

# Canadian Freight Courier Rolls Out RFID

Liaison Can/U.S. is using active and passive RFID tags to help it keep better tabs on the goods it transports.

By Mary Catherine O'Connor

July 28, 2005—[Liaison Can/U.S. Courier](#), a Lachine, Quebec, company that provides transport and customs clearance services for goods traveling between Canada and the United States, is offering its customers a range of RFID services. The firm rolled out its offerings after six months of development and a C\$100,000 (US\$80,880) investment in hardware and software. Liaison Can/U.S. plans to begin recouping some of that investment when it starts charging customers for its RFID services later this year.

Liaison Can/U.S. Courier president and CEO Yves D'Amours says the company decided to add RFID-based systems to its operations so it could maintain an inventory on the cargo it stores and transports for its clients. He says these capabilities will benefit both Liaison Can/U.S. and its customers by providing a higher level of control and security for these goods.

The company is using a proprietary RFID system developed by Montreal-based RFID services company [Ship2Save](#). The system consists of a combination of active tags, which operate at a range of frequencies between 300 MHz and 3.0 GHz and comply with the [European Telecommunications Standards Institute's EN 300 220](#) standard, and passive EPC Class 1 UHF RFID tags manufactured by [Alien Technology](#)—specifically the Squiggle and M tags. It also includes Ship2Save's data management software, RFID interrogators manufactured by [AWID](#) and RFID printer-encoders from [Printronic](#).

As shipments arrive at Liaison Can/U.S.'s 40,000 square foot warehouse in Lachine, the company places passive UHF tags on cases of goods. Certain high-value individual goods are assigned active tags so they can be monitored within the warehouse or within trucking containers. These cases and goods are palletized, and an active tag is placed on the pallet. Each tag, whether active or passive, is encoded with a unique ID that the Ship2Save data management software associates with the shipment to which the goods belong. This information is stored in an SQL server database used by Liaison Can/U.S. to maintain an inventory of the tagged items; the company is working on integrating tag data into its Microsoft Navision enterprise inventory system, which currently cannot support the tag data. As these pallets are loaded onto a truck for transport, interrogators installed at the warehouse gate read the active tags. The software then associates these reads with the appropriate outbound order, and the goods are assigned the status of being "in transport." If any of the read tags are not part of this outbound order, the software sends an alert to a tree light at the door, which flashes.

To track cargo in transit, Liaison installs mobile RFID interrogators inside trucking containers. The interrogators constantly monitor the active tags on individual goods or pallets of goods within the container and can be set to alert Liaison staff when a pallet or item bearing an active tag is removed from the interrogation zone within the truck.

Once the goods are in transport, Liaison tracks the goods with Ship2Save's Unit in Transit system. The system uses a combination of cellular communication links provided by Canadian telecom [Bell Mobility](#), and GPS to

track the shipment. Tag data from the RFID interrogator inside the truck is sent to Liaison Can/U.S. via a cellular link inside the truck, through one of Bell Mobility's third-party service providers. This information is associated in the Ship2Save software with the truck's location, which is ascertained via GPS. The Unit in Transit software displays this information on a map, which Liaison Can/U.S. personnel can view from the warehouse in order to track the shipment's progress. As the truck makes its scheduled stops to unload goods, the Ship2Save software can record the removal of those goods. While the Unit in Transit system does not physically secure the items in transit, it can send alerts to Liaison Can/U.S. staff when they are removed outside of their scheduled stop, which provides some value in terms of security.

Many of the goods the company transports are high-value, such as fur coats headed for Quebec-based furriers and large steel coils shipped by Integris, a Minneapolis-based distributor of metal goods for construction and other industrial applications. The coils, each valued from C\$5,000 to C\$10,000, were among the first items Liaison started tracking out of concern that they might be stolen.

Over the next few months, D'Amours says, Liaison Can/U.S. will offer its RFID tagging service to other clients, starting with those whose goods have the highest monetary value or are most subject to theft. Ship2Save is also developing tools to feed the inventory and track and trace data directly from Liaison Can/U.S. system to a client's enterprise software. D'Amours is hoping to provide this information as a fee-based service.

"I'm not sure when I'll get a return on this investment, but if I want to stay competitive, I need to do it," D'Amours says. "The market is moving toward RFID, and we like to be ahead of the market. That's what makes us different from other [courier services]."

Using RFID in combination with electronic seals on cargo containers, something Liaison Can/U.S. is considering, would also aid the firm in verifying the security of their loads as they go through U.S. Customs. Liaison Can/U.S. is a member of the Customs-Trade Partnership Against Terrorism (C-TPAT), a U.S. Customs and Border Protection program launched after 9/11 to increase cargo security.

Liaison Can/U.S. is also planning to offer RFID electronic product code (EPC) tagging services for suppliers to Wal-Mart and other retailers requiring that cases and pallets of goods carry RFID tags encoded with EPCs commissioned through EPCglobal, the organization established by GS1 and the Uniform Code Council (UCC) to commercialize EPC technology. According to Konrad Konarski, Ship2Save's executive business analyst, many of Liaison Can/U.S.'s customers will need to begin tagging products bound for Wal-Mart in January. Liaison Can/U.S. will tag cases and pallets of goods under that mandate on behalf of those suppliers, for a fee yet to be determined.

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