

RFID News Roundup

ASK, WS Packaging form U.S. venture to produce contactless cards, tickets; University HealthSystem Consortium picks Ekahau as RTLS provider; SAVR Communications team forms new company to target M2M market; MBTA, MIT students make peace to work on security; CEL adds to line of ZigBee transceiver solutions.

Jan. 8, 2008—The following are news announcements made during the past week.

ASK, WS Packaging Form U.S. Venture to Produce Contactless Cards, Tickets

ASK, a French manufacturer of contactless microprocessor smart cards, contactless cards, paper tickets, and RFID smart paper labels, has teamed with label maker WS Packaging Group, headquartered in Green Bay, Wis., to launch a new U.S. company that will produce RFID inlays printed on paper. The firm, known as ASK-intTag, will manufacture products for a range of markets, including food, health care, gaming, event ticketing, secure identification, financial bank cards and mass transit. Initial production will focus on secure identification, mass transit and bank cards. The company, according to ASK, will be the first RFID manufacturer in the United States to print silver-based inlays on a paper substrate. The inlay's composition will be highly resistant to forgery, the firm reports. ASK has U.S. clients involved in mass transit, banking and identity markets, but indicates a joint venture with a U.S. business will enhance its market presence and the adoption of contactless technology in North America. "Furthermore," said Bruno Moreau, ASK's CEO, in a prepared statement, "our clients who requested a domestic manufacturing site will be pleased to benefit from ASK technology and WS Packaging's strong market presence." ASK-intTag will operate as a separate company. Potential U.S. manufacturing locations are presently under review, but are expected to be finalized this month.

University HealthSystem Consortium Picks Ekahau as RTLS Provider

Ekahau, a provider of Wi-Fi-based real-time location systems (RTLS), has announced that it has been awarded a contract with the University HealthSystem Consortium (UHC). The consortium, an alliance of 103 academic medical centers and 191 of their affiliated hospitals, has a mission to advance knowledge, foster collaboration and promote change in order to help members succeed in their respective markets. Under the terms of the three-year agreement, with options to extend, Ekahau becomes a preferred provider of RTLS solutions to UHC's member hospitals throughout the United States. Ekahau's platform consists of 2.45 GHz active RFID tags transmitting unique IDs, using the IEEE 802.11 (Wi-Fi) standard, to access points linked to a wireless LAN, along with tracking software that maps tag locations in real time.

SAVR Communications Team Forms New Company to Target M2M Market

Irving, Tex.-based RFID technology provider SAVR Communications has been purchased by a group of its executives who are expanding the company's focus beyond RFID, by increasing emphasis on machine-to-machine (M2M) applications. Such applications allow for data communication between two machines, and include the remote collection of flow rates, pressures, temperatures, tank levels and equipment status in an oil refinery, as well as the monitoring of equipment, energy usage and maintenance as part of facilities management. SAVR Communications is now part of OnAsset Intelligence, a new company formed by a group of SAVR executives to address the growing M2M communications market. OnAsset will concentrate on helping firms wirelessly locate, track, connect, control and manage fixed and mobile assets in

real time via integrated solutions. The new company name was selected to align with SAVR Communications' OnAsset Platform, a software-as-a-service (SAAS) solution for monitoring and controlling fixed or mobile assets on the Web. OnAsset's acquisition of SAVR is not expected to not impact the former company's operations or production of products and services. The company's Sentry active RFID hardware line and OnAsset Platform will serve as the key enablers for M2M solutions, according to Adam Crossno, SAVR's former VP and general manager, who now serves as OnAsset's president and CEO.

MBTA, MIT Students Make Peace to Work on Security

A battle between the Massachusetts Bay Transit Authority (MBTA) and a group of MIT students appears to have been settled. The dispute, centering on alleged security flaws in the MBTA's CharlieCard contactless smart card system used for electronic ticketing, began when three MIT students planned to publicly disclose, at last August's Defcon hacker conference, details of several security vulnerabilities they discovered in the electronic ticketing system. The MBTA went to the U.S. District Court in Boston and obtained a temporary restraining order preventing the release of certain information regarding those vulnerabilities. The Electronic Frontier Foundation, a nonprofit advocacy and legal organization, took up the students' defense, and appealed the temporary injunction. Ultimately, Judge George O'Toole, who presided over the case, chose to avoid ruling on whether MBTA's lawsuit and the subsequent gag order had violated the researchers' First Amendment rights. In late December 2008, the MBTA and the students announced that they would collaborate to improve CharlieCard's security. The CharlieCard system, in operation since late 2006, employs NXP Semiconductors's Mifare Classic RFID chip, which was hacked in early 2008 by two separate research teams who reverse-engineered the chip and uncovered the security algorithm it utilizes. A party who knows the Classic chips' security algorithm could use this information to clone RFID tags containing the chip—a weakness that could be exploited to create fake transit passes or unauthorized copies of key cards, in order to enter access-controlled buildings. Boston is not the only transit system employing the Mifare classic chip; London's transit system also uses it in its RFID-based Oyster transit cards (see RFID Payment Platforms Gaining Momentum). In March of last year, NXP unveiled a new RFID chip, the Mifare Plus, which the company says can support the advanced encryption standard (AES), as well as a number of other data security protocols (see NXP Announces New, More Secure Chip for Transport, Access Cards).

CEL Adds to Line of ZigBee Transceiver Solutions

California Eastern Laboratories (CEL) is now shipping a new ZigBee radio module that the lab says is designed to help customers more quickly develop systems that utilize the ZigBee application and profile suite as specified by the ZigBee Alliance, an association of companies working to define the ZigBee standards, provide interoperability and conformance testing specifications, and promote the technology's adoption. Based on the EM260 transceiver platform from ZigBee-compliant chip manufacturer Ember, CEL's Apex LT Module runs the entire ZigBee suite of applications and profiles as specified by the ZigBee Alliance, and supports both ZigBee and ZigBee Pro Certified software stacks and full mesh networking, as well as the ZigBee Alliance Smart Energy profile. The module is a hardware and software solution that CEL indicates is ideal for such applications as automated heating, lighting, air conditioning and ventilation systems in commercial and residential buildings. The module fits into Automated Meter Reading and Automated Meter Infrastructure (AMR/AMI) systems, the company reports, and could be installed by gas utilities seeking to monitor and reduce energy use. The Apex LT module features +20dBm output power and a 4,000-foot transmission range in a typical deployment. The module's native low-power processor handles radio and network management functions, off-loading these tasks from the host controller. It features an onboard power amplifier with software-configurable output from 1mW to 100mW. At the 100mW level, power consumption is only 170mA, which, according to CEL, makes it a good choice for battery-powered applications. The Apex LT module is only 25 millimeters by 33 millimeters (1 inch by 1.3 inches) in size, including an integrated antenna, and has an external antenna interface to allow for various antenna options. Available now, the module is priced below \$15 in volume quantities.