

## ECONOMICAL COMPARISON OF AEROTAXI WITH AEROLINES – SCHEDULED AERO TRANSPORT

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### ABSTRACT

The article describes compared to non-scheduled aero transport - aerotaxi with aerolines in terms of price, time on the road and safety. There are listed the advantages and disadvantages aero taxi, potential customers and other factors that may affect the customer's choice for aerotaxi.

**KEYWORDS:** Economy of Aerotaxi, Aeroline Transport, Aerotaxi

### INTRODUCTION

The article is dedicated to the popularization of small aerolines and non-scheduled aero transport - taxi. The public generally perceives this mode of transport as unavailable and therefore it when planning a trip or not included in the selection of possible transport.

Under certain circumstances, it may be even cheaper than taxi's overall transport costs for aero carriers to scheduled flights, but not the price advantage, but also other factors such as travel time, comfort, privacy, security, and flexibility. I compare the various factors that may have a key influence in customer's decision whether to use the aeroline or services of one of the providers taxi, which is time and flexibility may be for a particular customer group the main factor for the selection of a suitable taxi transport for their journey.

### POTENTIAL OF CUSTOMERS

Customers who are potential carriers for aero taxi, I would split into two groups

- Very wealthy people who are willing to pay for convenience which offers aero taxi. You could say that this present their position in society. Such a customer has a need to use extra services at the expense of higher prices. Aero taxis used for private use, especially to transport on holiday etc.
- The second group are the owners and employees of companies with a particular foreign representation, often suddenly and traveling around Europe. For these customers is determined primarily by time spent on the road, price and prestige of transportation. On scheduled flights are booked flights for a short time before they are executed at around 3 days, very expensive. We're taking into account that a number of businessmen traveling in business class, so taxi fare can be competitive with the prices of aeroline tickets for scheduled flights.

Customer will therefore be either a private person or company, and the need to use air taxis will have the following reasons:

- Saves time
- Flexibility
- Comfort
- Safety
- Financial savings
- Prestige or image
- Or their mutual combination

## FACTOR OF PRICE

First, I would point out that in today's world of low-cost airlines, where you can buy a ticket to Europe since several hundred Czech crowns, taxi cost is comparable. But this is the case, they have to select the destination of flights by price, usually several months before making their own way. However, this is usually not the case of business trips, so I opted for mutual comparison of a normal business travel, where the customer need to make their journey the next day, or during the next few days. In the event that the path will be held for a group of people, we will only multiply the airline ticket price. For aero taxi plane will look with the capacity to meet customer needs.

For clarity, I conducted comparing the price of a return ticket of destinations offered through the portal CSA and a cost of one round trip flight school providing taxi to supplement the training of pilots. The order was made two days before the scheduled flight in both cases. For aerotaxi are two planes, depending on customer needs.

Piper Seneca V, which can hold up to 4 passengers and a Cessna 421 for a maximum of 6 passengers.

The chart shows the price of a ticket for 1-6 passengers (airline - shades of blue columns), the price of four plane (aero taxi 1 - yellow column) and a six plane (aero taxi 2 - red column)

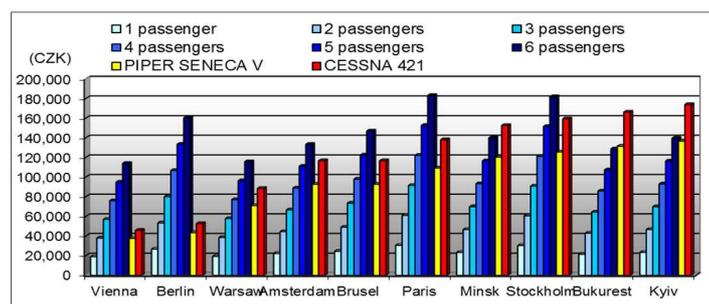


Figure 1

From above graph we can see that the destination where it is advantageous to use a taxi, and then the destination where you have carriers operating scheduled services more flight capacity utilization, which is very competitive and the ticket price is pushed down.

It is also apparent that the increasing number of passengers is better to use taxi. It is due to the fact that the nature

of the service we pay for the seat, while the taxi pay for the entire plane (eg Piper Seneca V for about 4 passengers). In this case, the third selected destinations economically advantageous since three passengers. In particular, it is a shorter length.

