

# **Optimising European Public Transport**

## **SYNOPSIS of research papers**

*(The present research is part of the “Optimising European Public Transport” project supported by Allianz Kulturstiftung)*

This article aims to summarize the ideas generated by several Allianz Summer Academy alumni, who felt a strong need to contribute to the improvement of the different means of local, regional, national and international transport in the European Union.

Through discussion, online research and definition of our individual dreams we have formulated some ideas that we would like to share with our European co-citizens and the concerned decision-makers. We have considered four different aspects of the public transport that we felt close to our hearts and needs.

We focused on the further development of bike-sharing schemes; the establishment of a true car-surfing system for shared use of cars on short or long journeys; the rational use of last minute empty seats on flights; and finally we felt important to insist on the human dimension of the public transport development.

### **Bike-sharing schemes in European cities**

These schemes exist in over 130 European cities. France and Germany are leading the way with around 35 and 30 cities operating such systems, respectively. These schemes allow individuals to share a publicly available bicycle for a small subscription or usage fee, thus spreading the cost of the bike and its maintenance over many people and multiple rides. These schemes reduce road congestion by private cars and contribute to a cleaner environment in the major cities, as well as provide convenience and speed in short-distance transportation.

The schemes require an initial registration (usually a bank card is sufficient) in order to guarantee that any rented bike will be returned, or else a deposit of up to \$500 may be charged to one's card. Additionally, after a period of 30-45 minutes of free use, there is a charge for every incremental hour or half-hour.

Two areas that require improvement are theft and vandalism prevention and the balancing of supply and demand of bikes at each docking station.

Installing GPS-tracking devices in the solid frame of the bike will minimise the risk of theft. The GPS functionality will also give warning about possible future overcrowding of some docking stations based on assessing the location of bikes still in motion.

To encourage the balancing of supply and demand, bikers may be offered financial incentives (e.g. a ride at half price) to leave their bikes at docking stations that are empty during a certain time of day. Bonus notifications can be sent by text to mobile phones.

The explosive growth of bike share schemes across the world over the last five years shows that this mode of transportation offers significant benefits and advantages to individual users and to the urban communities. However, this trend is not irreversible, as the closing of the strapped-for-advertising-revenue schemes in Helsinki and Washington D.C. shows. European governments have been particularly supportive of this mode of transportation and users have been very receptive, which bodes well for this mode of transportation in Europe.

## **Euro Car Surfing**

The idea is to create a European web-based community of car travellers. It will be a typical two-sided online platform, under the temporary name of Euro Car Surfing (ECS). Users will publish their travel plans and their travel needs on a website and the matching algorithm of the website would return possible routing and timing options to share a trip with someone else or a group of travellers. For someone who owns a car and will travel to a given destination, the website will allow to find passengers to fill the empty seats and to share the fuel and other variable costs of the trip with fellow travellers. In simple words, this would be an extension to travelling of the revolutionary idea of Couch-Surfing, but with the added benefit of sharing the cost to provide a financial incentive for drivers to participate.

This system is based on the principle of reciprocity: users should be willing to sometimes ask for and sometimes give rides, although clearly different participants will use more heavily one option or the other. When this becomes a long-term engagement for the users registered in the scheme, they will build a track record that will help the other participants to judge their suitability as a fellow traveller or fellow driver.

The issue of travel insurance will be dealt with at a later stage. Initially participation in the scheme is planned to come with a waiver of any liability (caveat emptor) for both sides: vehicle operators and vehicle users.

Some forms of travel sharing systems already exist, however none has been successful in Europe. Firstly, none has been conceived accurately and efficiently enough to become one of the mainstream travelling options for the European population and especially for young Europeans. None has ever even got close to the scale of Couch-Surfing in terms of use, diffusion and reputation. Most Europeans today have no idea that anything like this exists. Secondly, none of the rudimentary travel sharing networks in Europe has the pan-European dimension and a European inspiration. ECS aims to be a new, powerful way to contribute to the formation of a European identity.

This European dimension is not secondary in importance as it can give the system a competitive advantage and brand awareness far exceeding that of the existing national or local start-up schemes. If Europe struggles in today's global world, it is perhaps because it is a body without soul. We have been building the European structures and institutions, but not really a European identity that harbours mobility across the continent. Once mobility becomes a clearly visible European trend, this could plant the seeds for historic economic and political change.

## **Euro Sky Pass**

Imagine you are a young tourist who wants to see Europe. You would need to fly for at least some parts of your route but this would be extremely expensive at today's prices.

The ideal solution to the problem would be the following: a low-priced airplane ticket which you can use whenever an airline flies to your desired destination and has empty seats. This is essentially an extension to air travelling of the successful InterRail Pass, which allows young Europeans to travel around the continent since 1972. This would definitely be the best fit for you: it would solve the timing problem while taking into account the budget restriction.

The question is whether this would be profitable for airline companies. Suppose you could use that pass strictly when, for example just three hours before the flight, the plane has still an empty seat. In that case, the airline might want to let you fly, since there is no chance that it can sell that seat to anyone else. Making a little money out of your cheap ticket is still better than making nothing. For you this works perfectly, because you are travelling for fun and you plan your travel schedule on the fly. Since you are flying within the Schengen area where no identity check is needed, all you have to do is reach the airport, check in and pass the security check. Three hours is more than enough for that. And flying within the Schengen area is not a small thing: twenty-six countries and four million square kilometres!

## **Don't forget the human dimension!**

Our modern society is facing a paradox in which high technological achievements are countered by unsocial behaviour on every level. We're talking about vandalism and uncivilised behaviour. For instance according to a research, conducted by the British Department for Transport in 2008 and published in 2010, crimes on public transport in England cost an estimated £1.5bn a year.

Another problem is the carbon footprint left by all the users of private transport, non-willing to use the public transport, because of emotional or irrational reasons. In addition to their carbon footprint we need to consider also the heavy traffic created by their choice of transport, the stress and the noise pollution in cities.

Badly managed or ineffectively used public transport creates many hidden secondary costs due to pollution, stress, higher costs of private transport etc. In few words we need to find a way of making the European citizens smarter and more civilised. People can be civilised and smarter in their everyday choices, but sometimes they just don't have the right information or haven't received the right education. We need to reach them via appropriate communication channels.

Young people should be targeted via more modern media like social networks, TV, computer games, phone applications etc. It is important to show that it's "cool" to be smart and civilised and it's "uncool" to be a vandalising brainless individual.

The middle-aged generation is mainly characterised by the quest for social status. It is the period of life when one cumulates wealth and builds their social status which in our material society goes along with wealth. Here we need to find a way to show that it is socially well perceived to use the public transport, to minimise the ecological burden of one's movement.

We need to raise awareness of the necessity to add a human dimension in the improvement of the public transport system. No technological advancement can be successful without bringing in the advancement of the society. The connection between technology and the absorption capacity of the ordinary citizen should constantly be kept in mind.

## **The team's activities in the framework of the project**

In order to formulate these ideas into concrete entrepreneurial and policy proposals, the team met in Barcelona in February 2011. We spent two days discussing our enthusiastic ideas and confronting them with reality. We agreed on a working agenda and organised Skype conference calls thereafter.

We have also created a website dedicated to sharing the material we have collected in the form of photos of different types of public transport networks in Europe, so that those who land on it via a search engine may get a broader image of the diversity of transport modes and the extensiveness of transport networks in Europe.