

# Call for Master Thesis at the Institute for Transport Studies

## Working Title

Digital infrastructures for traffic management in cities

## Starting Situation / Framework Conditions

Vehicles are increasingly connected (see e.g. e-call directive). This opens up many opportunities of optimizing traffic, e.g. dynamic regulation of traffic flows, providing better transport services etc. Many questions remain about

- concrete possibilities to influence vehicle traffic flows or (dis)incentivize particular mobility behavior and patterns
- steps to be taken to implement these traffic management schemes (investments, legal framework – both proper to a city administration and overarching national/EU, changes in governance or processes and
- associated challenges e.g. in the areas of privacy, liability or resilience.

The concept of digital infrastructure may be interpreted broadly, starting from the actual IT hardware, through algorithms and databases up to standards and governance processes.

## Aim of the Master Thesis

- to identify possibilities for traffic management in urban areas by city administrations;
- to highlight those developments where digitalization can significantly contribute to improve efficiency (e.g. improve impacts or reduce costs of management or enforcement, ...);
- to analyze benefits and risks of the solutions, even beyond transport planning;
- to develop recommendations and strategies how city administrations in Europe can progress on this matter (preconditions, barriers, key interventions, required competences, ...).

## Methods

- Literature study
- Identification of best practice examples
- (Semi-Structured) interviews with different stakeholder groups
- Structured analysis of impacts and requirements
- Development of policy recommendations

## Co-operations

- The Vienna City Administration is supporting this master thesis by providing information on request.
- Depending of the individual choice of the research questions and the quality of the work, a presentation may be possible to an audience of experts and practitioners in the mobility sector.

## Contact at the Institute for Transport Studies

- *Yusak Susilo* ([yusak.susilo@boku.ac.at](mailto:yusak.susilo@boku.ac.at))
- *Oliver Roider* ([oliver.roider@boku.ac.at](mailto:oliver.roider@boku.ac.at))

## Notice

Language: English / Deutsch