. 300/2008 on common in the field of civil aviation, Commission Regulation no. 272/2009, Commission Regulation no. 185/2010 and Commission Regulation no. 774/2010, which solved detailed arrangement for implementing basic standards for safeguarding civil aviation against acts of unlawful interference. The last document made by ECAC is called Document 30 Policy Statement in the Field Civil Aviation Facilitation. The last document is called ECAC Doc 30 Policy Statement in the Field of Civil Aviation Facilitation. Act no. 143/1998 Coll. Civil Aviation is a fundamental rule of law at the **national level**. It consists of 12 chapters. The 7th part is Aviation Security, §34 Protection against acts of unlawful interference defines the responsibility of public authorities for implementation of international agreements.

3 AIRPORTS

Airport is a complex process which is controlled by the people and is divided into three parts, to be determined in maintaining security. Airport security has top priority. According Regulation (EU) no. 185/2010 laying down detailed measures for the implementation of the common basic standards on aviation security airport operator must determine the boundaries between Airside, Landside and Security Restricted Area, possibly also demarcated areas. Landside, respectively public part is intended for public, so we find services in this area. Airside is non public part, in which enter and movement is monitored, and includes areas such as moving area, air traffic control etc. The boundary between landside and airside shall constitute a security. Also include to the operational part with difference that passenger must have valid boarding pass and through detection control for moving in this area.

3.1 Airport Kosice

Company Airport Kosice created by law no. 136/20064 Coll. Airports companies. After completion of the privatization process of Slovak airports in 2006 took over 66% shares Vienna airport, the remaining 34% owned by Slovak republic, especially Ministry of Transport. Airport Kosice represents the second largest airport in Slovakia. IATA code is KSC and ICAO code is LZKZ. Airport uses eight check-in counters located in public area for handling passengers and their baggage. Departure gates are divided on schengen (4) and non-

schengen (2). Arrivals halls are divided like as departure gates on schengen and non-schengen. In 2013, airport handled 237,165 passengers per year, an increase of 1% compared with the year 2012.

3.2 Airport Poprad-Tatry

Airport Poprad-Tatry is not privatizing as airport Kosice. This is a first fundamental difference between selected airports. Shareholders of Poprad-Tatry are Ministry of Transport (97, 61%), Poprad city (1, 67%) and High Tatras city (0, 72%). Airport terminal is a modern building which has currently equipped the first flight. For handling airport uses three check-in counters. In the public part of the terminal currently are 3 check-in desks, coffee, lectern for customs and treasury. The terminal has four boarding gates (2 Schengen, non-Schengen 2). Arrival hall is also 2, divided into Schengen and non-Schengen.

3.3 Security authorities

The security authorities of selected airports are Airport Security Committee, Department of Airport Security (Airport Security and Airport Control), and department of border control of the Police Force, Fire Rescue Services and Customs Branch Office. Section of **Airport Security** has functions such as protection of assets of the airport airside and participates in the operation of the safety and security in the territory. Fire **Rescue Service** is practising under fire Statute airport. It is document which defines the organizational structure, the list of objects at the airport etc. Based on the aforesaid document and other laws of the Ministry of Interior ensure fire safety of air traffic and the related strictly saving lives in an accident or natural disaster at the airport. Customs Branch Office performs role of border customs supervision. It is control goods, luggage, which come from the territory of third countries. Airport Kosice has Crisis Information Centre. The main purpose is to deal with crisis situation, such as sabotage, terrorist attacks at the airport.

3.4 Security measures

Process of aviation security begins on check-in desk. Employee's responsibility is to ask any following security questions: Did you pack your luggage on your own? Who did you help packing your luggage? When passenger answering employee must take notice reactions of passenger, for example his behaviour, gestures etc. Security control divided into three parts, such as **screening of passengers** (frame detectors, hand searching and hand detector), **screening of cabin baggage** (complete search control or X-ray equipment or X-ray equipment with EDS). The last type of security control is **screening of checked baggage** (hand search, or X-ray equipment or explosives detection equipment or device EDS

4 HANDLING PASSENGERS AND BAGGAGE

4.1 SWOT analysis

SWOT analysis is strategic tool that identifies weaknesses, strengths, opportunities, threats sides that are specific to the project company in an effort to achieve the objective. SWOT analysis originated at Stanford University and its main representative to Albert Humphrey. The essence of analysis is to define end targets (efficiency handling passenger and baggage in keeping with established standards). SWOT, especially relational matrices is reviewed by means of point evolution (positive, neutral or negative).

4.2 Airport Kosice

Strengths of airport Kosice are **staffs** that are trained and performance of activities is necessary certificates. Strength is information's. This factor specifies level of informing with using information screen in public part of airport or at check-in desk. Procedures of handling are established and everyone who is involved at process must to know rules. Means of screening are also at the highest level because they have standards to international levels.

Weakness of airport Kosice is short distance between check-in desk and detection control. Cameras system at airport is another weakness, would need to change. Kosice Airport in 2013 benefited from a test detector liquid which passes not purchased because the detector did not fulfil ICAO standards. The final weakness is the airport screening area, which could be larger and therefore would not create lines at the security control at the large number of passengers.