Comparison is not purely objective because of the price of taxi is usually constant and bound at a distance or flight hour, while the price of seats on the line is very flexible and depends on the day of the week when planning a trip, the time spent at the destination, often at a time when We intend to make the path and not least the company you choose.

We are the cost savings are needed each year to compare case-by-case basis whether it is preferable to use a regular service or taxi.

If we calculate with a ticket for 1-2 passengers and existing line without transfer, airlines will be more convenient to use when you need to carry a larger group, or if it is a destination for which there is no direct connection from Prague airport, I recommend to address aero carrier offering aero taxi and ask for their calculation.

### THE FACTOR OF TIME SPENT ON THE WAY

To compare the time spent on the road I chose a typical representative of plane on European routes. For taxi, I chose a twin-engine Piper Seneca V with a capacity of 2 pilots and 4 passengers. I chose for airline Boeing 737. Choice I made so as to respect the offer of the Czech market.

Fleet companies dealing with taxi, certainly can not compete with cruising speeds of jet plane on scheduled routes, which means it will go the same distance taxi longer. If we include in the way of downtime at check-in and security checks (at some airports may take several hours), we find that the total time spent on the road taxi provides an undeniable advantage

We plan to travel for up to 4 passengers and means of transport will be Piper Seneca V with a cruising speed of 360 km / h, thus theoretically lead is 720 km (not included in the calculation of the stochastic component of the wind). This is for example the distance from Prague to Zadar in Croatia, and Amsterdam in the Netherlands.

Comparison of time spent on the way due to the distance from the point of take-off is shown in the following chart

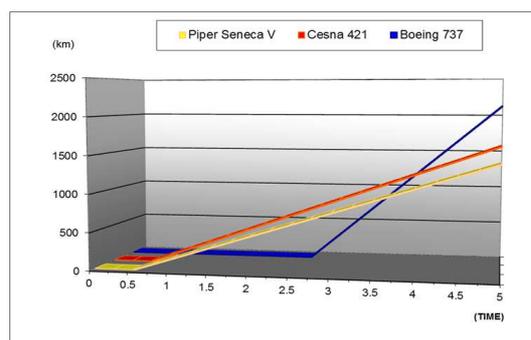


Figure 2

The above chart shows that the tipping point saving time occurs around 1000 km. It will be the final destination is the distance up to 1000 km, so we can expect the time savings is such plane such as the Piper Seneca V which is capable of taking off and landing from unpaved grassy takeoff and landing areas, such as certain non-public international airport limited.

The basic premise of this graph is that the time from the arrival of passengers at the airport for departure taxi can

be up to thirty minutes. By contrast, the normal line- transport planes, which are indeed noticeably faster, but the time spent at the airport, therefore the arrival of passengers at the airport until the departure may take more than 2.5 hours.

The main advantage is especially taxi in time savings due to the direct connection between the departure and arrival. Where there is by scheduled commercial aero transport offered a direct link, it is usually necessary to use two to three carriers. This naturally brings delays at the airport or airports for transfer, additional costs for accommodation and food service activities more expensive than the normal price.

For an illustration the case of forming a leader in mobile telecommunications in the Czech market, which has a branch in Prague and the parent company is based in Bonn. Between Prague and Bonn, there is no direct regular flight connection and employees flies from Prague to Frankfurt and then continue by train to Bonn, or vice versa. It is not uncommon if the management representative go in groups to conduct several hours and then travel back. Such a two-to three-hour meeting can therefore take the path up to two days with an overnight stay in the agenda. In such a case, traveling with a taxi meant a considerable saving of time. As for the cost of travel if you include them in its own costs for a train ticket and hotel managers and downtime, so we can reach even higher amounts than would charge the company offering taxi.

## **COMFORT FACTOR**

Comfort is very relative and difficult to precisely measurable quantity, but each of us has about him a clear idea. The basic factors such as comfort, speed, personal attention, reliability and flexibility of joints which certainly offers aero taxi.

For convenience, you can also generally be considered to minimize the time spent at check-in halls at airports.

Another alternative taxi transportation can be a formidable comfort that common types of plane used on regular routes do not. Luxury and superior comfort go hand in hand with increased costs, but it also can play a role, when it comes to us primarily to convince business partner in negotiating important contracts that "have to". In such cases, the taxi ideal way to accomplish this.

