

The American National Standards Institute has embraced a standard for real-time locating systems.

Aug. 12, 2003 - Real-time locating systems use active (battery-powered) RFID tags, readers and triangulation software to identify assets in large areas, such as a factory or distribution yard. Companies like Ford Motor Co. and Associated Foods that wanted the benefits of using an RTLS system had to invest in proprietary systems that locked them into one vendor and left them vulnerable if the company went under. Now that's changing.

Last week, a new RTLS standard was developed by the [InterNational Committee for Information Technology Standards \(INCITS\)](#) and has been approved by the [American National Standards Institute \(ANSI\)](#). ANSI will try to get the standard adopted internationally by putting it through the standards process of the [International Organization for Standardization \(ISO\)](#). If the proposal is approved by ISO, companies would be able to use the same RTLS system to track assets globally.

"We have no doubt that this standard will encourage widespread adoption of wireless location systems as the technology has already been proven to deliver tremendous bottom line cost savings for enterprises around the world," said Larry Graham, global manager of manufacturing technologies at General Motors and chairman of the INCITS T20 committee that developed the standards in a statement released by ANSI/INCITS.



WhereNet's Doles

The automotive industry has been among the biggest users of RTLS systems; both GM and Ford have deployed systems across parts of their operations. Other manufacturers, including Boeing, are currently testing RTLS systems.

It was the established customers, looking for interoperability and potential savings from increased competition, that provided much of the impetus for the new standard, according to Dan Doles, president and CEO of [WhereNet](#), an RTLS system vendor that took part in the standardization process. "The customers were really the ones that drove this standard," he says.

"The standard will allow all of us to benefit from reduced infrastructure costs and increased efficiencies across the supply chain," said Tony Cataldo, manager of network engineering and network operations for Ford and T20 vice chairman also in a released statement.

The INCITS 371 series standard defines the air interface protocols—the way tags and readers communicate—for systems that operate at 2.4 GHz and those that operate at 433 MHz. The 2.4 GHz band is typically used in systems that monitor vehicles through a multi-station assembly line or within a

delivery yard. The new standard says items with 2.4 GHz tags have to be located to within 10 feet (three meters) several times a minute.

The 433 MHz band is most often used by systems that monitor mobile assets within an installation. These systems are intended to provide presence and location data for assets that move through zones within range of a permanent reader infrastructure.

The standard also defines the application programming interface (API) for the software used to link RTLS systems to enterprise application systems, such as logistics management software.

RTLS supporters say the new standard should jump-start sales of RFID systems. But first vendors will need to make some modifications to their hardware and software to comply with the new standards. WhereNet's Dole maintains the changes are minimal and will not conflict with existing systems. "All the RTLS vendors participating had to compromise a little to develop a common standard," he says.

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