

POSETIV – Potential and promotion of speed pedelecs for commuters

Philipp Blass, Veronika Zuser, Nina Senitschnig, Christoph Breuer, Eveline Braun and Aggelos Soteropoulos

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In Austria, the popularity of speed pedelecs rises. As an eco-friendly and healthy mode of transport they are used in leisure time as well as for commuting. Being legally equivalent to mopeds brings substantial drawbacks though. It is not allowed to use speed pedelecs on cycling infrastructure, they need insurance, registration and type approval. In this paper, the potential of speed pedelecs as an alternative mode for commuting, mainly as a replacement for cars, is considered. Aims therefore are

- to answer the question whether this potential is restricted by the current legal framework in Austria,
- to evaluate the current legal framework from a safety perspective,
- to propose alternative regulations for speed pedelecs in Austria,
- to recommend guidelines for companies, municipalities and governments to enhance the attractiveness of speed pedelecs for commuters.

To tackle these goals the study is split into several interacting parts. One main part is a field study carried out with 100 participants in three different regions in Austria and Switzerland (urban, suburban, rural). The participants tracked their daily trips to work with the help of a GPS-ready smartphone over the span of five weeks. The first week was used to track their usual commuting behaviour. In weeks two and three pedelecs, in weeks four and five speed pedelecs were supplied. The participants were encouraged to mainly use these provided vehicles for their daily trips. To support the collected driving data, participant's experiences and opinions were surveyed at four different points of time during and after the field trial. In addition, an online questionnaire representing the Austrian population was conducted, which focused on people's expectations of riding an speed pedelec and possible reasons for changing their mode of transport.

The output of the field trial was a huge data set on daily commuting routines with different modes of transport. For safety related aspects, speed differences of pedelecs and speed pedelecs were computed and further evaluated. The field trial showed that speed differences were not as large as expected. The participants questionnaire revealed that people would prefer to drive on bike infrastructure with speed pedelecs. Especially in a rural environment, this would increase their perception of safety. The quantitative questionnaire indicates that people share this attitude. Additionally, speed pedelecs getting cheaper, receiving funding by the employer or by public means, and having access to a parking space would influence people to change their commuting behaviour towards speed pedelecs. Suggestions for legislation and guidelines for different stakeholders like companies, municipalities and governments will be provided.