## **THE SAFETY FACTOR**

Undoubted advantage and neopomíjenou taxi is the fact that the board will be tested in addition to the crew, unknown to any other person and also any extraneous baggage. An overview of who and what will be transported to the Client under his control.

The customer does not travel with strangers, which mainly relates to minimize the risk of terrorism, which is currently very frequently discussed issue.

## **COMPANIES OFFERING AIR TAXI SERVICES IN CR**

Company which offers air taxi in the Czech Republic quite a lot, but this is primarily a niche range of flight schools and aircraft operators. Such companies that offer air taxis as the main focus of their activities in the Czech Republic less so.

You can see more scope for competition that would contribute to a more complete offer and customer focus, especially around major cities, namely Prague, Brno and Ostrava.

### PLACES CHECK-IN AND DEPARTURE IN CR

The great advantage is its flexibility taxi airport choice. The client can be used to pick up a dense network of sports airports and then proceed to one of the international airports where there is a clearance. From there, follow the path to the international airport destination, where the client can continue to check individual car transportation (taxi, car, company car with driver) or after check closer to the seat of the company plane on some of the sport airports closer umístěných company. That in the event that the headquarters can be distanced from the international airport and a few hundred kilometers. Only in such cases shows advantages and huge time savings taxi. If it is a several hours meeting or a presentation carried out in Europe, this can get done in one day, and the company still saves the cost of accommodation.

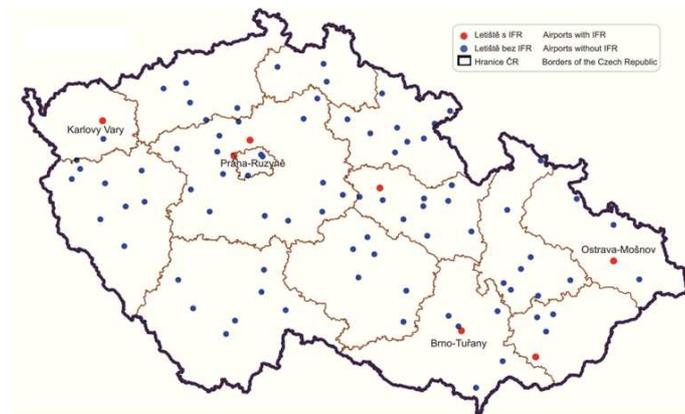


Figure 3

### AEROTAXI BENEFITS FOR CUSTOMERS

Customers who are potential carriers for taxi can be divided into two basic groups

Very wealthy people who are willing to pay for comfort, which offers aerotaxi – they that present their position in society. Such a customer has a need to use extra services almost regardless of the price. Air taxis used for private use in particular for transport on holiday etc.

The owners and senior employees of companies especially foreign capital often suddenly and traveling around Europe. For these customers is determined primarily by time spent on the road price and prestige of transportation. On scheduled flights are booked flights for a short time before they are implemented (around three days) is very expensive. In addition, many of these clients traveling in business class so the taxi price is competitive.

Customer will therefore be either a private person or company, and the need to use air taxis will have the following reasons

- Saves time
- Could be financial savings

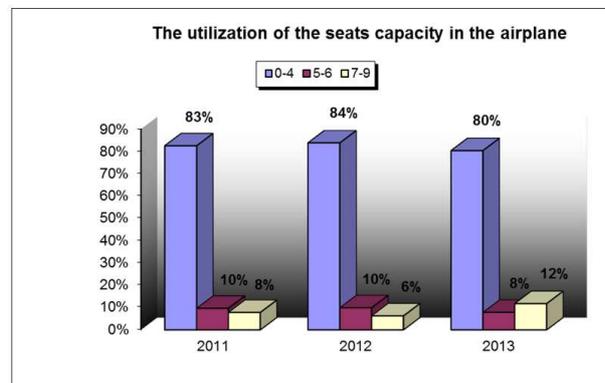
- Prestige and image
- Flexibility
- Security

### STATISTICS UTILIZED CAPACITY AEROTAXI

Analysis of the capacity of the aircraft at the request of passengers. Data was selected postytnyta airotaxi operator in the Czech Republic.

Processed data are from two commercial operators for the years 2011, 2012 and 2013.

