

Turkish Municipality Using RFID to Track Its Vehicles

A suburb of Istanbul is using UHF Gen 2 tags to track employee vehicles, and plans to extend its use of the technology to include security and payment applications.

By Mary Catherine O'Connor

June 8, 2007—[STS Technology](#), an RFID systems integrator based in Istanbul, has completed work on an RFID-based vehicle-tracking project for a government building in Pendik, a suburb of the Turkish city. STS is a reseller of [Alien Technology](#) RFID hardware and software, which it used to deploy the vehicle-tracking system.

The municipality of Pendik deployed the system six months ago to control access to an employee-only lot within a large parking area, and to restrict unauthorized vehicles from entering. Alien's Gen 2 fixed-position interrogators are installed at each entry lane into the lot. When an authorized vehicle approaches a gate, an interrogator reads a passive Alien 9540 Gen 2 Squiggle RFID tag inlay embedded in a sticker attached to the car's windshield. The reader transmits the tag's ID number to a program that compares it with a list of IDs for tags issued to employees. If it finds a match, the program sends a command to the security gate controller to raise the bar blocking the entrance.

The Alien readers are tuned to transmit and receive data in compliance with [European Telecommunications Standards Institute](#) (ETSI) regulations for UHF RFID systems operating at 866 MHz.

According to Ronny Haraldsvik, Alien's VP of marketing and industry relations, the municipality eventually plans to expand this application to automate the collection of parking fares at a lot used by members of the public visiting the government facility. It may also begin utilizing the system as a security tool by using the tags to authenticate certain vehicles and drivers entering designated parking areas.

Based on the success of the Pendik project, says Tanhu Dizgec, president of STS Technology, the company has secured a half-dozen other vehicle-tracking projects with additional municipalities (and universities) in and around Turkey.

RELATED_ARTICLES Until now, adoption of EPC Gen 2 passive RFID tags and interrogators has primarily come from companies supplying goods to retailers and the [U.S. Department of Defense](#), in response to RFID mandates. The Pendik project, Haraldsvik notes, is representative of the growing adoption of EPC Gen 2 passive RFID technology for uses outside of supply chain compliance applications. "We are seeing vehicle tracking and access control as a significantly growing application," he says, "for non-compliance applications of EPC technology."

According to Alien, the agreement STS has secured with the municipality of Pendik for present and future vehicle-tracking applications calls for the use of a large volume of Alien Gen 2 tags—up to tens of thousands.

