

**The retailer says it is seeing positive results across its various RFID initiatives, and it plans expansions in 2008.**

By Mary Catherine O'Connor

March 11, 2008—By the end of September, German retail conglomerate [Metro Group](#) will deploy RFID readers at an additional 200 of its Real hypermarkets in Germany, according to Roger Davies, general manager of European UHF business for [Checkpoint Systems](#), the retail technology provider whose EPC Gen 2-compliant RFID readers are to be installed at the stores. The company's readers are already used at 100 Real locations in the country. The portals will be used to track pallets as they arrive at the stores, although Checkpoint says the same portals will be eventually be used for case-level tracking, as well, when Metro begins expanding its use of RFID for tracking cases of goods—something it started testing for past two years.

In 2007, Metro installed RFID interrogators at 130 of its Cash & Carry wholesale stores in Germany (see [Metro Fleshes Out Its RFID Plans](#)). At its German Cash & Carry stores, 40 percent of all merchandise sold is now supplied on tagged pallets. The company says it is preparing to roll out RFID technology at its Cash & Carry locations in France.

Since July 2006, the retailer has been running a technology trial in which it places RFID tags on cases of goods on mixed pallets shipped from a distribution center in Essen, Germany, to an RFID-enabled Extra retail store in Rheinberg. Metro has been conducting the case-level pilot in collaboration with [Intel Solution Services](#), the chipmakers' professional services division. Intel servers are used to collect and transmit the tag data to a central server located at Metro's RFID Innovation Center in Neuss. The Essen DC and Extra test store are linked to this central server via a wide area network.

Unlike Wal-Mart and Target in the United States, German retail conglomerate Metro has not required its suppliers to begin placing RFID tags on cases of goods. Rather, it has asked them to tag pallets carrying cases of goods, and it now has nearly 200 suppliers doing so on goods sent to many of its supermarkets and retail stores. On mixed pallets (those carrying a variety of different goods) that Metro ships from its distribution centers to its Cash & Carry retail stores, the retailer applies its own RFID tags to pallets in order to automate their tracking and receipt.

Metro Cash & Carry personnel place labels with embedded passive UHF EPC Gen 2 RFID inlays on cases as they are pulled from a shelves inside the Essen DC. The tagged cases are then placed on a conveyor that brings them to a pallet-building station. RFID readers mounted along the conveyor read the tags on the cases and send the EPC data on each tag to a central database. Once the mixed pallets of goods are built, the case tags are read again and associated with an EPC on a pallet tag. The case and pallet tags are read once more as the pallets move through a portal while being loaded onto a truck bound for the Extra store. Once the pallets are received at the store, readers collect the EPCs from the case and pallet tags and compare the data to advance shipment notices sent from the distribution center through Metro's EDI system, which is now part of the retailer's Web-based [Metro Link](#) portal.

Metro also announced last week that starting in mid-2008, suppliers participating in the RFID rollout will be able to log on to Metro Link to see exactly when and where shipments of their have been received.

Gerd Wolfram, the managing director of MGI Metro Group Information Technology, says the retailer is using RFID inlays containing [NXP Semiconductors'](#) Ucode G2XL chip, which is compliant with the EPC Gen 2 standard. He says Metro selected the chip based on results of comparative tests it conducted at the [European EPC Competence Center](#) (EECC), a lab established by Metro and [GS1 Germany](#) (see [European EPC Competence Center Releases UHF Tag Study](#)).

"The NXP Ucode G2XL chip is a very capable chip, especially in terms of responding if placed on difficult materials," says Wolfram. "This makes it really interesting for our case-level trial because there we often have to deal with challenging placements of transponders—i.e., on metal packages or on a box that sits in the middle of a mixed pallet."

For its case-level pilot, Metro is contract with a network of label converters that embed Gen 2 RFID inlays, containing the G2XL chip, into shipping labels. However, Wolfram says that for Metro suppliers that attach RFID labels to pallets, the retailer does not mandate which EPC Gen 2 chip to use.

Additionally, Metro is running a pilot project to test the use of RFID tags at the item level, using its men's apparel department of a Galeria Kaufhof store in Essen, Germany (see [Metro Group's Galeria Kaufhof Launches UHF Item-Level Pilot](#)). The test began in September 2007 and is set to last until the end of 2008, at which time the company will perform customer surveys to collect feedback and also develop case studies on the results. In January, Wolfram said the tests were off to a good start, and that customers showed some interest in the customer-facing facets of the test, such as an RFID-enabled mirror that displays product information about RFID-tagged clothing tried on inside dressing rooms in the store.