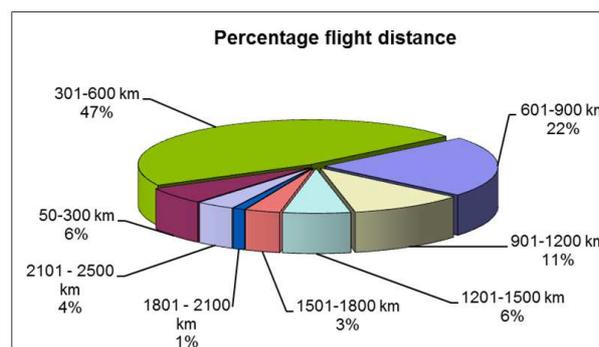
Individual categories are four, five and six and seven to nine passenger seats. The following graph in Figure 4 shows how many flights took place in each category.



**Figure 4**

The graph shows that the greatest demand is for years in groups of up to four passengers.

The following graph distance division into categories graded after 300 km.



**Figure 5**

It shows that almost half of the flights took place over a distance of 300-600 km.

Another important group is the category distance 600-900 km.

The last group, the proportion of over 10% belong to distances of 900-1200 km.

Air transport did not record any decline of the interest in the Czech Republic for last years. The data from Czech Statistical Office sluggish trend is evident in both scheduled and non-scheduled air transport.

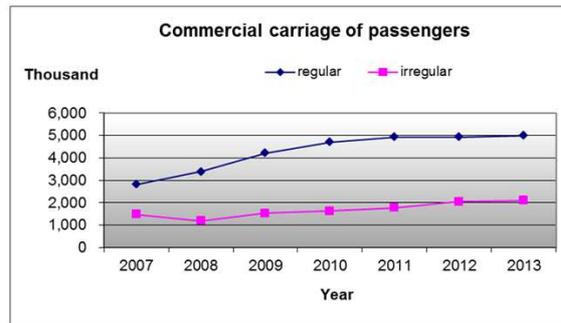


Figure 6

Data representing irregular transport are representing mainly charter flights. This chart shows general concern for air transport in the Czech Republic and theoretical opportunities for individually air transport.

The next graph shows flight hours and trends one major taxi operator which has major representation in such type of the transport in the Czech Republic.

Red line represents the amount of flying hours performed in the particular month.

Blue line represents trend across past 3 years without any extrapolation.

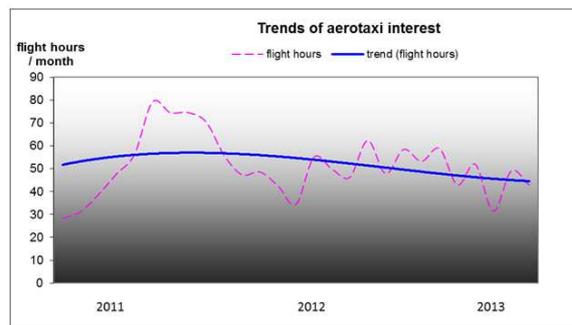


Figure 7

It shows the economic situation in Europe have an influence to aerotaxi business but there is still opportunity to increase ratio of the marked between aerotaxi and scheduled airlines.

Based on the analyses is visible the biggest interest is about distance 300-900 km and small plane with 4 seats.

**ADVANTAGES AND DISADVANTAGES AEROTAXI**

- **Benefits**
  - Flexibility
  - comfort
  - prestige

- Selection of passengers
- The speed at check-in
- Under certain conditions, lower shipping costs than conventional aerolines
- Personal approach
- **Disadvantages**
  - A small network of aero taxi operators
  - If you need a ticket is necessary to pay for all the seats on the plane
  - They are normally required to pay for the return journey (for longer stay in the area)
  - Lower shipping rate
  - Usually a higher price
  - Some planes for 4 passengers do not have a toilet

## CONCLUSIONS

I compared the non-scheduled aero transport - taxi with aerolines based on transport costs, time spent on the way, safety and flexibility.

Price comparison, I performed comparing offers the largest line carrier in the Czech Republic with flight calculations made one flight school, which offers aero taxi as a supplement to their main business.

The above has shown that there are cases where the use of aero taxi customer might save money, especially on European routes where there is no direct flight, or if the customer has the need for transport groups of passengers. On shorter period, to 900 km, there is a clear time savings, especially on routes where there is no direct link.

Currently, our market is still space to focus on customers and popularization taxi, which would increase support for small and medium-sized enterprises engaged in scheduled aero transport.

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