

# QUALITY OF SERVICE AT AIRPORTS

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### **Abstract**

*At present, air transport is on the rise and with it are the airlines, airports and services they provide. Their quality is reflected in revenues as well as in the number of airlines using the airport. The aim of this paper is to evaluate what services are offered to individual airport customers, how to evaluate customer satisfaction with services and the last chapter focuses on evaluating the quality of services offered to airlines and crew, where a method of evaluating services provided by airports from the airlines based on an analysis of current ways of measuring the quality of these services. Finally, possible service improvements are described, which could streamline the operation of the airport.*

### **Keywords**

*airport, services, quality*

## **1. Introduction**

This paper deals with the issue of airport services provided to the airlines and aircrew. Based on the examination of available information, regulations, it is necessary to make recommendations, or changes in the provision of services at the airport from the arrival of pilots at the airport, spending time at the airport, pre-flight training, preparation with the flight crew, security controls, transfer to the aircraft and communication with the airport [1].

Thesis consists of five chapters, where the first part describes the airport customer and who they are. The main part is a description of the individual services that are provided to the pilots at the airport and without which they could not do, such as the transport of pilots to the aircraft, pre-flight briefing, security check, aircraft check or communication with the airport carriage [2].

The next chapter mentions Current trends in the evaluation of the airport service quality where the current solution of the evaluation of the provided services is described, followed by the Airline-centered approach to the evaluation of the airport service quality. The results from the questionnaire, which was provided to several subjects so that the objective result of the research could be evaluated, are also described here [3].

The last chapter is focused on the evaluation of everything that was described in the work and especially according to the questionnaire that was provided, possible improvements to airlines or airports, where the pilots are the ones without whom they could not exist, and it is necessary to provide them services with the best possible use to avoid possible complications.

## **2. Airport customers**

The airport earns money from aviation and non-aviation activities.

### **2.1. Aviation customers**

Aviation customers are:

- airlines,
- pilots,
- flight attendants,
- passengers,
- ground staff,
- ground handling companies,
- travel agencies
- meters, greeters and visitors.

### **2.2. Non-aviation customers**

- tenants and concessionaires, e.g., operators of restaurants, shops, car rentals, exchange offices, banks, parking lots,
- duty-free shops,
- catering companies,
- advertising agencies, etc.

### 3. Service at airports

Airports provide services that we could divide into two separate groups. These are aviation and non-aviation services. An example of aviation services is the security, maintenance or operation of airport infrastructure required for the take-off of an aircraft as well as for its landing. Further security and maintenance required for baggage handling and security services. Air services also include ground handling services, such as preparing the aircraft for flight, unloading and loading of luggage on the aircraft, or transporting passengers to the aircraft. Non-aviation services include car parking, business activities at the airport (catering services, trade), business services lounges, rentals, advertising, etc. Direct customers of aviation services are airlines and customers of non-aviation services are passengers.

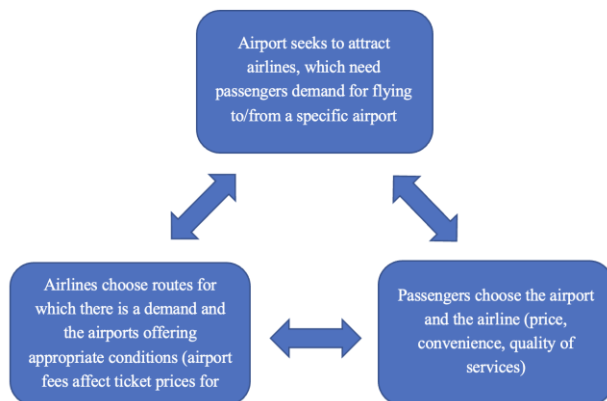


Figure 1: Flow scheme. Source: Authors.

#### 3.1. Airport Ramp services (ground handling)

The following services are provided:

- Loading and unloading of aircraft
- Pushback and towing of aircraft
- Water / Toilet services
- Aircraft cabin cleaning
- Ground Power and Air conditioning Units
- Passengers and crew transports between aircraft and terminals
- Baggage and Cargo sorting and transportation
- Unit Load Device Control

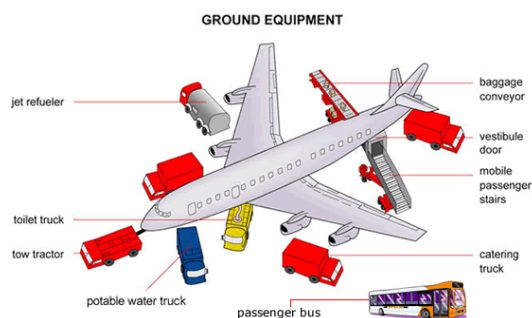


Figure 2: Ground equipment. Source: Authors.

