

# EPCglobal Ratifies Gen 2 Standard

The organization announced late today that its board has ratified the Gen 2 specification as an EPC standard and that it will be royalty-free.

By Mark Roberti

Dec. 16, 2004—[EPCglobal](#) announced late today that its board of governors has ratified the second-generation Electronic Product Code specification as an EPC standard. The move paves the way for vendors to begin making products based on the specification, which was designed to work globally and be approved as an international standard by the International Organization for Standardization (ISO).

"This is the most significant event in our history," Mike Meranda, president of EPCglobal US, told *RFID Journal*. "It opens the door for a large number of manufacturers to make Gen 2 products quickly. It allows for global interoperability [of EPC systems] and creates a single converged standard. End users won't have to worry about using Class 1 or Class 2 or ISO 18000-6A or 18000-6B."

EPCglobal's Hardware Action Group (HAG) has been working on the draft specification for a year. During the past week, the HAG presented the final specification to EPCglobal's technical steering committee and business steering committee, which both unanimously approved the specification and sent it on to the board to ratify. The business steering committee is charged with ensuring that the standard meets end users' needs. The technical steering committee is responsible for making sure the standard is viable from a technical standpoint.

EPCglobal says the standard is royalty-free. Meranda says that as part of the ratification process, EPCglobal engaged legal counsel to examine claims made by Intermec Technologies, an Everett, Wash.-based RFID systems provider, that the Gen 2 spec contains intellectual property that it has patented. After exhaustive examination, the lawyers concluded that Intermec's patents are not essential to implementing the standard and therefore the standard is royalty-free.

Meranda says that RFID vendors that produce tags and readers based on the Gen 2 standard will take many different approaches and that some of those approaches might infringe Intermec's patents. It would be incumbent upon those companies to negotiate licensing fees with Intermec. In other words, if a vendor wants to make a reader that performs well, it might need Intermec's patents, but that is between the vendor and Intermec.

Intermec indicated it believed that its patents would be infringed by any products built to the new standard. Intermec president Tom Miller said in a statement released tonight that ratification of the Gen 2 standard "is an important step towards bringing the powerful benefits of RFID to market."

"It is important to remember the claim of a royalty-free protocol does not mean UHF RFID products will be royalty-free," he continued. "We believe companies who offer UHF RFID products will still require a license to use Intermec intellectual property. In addition to the IP claims included in the Generation 2 standard, Intermec holds more than 125 additional UHF RFID patents."

Another question surrounding the Gen 2 specification was the use of an eight-bit code on the tags that would be used to identify the source of data on the tag (see [Gen 2 Faces Eight-Bit Obstacle](#)). EPCglobal would like the option to create codes that could be used by, say, the U.S. Department of Defense or the automobile industry. But for the standard to be approved by ISO, the eight bits will likely have to be used for what ISO calls an Application Family Identifier (AFI), which is an important part of other ISO RFID standards.

The Gen 2 standard, as approved, includes eight bits that can be used for an AFI, but it doesn't require the use of ISO's AFI. Meranda says that manufacturers can begin making microchips for use in EPC tags, whether the eight bits are used for an AFI or an EPC identifier. In the meantime, EPCglobal will work with ISO to try to resolve the issue, and then any change will have to go through an established procedure for changing the standard.

"We have committed to resolving [the issue] within the short term," he says. "The overwhelming opinion of the Hardware Action Group was that it was best to put the standard forward and make changes later. This allows us time to explore the issue and underlines our commitment to work with ISO."

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