

The world's third biggest retailer says that its initial RFID deployments have help it cut costs and improve operations and that it's ready to roll out RFID to new locations.

By Jonathan Collins

Jan. 24, 2005—The world's third biggest retailer, Metro Group, says that it is already seeing clear benefits from its adoption of radio frequency identification (RFID).

In November, the German group launched the first phase of its supply chain RFID implementation. Today, the company says it is on track to roll out RFID capabilities to additional locations starting in March.

The company's first RFID rollout phase has focused on the tracking incoming and outgoing shipments as well as automatic reconciliation of shipments with shipping documents across three retail sales divisions. So far, 20 suppliers with a range of products are sending RFID-tagged shipments to Metro, and the retailer says it is already seeing significant improvements from using the technology.



Gerd Wolfram

"We are already seeing faster unloading and checking in for RFID shipments of around 15 to 20 minutes per truck, as well as early identification and elimination of weak spots in handling process," says Gerd Wolfram, director of IT strategy, buying and development services for MGI Metro Group Information Technology, a Metro subsidiary that provide IT services for the company.

By the end of 2005, Metro says it expects to have 100 companies in its supply chain sending it RFID-tagged shipments, and extend the tagging to smaller shipping cases. Next year, Metro expects to receive tagged shipments from its top 300 suppliers, which provide the retailer with merchandise that accounts for 60 to 80 percent of its total revenue.

Metro says it has integrated its RFID deployments with existing applications running its operations so that RFID-tagged pallets and cases are detected and recorded at the shipping portal, and the tag ID is transmitted over a LAN to a local server. The tag number, which functions as a serial shipping container code (SSCC), is then compared with EDI data from its merchandise managing system on a central server. Shipments are then either cleared or held up if there is a discrepancy between the shipment and the EDI documentation or if there is a problem reading the RFID tag.

Metro is currently using tags based on Philips' UCODE 1.19 design but says that it is eager to move to EPC Class 1 Generation 2 tags as soon as possible. "We will start using them in the second half of this year," says Wolfram, adding that the company has yet to decide how it will manage the transition from

its current tags and readers to the new Gen 2 equipment.

Presently, Metro's Cash & Carry unit is receiving tagged shipments of grocery and general merchandise into one distribution center and two stores from 12 suppliers. Metro's Kaufhof department store business is receiving RFID tagged shipments into five distribution centers from three apparel and textile suppliers. Metro's Real hypermarket division is receiving tagged grocery shipments from four suppliers into three distribution centers and sending them on to 11 RFID-equipped stores.

Because Metro is deploying RFID across three different retail sales divisions, it has been working to develop a range of equipment configurations to achieve consistent read rates across different implementations. So far, Metro says, the retailer is still developing its RFID portals and is seeing read rates that vary according to the portal design and the merchandise being read.

For shipments arriving on hangers and read through one portal design, the company says it has been able to achieve up to a 99 percent read rate. The same rate has also been achieved reading boxed goods moving on a conveyor through an RFID portal. At portals deployed at loading bays to track pallets of shipped goods, rates vary but have also reached as high as 99 percent. However, in developing those portals, Wolfram says, Metro experienced significantly lower read rates and a significant amount of testing had to be done to bring up read rates to their current levels. In addition, the company is still working on its RFID portal for reusable plastic totes, for which the rate of successful reads is currently around 90 percent.

Despite the difficulties, the company believes it will be able to quickly replicate its RFID configurations at new installations. "During phase one, it has taken up to four months to get an RFID portal up and running properly, but that includes all the testing in our Innovation Center. By March this year, we will be able to replicate and deploy a portal within a day or so," says Wolfram.