



**A Division of Alien Technology Corporation**

White Paper

*Are Companies Ready for RFID?*

*A Survey of DoD Suppliers and DoD Personnel Provides Insight*

December 2006

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## A Survey of 300 DoD Suppliers and DoD Personnel

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## RFID Readiness: A Survey of 300 DoD Suppliers and DoD Personnel

### I. OVERVIEW

Radio Frequency Identification (RFID) is expected to be one of the most influential technologies in the next twenty years in the defense industry and across retail, distribution and supply chains in all industries. It is estimated that more than ten trillion RFID tags will be in use by the year 2015.

With the high expectations placed on this valuable technology, corporations and governments need to be efficient in their adoption of RFID and have little room and budget to make the wrong choices. This publication was developed as a result of a comprehensive survey conducted in October 2006 by the RFID Solutions Center in Dayton, Ohio. The survey sought information to determine where suppliers and DoD personnel currently operate in the RFID Implementation life-cycle (described below) and to determine the greatest challenges that will arise in each phase of the life-cycle.

For more information regarding the survey or this publication, please contact [Research@RFIDSolutionsCenter.com](mailto:Research@RFIDSolutionsCenter.com)

### II. IMPORTANCE OF RFID IN THE DOD

The U.S. military has been at the forefront for using active RFID tagging of containers of goods, vehicles, and equipment. However, DoD has issued the most sweeping mandate of any organization, calling for its suppliers to transition to using passive RFID in their military shipments of items of all types by 2007. This ambitious step is being taken as part of an overall strategy to enhance visibility and control over the complex and far-flung supply operations necessary to support the U.S. military's global missions.

The DoD's RFID mandate, alongside Wal-Mart's, is considered the catalyzing event in RFID, with the projected demand for RFID products and services coming from the 43,000 DoD suppliers affected by the mandate.

In order to implement appropriate and successful RFID solutions, firms will need to find qualified individuals to plan, design and implement the solution. According to a 2005 executive survey by COMPTIA and reported at the RFID World 2005 Conference, two-thirds of respondents felt that training and educating employees in RFID technology will be one of the most critical challenges they will face in succeeding with RFID.

### III. THE RFID IMPLEMENTATION LIFE-CYCLE

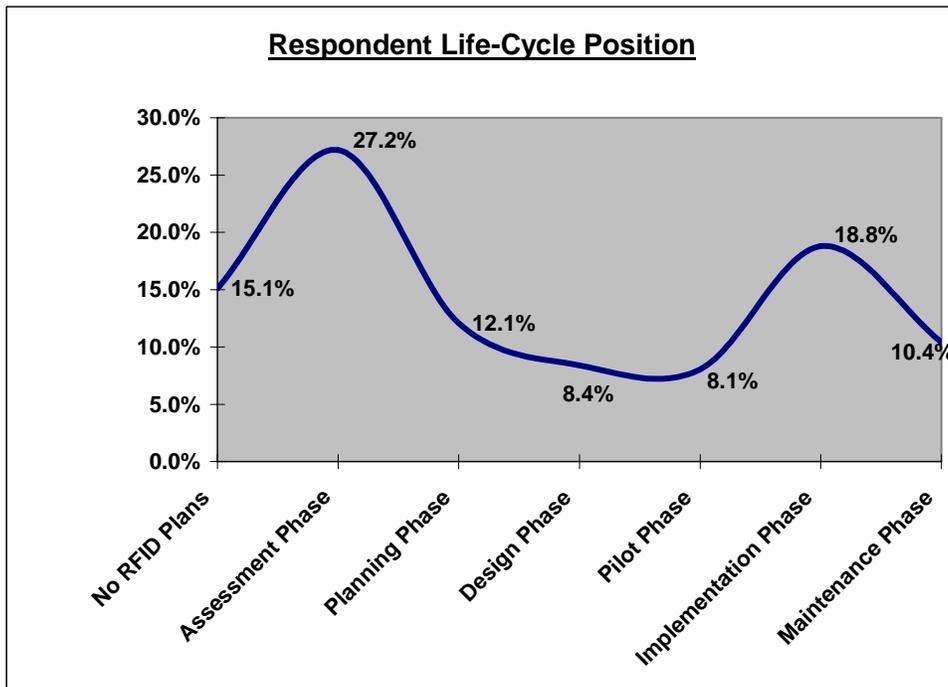
To properly plan and execute an RFID implementation, a roadmap is needed to guide each step of the life-cycle. Experts in RFID have developed the following RFID implementation roadmap breaking the life-cycle into six distinct phases.

Each phase has a distinct purpose and relationship to all other phases. Planning done up front will help reduce risks and identify the best design and implementation path for the duration of the project. As with all technology-oriented programs, project management disciplines are critical to monitor budget, schedule and scope adherence.

1. ASSESS	2. PLAN	3. DESIGN	4. PILOT	5. IMPLEMENT	6. MAINTAIN
<i>Strategic Planning / Assessment</i>	<i>Project Preparation</i>	<i>System Identification/ Design</i>	<i>Test in a Controlled Environment</i>	<i>Roll-Out &amp; Deploy</i>	<i>Operate &amp; Use</i>

### IV. WHERE COMPANIES RESIDE IN THE LIFE-CYCLE

As a result of the survey completed by more than 300 organizations, the following chart shows the position in the RFID implementation roadmap for the survey respondents across the six phases of the life-cycle.



## V. SUMMARY

RFID is expected to be one of the most influential technological advances in retail, distribution and logistics over the next two decades. With the level of interest and the need for compliance across DoD suppliers, it will be imperative that suppliers address RFID with the right resources and the right plan. Topics such as developing a strong business case, proving Return on Investment, developing a talented workforce, managing cultural change are among the many issues companies will face.

### About the RFID Solutions Center (RSC)

The RFID Solutions Center Dayton, a division of Alien Technology, is dedicated to driving RFID technology innovation and adoption of RFID solutions worldwide through collaboration with RFID end-users, key participants in the RFID industry, and academic institutions focused on RFID research and application. Infrastructure and equipment at the center enable technical services and applications engineering teams to simulate key stages in "real world" supply chains, and work closely with RFID customers to evaluate, design, specify, and deploy RFID systems. The center's simulated environment, which includes shipping dock doors, material handling equipment and conveyors, shipping stations, a store backroom and a retail store floor, offers a comprehensive engineering laboratory and educational RFID environment. More information regarding the RFID Solutions Center is available at [www.rfidsolutionscenter.com](http://www.rfidsolutionscenter.com).

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