Opportunities are representing by new technologies, which would increase the efficiency and simplify the work of staff. Higher passenger numbers is also positive for the airport because the airport fundamental objective is to carry the highest number of passengers. EU resources can be used to purchase equipment and also this factor represents visibility by new technologies and recoveries. Last opportunity is new airlines.

Threats are deprecation of equipment detection control for daily use. Equipment loses value and quality. Human error represents the greatest threat to aviation. As a direct result of the highest impact on safety is legislation that must follow each airport and the need to uphold standards of legislation at international level. All legal standards in the field of civil aviation are created based against their occurrence.

4.3 Airport Poprad-Tatry

Strength is orientation at airside, because it allows easier orientation of passenger to find right exit. The new terminal is much more effective than the old terminal. Other strength Poprad-Tatry procedures are

passenger and luggage that are established and clearly defined responsibilities and tasks of employees. Last strengths conclude means of screening that are new and so far used only once.

Weakness includes information, that information boards are placed on a stand next to check-in desk. Short conveyor belt in high traffic may cause delays in processing and also small spaces before check-in counter. The last weakness is less experienced workers. Poprad-Tatry Airport does not operate scheduled flights; charter flights only (now do not have any flights).

Open opportunities for airport are new product, security, higher number of passenger and attractiveness airport for new airlines.

Threats are factors such as the Kosice airport.

4.4. Evaluation of the relational matrices for both airports

Result of relational matrices for airport Kosice (8) means that airport for handling passenger and baggage has prevail over strength over the weak and opportunities over the threats. Strengths Kosice airport under relational matrices are the order of the following **information boards** in the public areas of the airport, which is overall evaluation (**6 points**). Other strengths are **equipments of detection control** which should represent the strength of each airport, because detection control is gateway between landside and security restricted area. Relational matrices defined the weakest factor weaknesses **short distance between the check-in desk and detection control (-6 points)**. Short distance may be adversely affected by a higher number of passengers in the event of new airlines at the airport. The largest airport opportunities are **new technologies (15 points)** and **EU resources (11 points)**. The human errors represents by relational matrices has the most negative impact which result can have loss of human lives and material values.

Result of relational matrices for airport Poprad-Tatry is (1). The strongest are **equipments of detection control** and final result is (**8 points**). It is a new equipment still has not used properly. Important factor which represents strength of the airport is **new terminal (4 points)**. Even if airport has a new terminal, his weakest factor is **short conveyor belt**, whose evolution is (**-8 points**). This factor represents the weakest factor among all selected factors. The evaluation tended to factor a new terminal; it is also one of the strengths and closely related opportunities such as **higher passenger numbers (7bodov)** and **attracting new airlines (6bodov)**. Airport threat is **human error**, the final result is (**-6 points**). The smallest threat is deprecation of equipment detection control.

5 DRAFT OF OPTIMAL SOLUTION FOR AIRPORT KOSICE

Draft of optimal process for handling passenger and baggage at the airport Kosice touches on two parts; check-in desk and detection control.

5.1 Check-in desk

The optimum solution passenger and luggage would be helped by a self-service kiosk by **information-security** (similar to the self check-in kiosk). While self check-in kiosk is used for passenger, and information security kiosk would be used solely to inform the passenger about safety rules and prohibited articles in the cabin and checked baggage if basic safety answering questions asked at check-in desk.

The main benefits include streamlining it is rapid processing of the counters, raise awareness of security for passengers, increase efficiency, security access.

The following **equipment** would be LCD screen, touch screen, FQTV card reader, card ID reader, passport scanner, camera and software.

The process of using information-security kiosk includes in five steps. Within the wider spectrum of passengers, the program should be functional **in English, German and Slovak**. The next step is choosing **airline** whose services will benefit passengers (Austrian Airlines, Czech Airlines and Wizz Air). The next step is the **identification** of passenger using an FQTV card or ID card or passport. After identification, the screen is divided into two parts. The first (left) are given security issues (depending on the type of luggage - cabin and hold) on which passengers respond. Right shows the prohibited items in the cabin and checked baggage, which help passenger to answering and awareness of the objects of a carry-on luggage, which ones must interject into another bag or leave the airport. Finally terminates the process button **"to end"**.

An advantage is awareness of passengers on aviation safety. It is important to be informed of the prohibited articles in cabin or checked baggage. KIOSK is also a form of information to passengers other than at present at the airport in Kosice. On the other hand, reduces the burden on employees.

The disadvantages include the need for at least one employee who would initially draw attention to the existence and use. Another disadvantage is the cost ratio. However, we should not forget that airport security is among the highest priorities.

5.2 Detection control

For detection control airport Kosice is a **full-body scanner millimetre wave most effective solution**. The scanner uses non-ionizing electromagnetic radiation and is considered safe. Highlights include a full body scanner scanning speed, which, in the Kosice airport, given the short distance between the check-in and screened was needed. Another important advantage is the identification of dangerous objects that can carry passengers

6 CONCLUSIONS

Aviation Security is a top priority in aviation. Its preparation and ongoing regulate dedicated presently entities divided into three basic levels, namely international, European and national. The problem arises in that the makers of laws are mostly people who do not know the practice and create

standards of office on the basis of opinion passengers. It can be argued that many of norms (not only in the field of security) that are more burdensome than facilitating the area that address.

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