

# HANDLING OF PASSENGERS AND BAGGAGE USING DCS SYSTEMS

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## 1 INTRODUCTION

In my work I analyze the operating conditions at the Letisko Košice - Airport Košice, a.s. (thereinafter also as "Letisko Košice/letisko Košice"). I watch the commercial handling currently looking for new solutions and proposals to streamline and optimize the air transport process. I also compare the DCS systems used at the airport Kosice. Evaluate their pros and cons.

## 2 GENERAL INFORMATION

In my diploma work I pay attention to the issues aimed to the commercial handling practiced at the airport Košice a.s. I analyze individual advancements and solutions for the effectiveness of these services and optimization of the cargoes for the operation. I am looking for the solution specifically for the airport Košice a.s, where I proximately operate. The commercial handling is strongly influenced according to the seasons so the strongest season are summer months where ate mixed the regular airlines with charter flights and it causes the load pattern and the capacity pattern. Due to it the optimization of the commercial handling is needful and periodical.

At work I analyze individuals parts of the commercial handling from the viewpoint of the department of the dispatch of the persons and I pay attention to the other departments which participate in the process.

The requirements on the service of the passengers and the baggage are inseparable part of the operation in each airport association. The manual contains the formulas by law, instructions and indications for the check-in of the passengers and the planes, manipulation the air cargo and planning for the planes. It content (capacity) is based on the politic of the concrete association as well as published by the aviation office and the producers of the planes. Te main aim is to provide safe and fluent commanding of the planes on the Earth.

The employees of the all branches must be informed about all the adjustments concerned to the practiced work. They must be aware that their work has the direct influence to the safety of the flight. The employees must strictly keep the regulations concerned to the safety.

By SWOT analyses is seen the airport Košice a.s. is complete and by its location can attract big quantify of the passengers with properly chosen airlines and strategy For the effectiveness of the personal sources the program of the multiple – function employees started to apply and momentary is successful.

For the future is considered to widespread capacity possibilities and optimized the terminal units and gates mainly in the low – cost operation.

## 3 DCS SYSTEM

In the next part I compare the DCS systems used at the airport Košice a.s. which are needful part of the handling and the key process at the dispatching of the passenger. Furthermore DCS system are able to monitor data about travelling papers and visas connected with their immigration control.

Historically, the systems were developed in the North America and implemented into the function in the framework of the reservation system. Load control (weight and balancing of the plane) were implemented as individual application. The systems developed by the aviation associations apart from North America have traditionally individual data base, consider the data about the passengers which have to be accomplished from PNR to DCS records. These systems have integrated system of the balancing of the plane.

At the airport Košice a.s. are used three systems which I analyzed and looked for the most appropriate form the viewpoint of the passengers, agent of check-in, ramp agent.

In my analysis the most positive valuations had the system Altea Amadeus which is the youngest but is extremely simple, fast and universal. It requires the certain innovations and authorization from the side of airlines which use this system but in spite of that it has more positives than negatives. Up to the future is planned to use it on all the regular airlines at the airport Košice a.s. and due to it could be accomplished common check-in, check-in for passengers of several airlines by one agent what would be economic gain, optimization, saving of the sources and hereby effectiveness of the operation flow.

## 4 AIRPORT KOŠICE - ANALYSIS

The area of the airport Košice a.s. is 3,5 km<sup>2</sup> and total area of the terminal is 4456 m<sup>2</sup>, and from this area is more than 3500m<sup>2</sup> reserved for passenger. The biggest airplanes able to land on the airport are Boeing 767 and Airbus A300. The capacity of the airport is 700 000 persons per year, let us say 1000 person per hour.

The airport Košice a.s. was built between the years 1950-1955, when there was established the airline to the Prague. The terminal was broaden in the half of the 60-ties. The establishment of the Aviation military academy SNP (Slovak national uprising) in1973 strengthen the position of the airport in the framework of

Czechoslovakia. In 1974 – 1977 was lengthened runway and landing area in 1100 meters to today's 3100 meters the lighting system was improved and the electric ways. The Army stopped to use the airport in 2004. In this year was sent into the operation new building of the terminal for the passengers.

