

# Colombian Shipper to Use RFID

Emprevi will begin using tags to track shipment containers, expedite security and reduce customs inspections.

By Claire Swedberg

May 15, 2006—Starting in June, Colombian shipper Empresa de Prevención y Vigilancia (Emprevi) will begin using radio frequency identification to track shipment containers within Colombia, offering better security for its containers as they are imported and exported through the Colombian seaports. Emprevi is also planning a second phase to its RFID implementation, to use a global tracking system allowing the visibility of a shipment from the container's origin to its destination.

The deployment's first phase involves Savi Technology's SmartChain Transportation Security Solution (TSS), which will allow Emprevi to track the container's location within Colombia. In some cases, the container's temperature, humidity and shock history will also be recorded, as well as whether anyone has attempted to open the container without approval.

"This allows Emprevi to maintain control of the condition and security of a shipment in an automated fashion," says Mark Weidick, Savi Technology's general manager of commercial markets. Emprevi will make the RFID system available for all its customers, but will use the tags only if a customer requests it. Those customers that do so will pay an additional fee.

Emprevi has previously tracked its shipment containers manually, and has usually sent its own employees with each shipment from the factory or distribution center to the port and onto the ship (in the case of exports), or from the port to the distribution center (for imports). The employee not only tracks the container's movements, but also needs to be present at a Colombian port in the event that a customs official wants to open it. Emprevi ships pharmaceuticals, food and retail items for manufacturers such as Pfizer, Gillette and Cadbury Adams. Most exports go to other South American countries.

The new RFID system will reduce—but not eliminate—the need for Emprevi to track its containers manually. The containers' security may lead to fewer customs inspections, thwarting efforts to break into the container and letting Emprevi track, in real time, where the container is while en route to or from the port.

To the outside of a loaded container, Emprevi affixes an ISO 18000-7-compliant, 433.92 MHz RFID tag, created by Savi in conjunction with EJ Brooks. The container is secured by means of a bolt seal plugged into the tag. The bolt cannot be removed from the container without sending a "tamper-event" warning to the RFID tag. The tag carries such information as the container ID number and the name of the person who sealed the container.

As a container is transported by truck to the port, it passes numerous RFID interrogators installed at choke points on the highway, which capture its time and location. At the port entry, the truck passes another interrogator. If a customs official wishes to open a container, an Emprevi employee decommissions the RFID tag and cuts the bolt to allow entrance.

For shipments requiring the monitoring of conditions inside the container, Emprevi will use Savi's ST-676 tags, which measure temperature, humidity and shock, storing such data so it can be retrieved when the container passes an RFID reader.

In the future, Emprevi intends to use a global tracking system known as SaviTrak, created by Savi's Savi Networks subsidiary. SaviTrak would allow Emprevi to track its containers through a network of RFID-enabled ports throughout the world, as well as interlinked supply chain checkpoints. This would allow Emprevi and its manufacturer and retailer customers to track shipments beyond Colombia's borders.

"The agreement with Savi Networks will let us extend our service to the largest ports in the Europe, North America and Asia," says Emprevi COO Andrés Bustos.

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