RFID News Roundup

TransCore unveils tag designed for most toll-collection systems; Mines near the Arctic Circle will use RFID; Charleston Inn using Capton's liquor-monitoring system; Germany gets its first contactless payment credit card; Airtag intros developer kit for Near Field Communications.

Oct. 2, 2008—The following are news announcements made during the past week.

TransCore Unveils Tag Designed for Most Toll-Collection Systems

TransCore, a provider of RFID technology and software used for electronic toll collection, has announced a new active RFID tag, the eZGo Anywhere, which is interoperable with 95 percent of the highway electronic tolling systems in the United States, according to Kelly Gravelle, chief technical officer of TransCore, which is based in Harrisburg, Pa. The tag was designed to provide frequent interstate travelers a single transponder they can use to automatically pay tolls on roads from throughout the East—including the E-ZPass system, which has issued nearly 10 million tags to drivers in 12 states—south to Florida and west to Texas. (The tag is not compliant with tolling protocols in the states of Colorado, California or Washington.) It operates in the 902-928 MHz frequency range and runs on a non-replaceable internal battery, estimated to last for 10 years of typical usage. It is a read-write tag and its data can be written to at high speeds and in real time, according to TransCore. The tag also supports data encryption and other security protocols designed to prevent corruption or alteration of tag data by an unauthorized party, Gravelle says. The tag is available in a waterproof housing that allows it to be mounted on the exterior of a vehicle if the user wishes. No tolling agencies are distributing the eZGo Anywhere tags to drivers yet, but TransCore hopes that will soon change. Gravelle says that eZGo tag can be read by the existing readers used by the tolling systems with which that tag is compatible, so the agencies won't need to make any hardware changes to accommodate them. Agencies will have to adjust their billing system in order to process payments and link them to the eZGo tag IDs, however.

Mines Near the Arctic Circle Will Use RFID

Sweden's government-owned Luossavaara-Kiirunavaara Aktiebolag (LKAB), located in a remote area near the Arctic Circle, is using Identec Solutions' WatcherMine real-time location system (RTLS) to track the movement of more than 1,000 miners at LKAB's Malmberget and Kiruna mines, which produce roughly 25 million tons of raw ore annually. WatcherMine uses Identec Solutions' ILR (Intelligent Long Range) 915 MHz active RFID transponders and readers, designed to withstand harsh environments and meet strict European guidelines for intrinsically safe equipment, according to Identec Solutions. Throughout the mines, RFID readers have been installed at strategic locations, and whenever an active tag enters the read range of one of these access points, the tag's unique ID is captured. The tag-to-antenna read range is approximately 100 meters.

Charleston Inn Using Capton's Liquor-Monitoring System

The Vendue Inn in Charleston, S.C., is using Capton's RFID-enabled Beverage Tracker system to monitor its bar operations. The inn reports the system has helped cut liquor costs, with a consistent 5 percentage point drop overall since the installation in May. The system enables the inn to more accurately track liquor sales and improve the consistency of drink preparation by providing a clear

picture of exactly how each drink is prepared. Beverage Tracker consists of RFID-enabled liquor spouts that can be fitted into liquor bottles, as well as an RFID interrogator and software. The spouts contain a battery-powered 418 MHz RFID tag and a measuring device. Whenever a bartender pours a drink, the tipping of the bottle activates both the tag and the measuring device, allowing the spout to measure the volume of liquor poured (in ounces) before the employee tips the bottle back up. The tag then transmits that information (and the microchip's unique identification number, as well as the brand and size of liquor bottle to which it is attached) to the interrogator's antenna. The spout's tag has a maximum read range of up to 100 feet from the antenna. Other hotels using Capton's Beverage Tracker include Treasure Island, a Las Vegas hotel and casino (see Hotel-Casino Uses Tags to Keep Tabs on Liquor); the Sandestin Golf and Beach Resort, in northwest Florida (see RFID News Roundup: Sandestin Putting RFID on Tap); and the Hyatt Regency McCormick Place, also in Las Vegas (see As You Like It).

Germany Gets Its First PayPass Contactless Credit Card

Lufthansa has launched its Miles & More credit card, the first card in Germany to use MasterCard's PayPass contactless payment technology, according to companies involved in the project. The Miles & More card also features a SmartMX security EMV chip from NXP Semiconductors. The card lets customers pay for goods and services by simply tapping the card over a PayPass reader during point-of-sale at participating retailers. The Lufthansa Miles & More card is produced by Vienna-based Card , a supplier of cards and personalization services in Austria and Eastern Europe, and is issued by Deutsche Kreditbank. NXP's SmartMX IC is a dual-interface Europay, MasterCard and Visa (EMV) chip; the EMV specification enables the updating of a customer's stored data whenever the cards are used in a chip-and-PIN reader and is also designed to allow multiple applications on a chip. The chip bolsters the credit card's security, requiring that for purchases of more than 25 euros, card holders must sign or enter their PIN to complete the transaction. By January 1, 2011, the SEPA (Single Euro Payments Area) Card Framework will mandate EMV chip and PIN as the supporting technology going forward, according to the companies. The first MasterCard PayPass terminals in Germany have been installed at checkout counters in the Frankfurt and Munich Airports, and are expected to become more widely available through participating retailers throughout the country. The Lufthansa Miles & More credit cards are currently accepted in more than 27 million locations across the world.

Airtag Intros Developer Kit for Near Field Communications

French company Airtag, a supplier of Near Field Communications (NFC) applications, services and infrastructure, including readers, tags, and interactive kiosks, has announced the Airtag Kit, which includes a multimedia NFC reader with a USB connection and a software development kit. Specifically, the kit includes 1 universal NFC USB reader (compatible with the ISO 14443 A and B and 15693 standards, as well as the Mifare and FeliCa specifications) and four different NFC tags (a tag based on the Java Card OpenPlatform smart card operating system; a 13.56 MHz Mifare tag, a tag compliant with ISO 15693, and an Inside Contactless sticker tag compliant with ISO 14443 B and 15693). The kit is designed to help customers—including end users, professionals, and developers—program tags to NFC standards so they can communicate with all standard NFC mobile phones, and to develop secure applications compliant with the industry standards. Customers will also have access to an online

community by logging into the Airtag Kit Web site The Web site includes online tutorials, examples of programs, discussion forums, professional advice and applications ideas. Available now, the kit is priced at 249 euros.