The impulse for the building – up new terminal was more than double increase of the transportation in the last years at the Airport Košice a.s.

The airport Košice a.s. entered new phase of its history last year

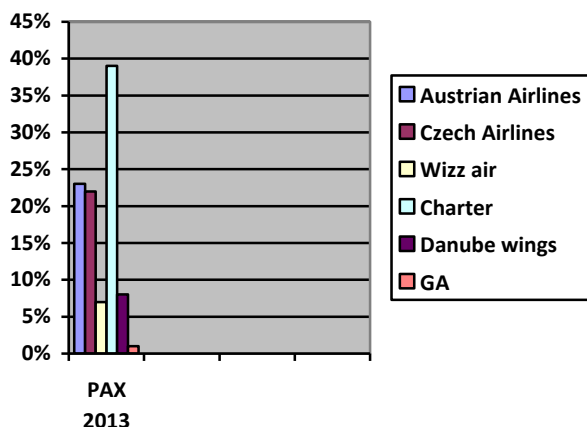
#### 4.1 AIRPORT KOŠICE A.S. - TODAY

In the year 2013 came thought gates of the airport 237165 passenger what estimates the increase to 1 percent in comparing to the former year. In spite of the high international competition in the segment of the regional airports managed to increase the number of the passengers after the 4 years decline. The biggest measurement of this growth had the segment of the regular airlines in which number of the transported passengers increased between year in 1030 passengers. Mostly to it contributed successful implementation of the straight air connection to London – Luton, which completed the offer of the regular airlines to the Central European metropolis Bratislava, Prague and Vienna.

The next important event was arrival of the stabile and reliable Czech airlines in the intercity flight Košice – Bratislava which confirmed its substantiation in the first week of the operation. The Czech national transport operator replaced at this airlines Slovak association Danube Wings which had connected two the biggest metropolis for five years.

In the segment of the chart passengers was also noticed reasonable increase and it happened in spite of the non – stabile situation in the countries of the North Africa. To the seaside resorts and back was transported together 92966 passengers what estimates 1percent increase in the comparing with the summer season 2012.

1 Traffic figures Airport Košice a.s.



## 5 OPPORTUNITIES

### ROUTE DEVELOPMENT:

PRIO 1: Scheduled: DUS, AMS

Charter: Split, summer season extension, TLV

PRIO 2: DUB, MAN

PRIO 3: CDG, MXP, SVO, KBP

INCOMING TOURISM: Košice as undiscovered destination

Role of KSC: incoming tour

operator

COOPERATION WITH TATRA MOUNTAINS

STAKEHOLDERS

LOCATION: last Schengen and EU airport, catchment area

UNUSED PREMISES: Aircraft maintenance base, cargo operations

GREEN AIRPORT PROJECT

- Photovoltaic power stations
- Terminal Building, Main power station, Felbermayr building
- 2014 result improvement: 33 500 €
- Waste separation
- 2014 result improvement: 7 100 €
- Biomass heating
- LED

Within the development opportunities available to Košice airport, which now key players in the Košice region have, it is appropriate to focus their pro-active approach in several ways, e.g.:

- Looking for new schemes of increasing the number of carriers, or lines, outside the existing incentive schemes
- Broader support for marketing activities by all key stakeholders (participation in exhibitions, advertising in business, economic journals, magazines, etc.)
- Identifying new routes and opportunities that are presented to airlines together with important information (analysis of the catchment area, market analysis and potential demand for the destination, the development of the number of passengers) and the preparation of a common presentation of the airport
- Definition of mutually beneficial solutions in terms of increasing region's accessibility by means of the Košice Airport, increasing the attractiveness of destination, supporting its more effective marketing and more intense involvement of the airport in these activities,
- Find subsidy possibilities for opening regular flights to new destinations with an emphasis on non-financial support to the private investor,

- And last, but not least, analyzing the possibility of extending the catchment area of Košice Airport by improving transport links.

## 6 CONCLUSION

In conclusion is that smaller airports accomplish successfully figure in the market and managed the demand in the airlines transport by proper portfolio of the services. It requires high measurement of the proficiency of the staff, constant improvement and the effectiveness of the work and searching for innovative and beneficial solutions.

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