Siemens develops overhead sensor system to optimize the search for a parking space

According to the latest Apcoa study, motorists drive an average of 4.5 kilometers before they finally find somewhere to park. That costs time, gasoline and nerves. The new radar sensors mounted overhead controlled parking management system from Siemens is helping to optimize the use of urban parking facilities and radically reduce the congestion caused by motorists searching for a space. The overhead sensor is currently being put through its paces at the testing ground in Munich. An initial pilot project is planned for summer 2015.

A sensor network – based on newly developed radar sensors mounted overhead – continuously monitors the parking lot and reports the occupancy status to a parking control center. Because the sensors are easy to install on or in street lights, there’s no need for major interventions into the infrastructure. The solution is also more...
accurate and not only notifies if there is an object in the parking space, but also sends information about the size and position of the vehicle. The overhead system also detects any obstructions on cycle paths, bus lanes or garage and forecourt entrances caused by incorrectly parked vehicles.

The measurement data is transmitted via mobile radio to the control center, which records the sensor data, calculates the corresponding parking space occupancy, and prepares it for use by app operators in services such as assistance for drivers in locating parking spaces. What makes the solution really special is that the software works with a system that is capable of learning. It detects recurring parking space situations at particular times and calculates forecasts so that users know what to expect when they arrive at their destination.

Siemens uses technology from the US company Intel for connecting the sensors to the internet. The Intel IoT (Internet of Things) platform enables the parking sensors to be connected securely and flexibly with the control center. In this way, Siemens and Intel are laying the foundations of a sensor and communication network for future Smart City concepts.

You can find more information, a film, press pictures and footage on this topic at [www.siemens.com/press/smart-parking](http://www.siemens.com/press/smart-parking)