

Contents

1	Introduction to the EPC Roadmap	3
1.1	Foreword	3
1.2	Executive Summary	4
1.3	Acknowledgments	6
2	The EPC Network	7
2.1	RFID Introduction & Background	7
2.2	The EPC Vision	7
2.3	EPC Architecture	10
3	Enabling The Vision	15
3.1	Introduction	15
3.2	Consistent Global Identification	15
3.3	Tags	16
3.4	Readers	18
3.5	Radio Frequency Spectrum	19
3.6	Interoperable Commercial Versions	20
3.7	Internal/External Infrastructure	21
3.8	Evolution Toward the EPC Vision	22
3.9	Public Policy Issues	23
3.10	Conclusion	25
4	A Company EPC Roadmap	27
4.1	Introduction	27
4.2	Lessons Learned from Early Adopters: Key Business Initiatives	27
4.3	The EPC Adoption Journey	31
5	Industry Action Plan	45
5.1	An Industry To-Do List	45
5.2	Key Players	45
5.3	Action Plan	46
6	Glossary	49
7	Appendix	51

1. Introduction to the EPC Roadmap

1.1 Foreword

Radio frequency identification (RFID) is a technology that has been around for more than half a century. In the last few years, however, its tremendous potential has begun to be harnessed to deliver new century solutions to the way manufacturers and retailers do business in the food and consumer packaged goods industry. In particular, the benefits to end consumers are also being realised by enabling improved on-shelf availability and providing the capability to enhance the shopping experience.

Enormous progress is being made on the commercial applications of this technology that make the entire industry supply chain visible, efficient, and collaborative. However, some challenges and barriers to a broad implementation of RFID still exist. Some companies are leading the way with the technology applications and pilot testing of RFID tags attached to items, cases, and pallets. The lessons learned from these early adopters acknowledge these challenges and barriers, but they also point to benefits already proven in these piloted tests and to those benefits alluded to by the tremendous promise of this initiative.

This roadmap outlines both the technology and process initiatives that have the power to revolutionise our industry. It details the status of standards and reveals the results of early trials and their areas of concentration. By putting all the issues surrounding RFID and their implications to companies and to the industry into one report, we hope to encourage your company to consider adoption of a standards-compliant implementation of RFID.

Why EPC Roadmap and not RFID Roadmap? The Global Commerce Initiative (GCI) Executive Board strongly recommends the implementation of RFID technology based on open, global standards. The Auto-ID Center worked for several years on a concept for RFID and the Electronic Product Code or EPC, which is the key identifier and content of the RFID tag. The establishment of a new organisation, EPCglobal™, was approved in September 2003 as a joint venture of EAN International and the Uniform Code Council to support the industry with open, voluntary standards for this new initiative. GCI wants to promote the practical application of the Electronic Product Code, and, therefore, we have named this roadmap accordingly.

The roadmap seeks to answer five key questions at a high level:

1. What is the EPC, and what is the vision behind it?
2. What current progress is being made with EPC development, and what are the issues we need to act upon to make the EPC vision a reality?
3. What are the key application scenarios, and what are the compelling reasons to act now?
4. What does a company implementation roadmap look like?
5. What can the industry jointly do to remove the barriers for a broad industry adoption?

The full implementation of the EPC vision will take some time. If we do not get the groundwork right and implement the standards across the industry now, we will hinder wider implementation efforts before they have even begun. This also will prevent companies from gaining the full benefits the EPC can bring.

GCI is convinced that both manufacturers and retailers will benefit from the adoption of global voluntary EPC standards aimed at transforming and streamlining the industry supply chain. We do not want to repeat the mistakes of the past. We therefore encourage you and your company to support the emerging standards and the work being driven through EPCglobal™.

Let's make it work!

Antony Burgmans
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Co-Chairmen of the Global Commerce Initiative

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