#### 3.2. Airport pilot (crew) services

- Crew shuttle
- Briefing and flight planning area
- Crew lounge
- Individual snooze room
- Security check

#### 3.3. Airport Passenger services

The following services are provided:

- Passenger check-in
- Arrival and departure services (transits)
- Boarding services
- Assistance to passengers with flight irregularities
- Special passenger's assistance
- Check-in systems
- Information desks
- Excess baggage collection
- Flight's statistics
- Lost and found baggage services

### 4. Current trends in evaluation of the airport service quality

There are several purposes for which airport management conducts studies on airport operations and seeks to measure results: measuring efficiency in financial and operational terms, evaluate investment opportunities, monitor airport safety and environmental performance. Passengers are also interested in the efficient operation of airports, but it should be noted that the main users of airport services are airlines, and it is the airlines that act as agents for airports, passengers and cargo carriers.

Service quality evaluation is provided:

- ACI's Airport Service Quality (ASQ)
- Touchpoint
- Questionnaire
- Employee survey for customer experience (ECE)
- IATA's Level of Service (LoS)
- SERVQUAL model

Table 1: SERVQUAL model of Vilnius International Airport

Service group	Tangibles	Reliability	Responsiveness	Assurance	Empathy	Average
Aircraft landing	10	8.90		8.86	8.43	9.05
Airport parking	9.86	8.79				9.32
Airport equipment use	8.36	9.00	8.57	7.46	8.08	8.29
Landside services	5.14	9.71		9.43		8.09
Aircraft and passenger safety		8.64		8.86		8.75
Non-aviation			7.14	7.71	6.86	7.42

## 5. Airline-centered approach to evaluation of the airport service quality

In evaluating the quality of airport services it is necessary to use evaluations from several airports because each has a different quality of services and this would result in biased evaluation. Evaluated were: Bratislava Airport, Vienna Airport, Praha Airport, Budapest Airport and Warszawa Airport. The airports were chosen precisely because they are relatively close to each other and airlines more or less decide which airport to choose because of service at airports, but of course for any airport charges or passengers' interest in flying, which also depends on the flights offered at the airport and the airlines which offer flights.

The questionnaire was based on the SERVQUAL model, but with slightly modified service groups. The questionnaire was designed so that the respondent first chose the airport to be evaluated and then rated the airport service groups on a scale from 1-10 where 1 is very bad and 10 very good. 98 respondents who are pilots filled in this questionnaire via Google Form, as in the current situation it was difficult to prepare the questionnaire in person. In the first column there are individual service groups and in the other columns the airports are evaluated where the average rating of the airport for the given service is displayed in the columns. In the last column, the individual services at all airports are averaged, which means how the total individual services should increase, and in the last line is the average value of total services for the airport.

A questionnaire was used in the evaluation, with the help of which it is possible to subsequently improve certain services at individual airports or to take an example from other airports where the given services work very well.

The questionnaire consists of:

- selection of airport
- pre-flight preparation (briefing and flight planning area)
- security
- aircraft approach (lighting, runway quality, ...)
- aircraft parking
- airport ground equipment use (apron airport equipment)
- landside services
- airside services
- aircraft and passengers safety.

Table 2: Result scores of questionnaire service quality at airports. Source: Authors.

Airport	Bratislava	Vienna	Praha	Budapest	Warszawa Chopin Airport	Average score
Pre-flight	8.7	9.7	8.9	9.1	9	9.08
Security	9.7	9.9	9.8	9.9	9.9	9.84
Aircraft approach	9.3	9.7	9.8	9.7	9.5	9.6
Aircraft parking	8.7	9.2	9.3	9.5	9.2	9.18
Airport equipment use	8.9	9.8	9.7	9.8	9.6	9.56
Landside services	8.5	9.4	9.2	9.3	9.1	9.1
Airside services	9.2	9.3	9.1	9.4	9.4	9.28
Aircraft and passengers safety	8.3	9.1	8.8	8.9	8.7	8.76
Average score	8.91	9.51	9.32	9.45	9.3	

## 6. Conclusion

The thesis briefly describes the services at the airport providing airlines. The aim was to describe all customers of the airport, the services they use and in the last chapter to evaluate the quality of services used by airlines and their crews. This is especially so because more attention is being paid to passengers than to airlines.

The questionnaire indicated that the services provided at airports are at a very high level. However, there are still several services that could be improved and airlines as well as the operation of the airport would be much more efficient and could lead to the arrival of new passengers.

For example, before the flight, the crew should be relaxed, so airports should offer a crew lounge or certain types of snooze zones to prevent crew overload. Furthermore, it can be more sophisticated briefings, which are modernly equipped, where the crew gets as quickly as possible to the information they will need for the flight.

Other services that should be introduced by more airports are, for example, boarding bridges instead of boarding stairs, as the risk of possible damage to the aircraft or injury to passengers is reduced, as passengers would not move around the aircraft and these risks would be eliminated.

The big advantage is refueling with Hydrant Dispensers instead of a fuel tank and using ground power instead of a mobile APU.

On the spot around the aircraft, it reduces the number of objects which minimize the risk of injury. This option is also more time-efficient, as the pumping of fuel as well as the supply of electricity is located directly on apron.

All these services are financially and capacity-intensive. At the moment, airports operate efficiently, even though it doesn't look like that from the point of view of the number of passengers in the last year. It needs to be considered whether such changes (service improvements) would help the airport and return the investment costs. Definitely yes at larger airports but probably not at smaller regional ones. However, it is necessary to take into account that air transport will be more and more developed and the services used by airlines will have to improve with each airport.

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