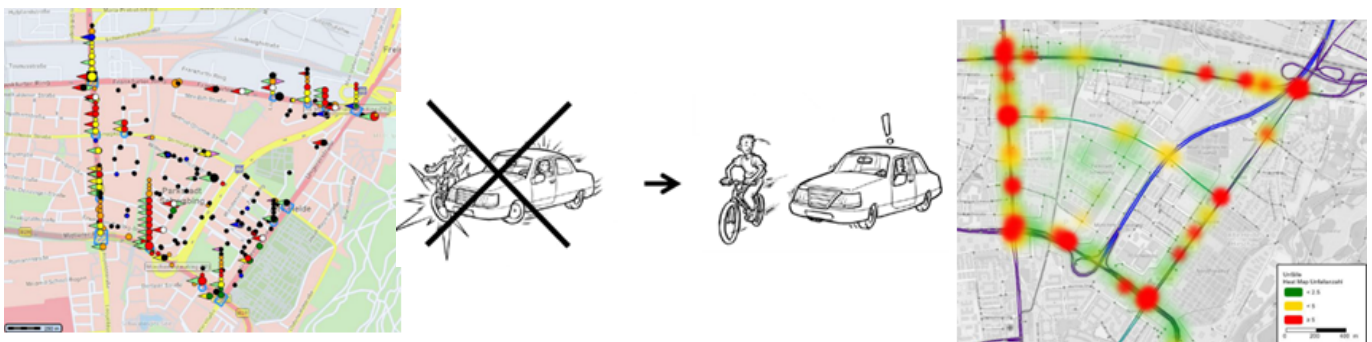


Software-controlled safety management for the road network

Autumn 2018



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- Road safety software tools for preventive safety management
- Reduced number of accidents
- Improved pedestrian and cyclist environment

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no. 690699.

Location: Munich, Germany

Organisations involved: [City of Munich](#)

What is the solution?

With this measure, the city of Munich aims to develop and demonstrate the potential of a new and innovative software-controlled road safety management concept in Munich's 'living labs' - the districts of Domagkpark and Parkstadt Schwabing, north of the city centre. The concept will allow to identify risks before accidents occur and to take appropriate prevention action. This is a preventive approach to road safety management that seeks to increase the safety inherent to the road system, reduce the amount and severity of accidents, and create a safe mobility environment for all road users.

How does it work?

The new road safety concept consists of two main aspects: a new software controlled management system that allows for preventive actions to increase road safety, and new planning elements for an innovative process in organising road safety.

In order to develop and implement the new safety concept, as a first step, it was necessary to conduct a comprehensive inventory and an in-depth analysis of the road safety situation in the area targeted. To do so, so called 'road safety hotspots' were identified in two ways:

1. A scientific analysis of the road safety in the living labs based on expert knowledge (subcontract) and existing traffic accident data;
2. An in-depth analysis of the road safety in the living labs in cooperation with local stakeholders, especially with local neighbourhood associations and local police representatives.

The results are being used to define a set of road safety objectives to be realised in the target area. Road safety is a highly political and very sensitive topic. Therefore, the safety audit is part of an intensive planning process that includes all relevant stakeholder groups.

As a second step, the objectives resulting from the safety audit are being used to develop the road safety management system. The system collects and analyses geo-referenced accident data of the past five years and links it to data of traffic models and other sources. For example, infrastructure data. Combined with a safety software tool, the findings can be used to forecast potential accident situations. The municipal urban and traffic planning authorities can then cooperate with the police in order to develop preventive measures that significantly reduce the likelihood of accidents. The management system requires high data quality. Therefore continuous monitoring and evaluation to control the development of the road safety situation in the living labs, and realisation of objectives, is foreseen.

Regarding the second aspect of the measure, the new planning elements for an innovative process in organising road safety, it is planned to make road safety management a cross-sectional task for all stakeholders involved in planning and infrastructure projects. With the help of the management system, planners will already be able to make a prognosis of their road safety impact during the planning phase of new development projects, and have the option to adapt their plans to promote better road safety.

Expected results

This solution will tackle the problem of increased car traffic across the city of Munich, having as focus the living lab areas. New modes of citizens participation and engagement will be developed, and better, safer environments for cyclists and pedestrians will emerge, through this comprehensive road safety concept. Reduced levels of car traffic in the Domagkpark and Parkstadt Schwabing are expected. The direct, observable and measurable impacts from the measure will be:

- The measure will be widely accepted by road users.
- Road users will be satisfied with the implemented measures.
- A high number of accidents will be prevented.
- People are expected to change their travel behaviour.

Business Model

The measure is fully financed by the CIVITAS ECCENTRIC project. A total budget of € 215,920 is allocated to realise the measure.

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Living lab area in Munich: <http://civitas.eu/eccentric/munich>