Papermaker Works on Brand Authentication

Finnish packaging specialist Stora Enso is preparing a new software application using RFID to help companies track products and deter counterfeiting.

By Jonathan Collins

Dec. 16, 2005—Finnish paper and packaging specialist Stora Enso is preparing a new software application using radio frequency identification and other technologies to help companies track products and safeguard their authenticity. The application, dubbed PackAgent, is initially targeting the pharmaceutical, consumer electronics and media industries. Eventually, it is intended to provide security against counterfeiting and other product violations by helping companies across the supply chain monitor and authenticate products as they move from manufacturer to wholesaler, retailer and even consumer.

The application works by collecting serialized ID data from a range of input devices, then sharing it among supply chain players and their business applications, such as enterprise resource planning systems. Data on each shipment can be entered into the application by means of RFID, bar codes or any other tracking and data input method. "PackAgent will even allow manual data entry, if that's what a customer wants," says Kirsi Viskari, manager of intelligent solutions at Stora Enso Consumer Boards, a division of the company that develops new packaging concepts and solutions.

PackAgent is set to undergo a trial that tracks CPG goods through a supply chain, from manufacturer to retail store, over the next few months. It is slated to be commercially available sometime in 2006.

For Stora Enso, the incentive behind the application is to involve the packaging industry in the intelligent supply chain. "Stora Enso isn't a traditional software vendor; we are a packaging company, but we have very good relationships with packaging converters, and there is a role for converters to play in helping brand owners—their customers—fight piracy," says Viskari.

Stora Enso makes the paper and cardboard that its primary customers—packaging converters—use to manufacture packaging for consumer packaged goods. The company says it developed the PackAgent application as a way to help packaging converters build packaging that helps guard against product piracy and counterfeiting. However, once tracking infrastructure and processes are in place, the company believes demand will be generated for smart packaging, where RFID tags are integrated into the packaging to enable tracking from packaging plant to retailer.

The PackAgent application has been built using the Trackway track-and-trace application from Finnish company Stockway, which has developed a peer-to-peer networking approach to sharing RFID and ID information between supply chain partners (see Peer-to-Peer: RFID's Killer App?). That means the application uses the open-source WWAI (World Wide Article Information) peer-to-peer protocol to share information stored across a distributed network. Any computer running the WWAI software can store and share information within the WWAI networked model. That's in contrast and in competition with the centralized approach being taken by EPCglobal and its EPCglobal Network architecture, where data will be maintained and managed centrally. Stora Enso maintains, however, that PackAgent will also be able to communicate and

operate using EPC data through a gateway to the EPC ONS.

Although Trackway is at the core of Stora Enso's PackAgent, the paper company says it has extended its application to manage brand protection and authentication. It does this by ensuring that when products or shipments move through the supply chain, they are not just identified, but also have their pedigree checked to ensure authenticity.

Stora Enso will hand over sales, delivery and systems integration of PackAgent in Europe and North America to systems integrator BearingPoint, and the software might potentially also be available as a hosted service. BearingPoint believes PackAgent will help to move RFID tagging to the source of packaging rather than at the point of manufacture.

"To ensure that a product is genuine, tracking has to start at the right place," says Marko Toivari, manager of supply chain management at BearingPoint. "In pharma—where some packaging converters are making the finished packaging—packaging can be the place to start tracking." In addition, the ability to operate with data collected by RFID or bar code provides a roadmap for companies using bar code that are not yet ready for RFID.