
Abstract of the Bachelorthesis

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Topic: **Integration of Mobility Supplies**

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The market of mobility supplies is characterized by a strong dynamic in connection with a huge growth during the last years. Especially in the sector of public mobility supplies, various new concepts such as car-sharing, bicycle rental systems, specific mediation of rideshare opportunities as well as the adoption of the scheduled long-distance bus market has established along with the conventional public transport (bus, train, taxi). Despite these developments the mobility behavior of the road users in Germany is still dominated by the private car. This fact certainly presents several problems: the increasing use of the traffic infrastructure by individual means of transportation (stationary as well as moving traffic), the neglect of the social and political commitment of ecologically sustainable action and rising crude oil prices caused by consistently decreasing resources are some examples.

In addition to these problems caused by the individual traffic, the public traffic is facing challenge as well. Not only the demographically change in our society, but also the migration from rural regions are developments which require a rethinking to enable the public transport to get on with its function of the public service. Also, there is a shortage of fossil fuels which demands an implementation of measures to support electro mobility especially related to the public traffic. The focus of these suggestions is the concept of the “multimodal mobility” which is identified by constant use of all different means of transportation during a certain period of time or even within a route. This concept demands the integration of different, but mainly innovative mobility offers, which can be included into the existent system of the public traffic. Therefore, the public traffic builds the main part of this concept.

Considering this situation, the dissertation on hand focuses on identifying potentials for an improved integration of mobility offers. For this purpose the existing linkage of mobility supports in Germany, Austria and Switzerland are evaluated. This investigation is build up systematically into different sections of integration of mobility offers which can be classified as follows: infrastructure, operation, scales, ticketing as well as information and booking systems. Furthermore, the connections are examined regarding organizational-institutional aspects. To illustrate the existing connections of supplies, matrixes are used, which establish the basis for the further approach.

The next step is an evaluation of the determined linkages. Using selective, assessed criteria, the requirements from the perspective of the operator as well as the one of the user are considered. This evaluation leads to the determination of potential to improve on the respective sections. The aim of this step is to identify sections with particularly significant potential and to present possible development attempts. Due to the cooperation with the “DB Regio AG” in the section of long-distance bus services, both, specific room for improvement and possible approaches of an integration for so far unlinked offers, are determined and, if procurable, also evaluated.

The result shows that lots of mobility offers are already characterized by being connected in different sections, whereby the intensity of these connections varies greatly. Especially the section of long distance bus

traffic such as offers of demand in the short-distance traffic however are affected by a multitude of connections, in which no measures to integrate mobility offers were implemented yet. The evaluation of the existing connections shows that many approaches to integration are characterized by a well or very well implementation. Nevertheless nearly all existing connections are characterized by potentials, partly in a very high form. Especially mobility cards in the area of ticketing, the carriage of bicycles as an operational offer, the uniform rate on a tariff section such as information systems on the section of information and booking systems show high potentials in relation to an improved integration of mobility supplies. Moreover at most of the very well evaluated connections a spatial extension or an increasing degree of integration (Inclusion of multiple offers) is advisable. With a view to the organizational-institutional section it is recognizable that there are considerable potentials as various connections only can be developed and included on basis of existing business cooperation.

In the area of the comparative new market of scheduled long-distance busses it is striking, that even in this sector there are many potentials for the realization of new approaches to integrate mobility offers. They partly differ only a little from the improved approaches of integration in general, but some specific connections with potential were determined, which connect the area of the long-distance traffic with other mobility supplies.

In replying the research questions it is striking, that many measures in the area of barrier-free mobility have already been implemented, but focusing the information system there still are potentials of an improvement. In view of this fact it is possible to counteract effectively against the challenges caused by the demographic change by means of potential approaches. In relation to the integration of electro mobility there consists a variety of approaches, especially in the area of mobile individual traffic and non-mobile individual traffic (e.g. charging stations for e-cars or pedelecs at parking space). But also public bicycle rental systems and car sharing offer diverse possibilities of an integration which can almost compensate the disadvantages of the electric mobility (high price of purchase, short range). With regard to the sharing systems particularly the integration on a tariff basis is important. There are only a few approaches present for the problem of migrating population in rural regions. Especially integration approaches in connection with offers of demand (e.g. phone boxes usable as an information system) such as the supplement by carpooling-offers in rural areas in form of tariff integration does however show that there is potential. With the planning and implementation of measures of the integration in rural areas the situational conditions (population structure, potential demand etc.) are to be considered.

Due to the improved integration of mobility offers the possibility exists to offer a complete, section and traffic spanning concept of multimodal mobility to the user in which the private car does not form the center. As a consequence there is potential of the reduction of the private car possession and therefore also a solution to the above-mentioned problems such as the increasing claiming of the traffic infrastructure by individual means of transportation.

With a view to the development in future it is to be said that an integration of mobility supplies only makes economic sense if the society reaches a rethinking: away from the private car, towards multimodality. In this relation mainly young people form the target group, as their mobility behavior often is not influenced by defined patterns and especially not by private car. Additionally political fundamental decisions on the promotion of multimodal mobility supplies are the basis of the development in future. Due to political fixations such as tax deductibility of private car drives or the financing of the integration of new mobility offers by aid money (e.g. the initial free use of bicycle rental systems) the attractiveness of using mobility supplies and thus the mobility behavior of the road users is significantly influenced.

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