

EPCglobal Ratifies EPCIS Standard

Designed to help companies securely exchange data with their business partners in real time, the new standard is expected to have a big impact on RFID's ROI.

By Beth Bacheldor

April 16, 2007—With revisions, reviews and interoperability tests behind it, the Electronic Product Code Information Services (EPCIS) specification has been ratified by [EPCglobal's](#) board.

EPCIS is designed to help companies securely exchange RFID and related product data in real time with their business partners. EPCglobal executives say they expect its ratification to have a big impact on RFID adoption.

[Procter & Gamble](#) VP and EPC team leader Dick Cantwell says the EPCIS standard will unlock the full potential of EPC communications. "For some time," he says, "RFID has come under scrutiny because, even though manufacturers have been putting tags on goods and retailers have been receiving those tagged goods, the question has still been, what is the value? What EPCIS does is connect data sharing and communications in a way that benefits both the manufacturers and the retailers. They both can maximize the value they get from RFID information. It is no longer a closed-loop solution."

The EPCIS protocol serves as the communication mechanism between applications and data repositories from which a company can effectively exchange and query data within its own RFID processes and those of its partners. The EPCIS standard automates the exchange of RFID data as well, because it allows for machine-to-machine communications.

Without the standard, companies would have to develop their own mechanisms for exchanging and querying data with each individual trading partner. "Everybody is looking to remove complexities and duplication from their business systems," says Paul Fox, P&G's external relations leader, "because what comes with complexities and duplication is cost."

Mike Meranda, president of [EPCglobal North America](#), calls the EPCIS standard "the third leg of the stool that delivers on the EPC Global Network." The EPCglobal Network is essentially a standards-based network of technologies and services created to enable companies to retrieve data associated with EPCs. He says the other two legs, or standards, critical to the EPCglobal Network are the UHF Gen 2 air-interface standard and the EPC Tag Data specification. "The EPCglobal Network is really about sharing information—about letting trading partners share information—and EPCIS is what makes that happen."

Ideas for the standard began surfacing about four years ago, Meranda explains. A formal group was formed about 18 months ago, which based its work on input from P&G and other retailers, including [Wal-Mart](#) and [Unilever North America](#), as well as from technology providers such as [IBM](#).

The standard's progression has included interoperability tests—something that does not often occur in standards development until after the completion of a standard. In late summer 2006, EPCglobal successfully

wrapped up tests of EPCIS software prototypes to see whether the software could interoperate, and to determine if the specification (a candidate standard at the time) was interpreted consistently by all parties involved (see [Interop Tests Bring EPCIS Closer to Standard](#)).

"One of the things that is really important to understand about EPCIS—more than any other standard we've developed—is that it already has been tested with trading partners coming out of the gate," Meranda says. "So it is a very reliable, very strong approach that also has the support of a number of technology providers."

Indeed, Unilever and P&G have already run their own EPCIS tests. Unilever, for example, launched a trial last summer using EPCIS-based software from IBM and <http://www.t3ci.com/T3Ci> (see [Unilever Launches Trial Using EPCIS Protocol](#)).

According to Cantwell, the consumer packaged goods manufacturer stands to gain a great deal from EPCIS, particularly in regard to its display and promotions initiatives. The company has been affixing RFID tags to its displays to track when stores move its displays out on the floor. In a study of the cumulative results of numerous promotions, P&G found that only about 45 percent of the stores actually put out the promotional displays when they were supposed to. "We have a huge opportunity," Cantwell notes, "to utilize EPCIS to exchange data with retailers and achieve greater visibility of where displays are."

With automated exchange of specific data, P&G could leverage EPCIS to find out, in real time, when displays were placed on the floor. If a promotion was not displayed, and was instead sitting in a store's back room, P&G's systems could automatically send out an alert to the store, asking it to place the display out on the floor.

RELATED_ARTICLES By making sure promotional displays are moved out to the sales floors on time, Cantwell estimates P&G could increase its sales by 10 percent. "That could result in a return on investment of 9 to 1," he says, explaining that for every dollar P&G spends on tags, interrogators and related EPC software, it could generate \$9 in sales.

"The lifeblood of our industry is to create excitement among consumers, and we can do that with promotional events and new item introductions," he says. "EPC data has allowed us to see huge opportunities in optimizing our ability to excite the customer."

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