Smart Parking Solutions for Roadside Parking – Including Charging Stations – in the City of the Future

City2.e 2.0 is supposed to contribute to the turnaround in energy and traffic policy. The project’s main objective is a practical demonstration of an intelligent parking space monitoring and control – including electrical car charging facilities. Central project parts are a prototype of a holistic parking detection, a practical real-world test, and a system architecture for monitoring and control of detected parking spaces. For demonstration, the implemented solution will be integrated in the Berlin traffic information system.

Lead by Siemens AG, five project partners work in the cooperative project City2.e 2.0 to realize a „virtual parking garage“ and to study technical, legal, and economic conditions in a real-world test. The pilot area for the real-world test will be set up in an urban street area in Friedenau in the Berlin borough Tempelhof-Schöneweberg.

DFKI Develops Adaptive Parking Space Occupancy Prediction

The German Research Center for Artificial Intelligence (DFKI) develops an adaptive prediction solution using machine learning methods to give estimations of future parking area occupation. Thereby, an improvement of planning, routing, and usage of parking spaces and charging stations could be realized.

Especially, a user can select the exact destination of his trip by the local parking space situation predicted for the time of his arrival. Consequently, an ideal selection of the means of transportation is possible (e.g., taking an electric car, public transport, or a combustion engine vehicle). This can be realized by the integration of the DFKI prediction module into the City2.e 2.0 system platform of VMZ Berlin and by linking the predicted occupancies to the intermodal routing planner. Thereby, a user can get a route directly to an available parking space – and this at any time before starting the trip, as well as while en route (and there, potentially with online corrections).

Duration: 01/2014 – 04/2016

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