

Position

The implementation of the electronic product code (EPC) and radio frequency identification (RFID) technology promises important benefits to consumers and businesses alike. EPCglobal supports the responsible development and implementation of EPC and RFID technology. Premature or inappropriate regulation or legislation of EPC or RFID technology could have the effect of stifling innovation and adoption, and preventing future benefits from reaching consumers and businesses.

Background

The EPC is a unique number that is used to identify a specific item in the supply chain. The EPC is stored on a RFID tag, which combines a silicon chip and an antenna. Once the EPC is retrieved from the tag, it can be associated with the data held in a secured database, such as where an item originated or the date of its production. Much like a global trade item number (GTIN) on the barcode or vehicle identification number (VIN), the EPC is the key that contains the information used within the EPCglobal Network. An EPC tag does not carry personally identifiable information.

Several major retailers and product manufacturers are testing EPC technology as a way to improve supply chain management. Similar to the VIN on a car, an EPC is a way to uniquely identify a pallet, case, or individual product. It is the next generation of the bar code, but unlike the barcode, which needs “line of sight” to be read, EPC tags use radio waves to read product information faster and more efficiently.

Policy Rationale

- **Benefiting Consumers and Businesses**

For consumers, the EPC promises to enhance consumer service, reduce out-of-stocks, and provide better product selection. In addition, it has the potential to provide better protection from counterfeit products (including medications), to monitor product freshness for dated goods, and to provide easier identification for recalls. According to the U.S. Food and Drug Administration’s *Combating Counterfeit Drugs Report* (February 2004), “radiofrequency identification (RFID) tagging of products by manufacturers, wholesalers, and retailers appears to be the most promising approach to reliable product tracking and tracing.” The EPC also offers the potential for easier returns and streamlined warranty processing.

For businesses, the EPC can help correct inefficiencies in the marketplace and bring price value to consumers. Each year billions of dollars are lost due to poor supply chain visibility. By dramatically improving this process, the EPC has the potential to provide significant annual savings, reduce the need for inventory held in “safety stock,” increase sales by reducing the number of out-of stock products, reduce transportation costs and shipping volumes, and provide more accurate forecasts and stock replenishments. In addition, the EPC implementation could significantly reduce theft in the supply chain and increase the competitiveness of companies using the technology.

- **Generating Economic Growth**

As with any new technology, the EPC and RFID have the potential to generate economic growth by creating jobs, spurring high-tech investment, and paving the way for new applications in the future.

- **Ensuring Consumer Privacy**

EPC tags are created for businesses to manage products, not people. They contain product information – not personal information. Privacy has been a focus of EPCglobal and its subscribers since the earliest stages of the effort to commercialize RFID. Licensing

agreements for the EPC specifically prohibit its use for tracking or identifying people, except in very specific cases and with full transparency relating to patient or troop safety. In addition, EPCglobal subscribers have adopted self-regulating guidelines that can evolve as the technology continues to develop.

Many EPCglobal subscribers are businesses that produce products or sell directly to consumers. They value the relationship with their consumers above all else and are committed to consumer privacy. EPCglobal subscribers have established the *EPCglobal Guidelines on EPC for Consumer Products* to address privacy issues related to the evolution and implementation of EPC. The *Guidelines* state that consumers will be given clear notice of the presence of EPC on products or their packaging. They will also be informed of the choices available to either discard, remove, or in the future disable EPC tags from the products they acquire. (See EPCglobal *Guidelines for EPC on Consumer Products*.)

Through its multi-industry, global Public Policy Steering Committee, EPCglobal subscribers interact with key stakeholders, ensuring an ongoing dialogue that will allow EPCglobal to make any necessary changes to the *Guidelines on EPC for Consumer Products* as the technology evolves. The *Guidelines*, coupled with existing strong governmental protections for privacy and consumer protection, are already in place to protect and educate consumers.