



## ***Professionalism through Certification***

*The Institute for RFID Education, Research and Certification*

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# **Associate Level Examination**

## **Examination Preparation Guide & Curriculum**

**Version 6**

**Final**

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## TABLE OF CONTENTS

<b>1</b>	<b>Introduction .....</b>	<b>4</b>
1.1	Purpose .....	4
1.2	Scope .....	4
1.3	Document Management .....	4
<b>2</b>	<b>The Associate Level Exam .....</b>	<b>5</b>
<b>3</b>	<b>Exam Media, Format &amp; Pass Level .....</b>	<b>6</b>
3.1	Media .....	6
3.1.1	Event .....	6
3.1.2	Individual .....	6
3.2	Format .....	6
3.2.1	Questions .....	6
3.2.2	Time .....	6
3.3	Exam Pass Level .....	7
<b>4</b>	<b>Examination Scope .....</b>	<b>8</b>
<b>5</b>	<b>What Is RFID? .....</b>	<b>9</b>
5.1	Scope .....	9
5.2	Knowledge Tested .....	9
5.3	Knowledge Not Tested .....	10
5.4	Sample Questions .....	10
5.5	Knowledge Not Tested .....	11
<b>6</b>	<b>Architecture Components .....</b>	<b>13</b>
6.1	Scope .....	13
6.2	Knowledge Tested .....	13
6.3	Knowledge Not Tested .....	13
6.4	Sample Questions .....	13
<b>7</b>	<b>Privacy, Safety &amp; Security .....</b>	<b>15</b>
7.1	Scope .....	15
7.2	Knowledge Tested .....	15
7.3	Knowledge Not Tested .....	15
7.4	Sample Questions .....	16

<b>8</b>	<b>RFID Standards &amp; Regulations .....</b>	<b>17</b>
8.1	Scope .....	17
8.2	Knowledge Tested.....	17
8.3	Knowledge Not Tested.....	17
8.4	Sample Questions.....	18
<b>9</b>	<b>RFID Component &amp; Service Providers.....</b>	<b>19</b>
9.1	Scope .....	19
9.2	Knowledge Tested.....	19
9.3	Knowledge Not Tested.....	19
9.4	Sample Questions.....	20
<b>10</b>	<b>Applications.....</b>	<b>21</b>
10.1	Scope .....	21
10.2	Knowledge Tested.....	21
10.3	Knowledge Not Tested.....	21
10.4	Sample Questions.....	21
<b>11</b>	<b>RFID Evaluation &amp; Selection .....</b>	<b>23</b>
11.1	Scope .....	23
11.2	Knowledge Tested.....	23
11.3	Knowledge Not Tested.....	23
11.4	Sample Questions.....	24
<b>12</b>	<b>Solution Design .....</b>	<b>25</b>
12.1	Scope .....	25
12.2	Knowledge Tested.....	25
12.3	Knowledge Not Tested.....	26
12.4	Sample Questions.....	26
<b>13</b>	<b>Deployment Steps .....</b>	<b>27</b>
13.1	Scope .....	27
13.2	Knowledge Tested.....	27
13.3	Knowledge Not Tested.....	27
13.4	Sample Questions.....	28
<b>14</b>	<b>Preparing for Your Exam.....</b>	<b>29</b>
14.1	Planning for Success .....	29
14.2	Some Steps to Take Before Taking the Exam.....	29

<b>14.2.1</b>	<b>Study .....</b>	<b>29</b>
<b>14.2.2</b>	<b>Where to Get Information on RFID.....</b>	<b>29</b>
<b>14.2.3</b>	<b>Glossary of RFID Terms .....</b>	<b>30</b>
<b>14.2.4</b>	<b>Case Studies.....</b>	<b>30</b>
<b>14.2.5</b>	<b>News and other information .....</b>	<b>30</b>
<b>14.2.6</b>	<b>Get Trained .....</b>	<b>30</b>

# 1 Introduction

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## 1.1 Purpose

The purpose of this document is to provide candidates, tutors and examiners an outline of the subject areas and content that are within the scope of the RFID Professional Institute Associate Level examination.

It is intended to be used as a guide to what to study guide for those wishing to gain certification from the RFID Professional Institute at Associate level.

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## 1.2 Scope

All RFID related subject areas that could be examined by the RFID Professional Institute at Associate level.

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## 1.3 Document Management

All versions of this document are managed and controlled by the RFID Professional Institute Board of Directors. The Board is also the owner of the processes involved with managing this document and future iterations of this document and is responsible for maintaining this document.

## 2 The Associate Level Exam

The RFID Professional Institute Associate Level exam is the first level in the RFID Professional Institute examinations designed to test the candidate's knowledge and understanding of RFID technology and how to apply it.

Being the first level, the exam focuses on establishing that the candidate has a good knowledge of the principles of RFID systems, common terms and their meaning, and the many factors which can influence how well such a system performs for a particular application.

The emphasis of the Associate Level exam is not on testing the examinees knowledge of how to design and deploy an RFID system, but rather on the basics of RFID, what the components of such as system, what role they each play and generally how they are applied in various applications. The Professional Level is where candidates are expected to have a good understanding of the more technical aspects of RFID and knowledge of how to deploy such systems.

When the RFID Professional Institute certifies that a candidate has demonstrated a specific level of professional knowledge about RFID it must be sure that it can stand behind that statement and that it has taken all reasonable steps to verify the candidate's knowledge.

The exam is simply the mechanism by which we verify that you, the candidate, have the knowledge that we have set out in the curriculum for the Certificate that we issue. It is also the mechanism by which you, the candidate, demonstrate to us that you have that knowledge.

## 3 Exam Media, Format & Pass Level

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### 3.1 Media

The exam is usually taken online in two possible settings

#### 3.1.1 Event

Exams are periodically held at key RFID events such as RFID Journal LIVE! Exams are also hosted on behalf of the RFID Professional Institute by other similar organisations such as the New Zealand Pathfinder Group (<http://www.rfid-pathfinder.org.nz/>).

In this setting there may be a group of candidates taking the exam at the same time in the same room. The exam is still taken online but is proctored by RFID Professional Institute staff.

#### 3.1.2 Individual

It was previously possible for individuals to take RFID Professional Institute exams online but the company providing that service ceased operations.

We are looking at alternative ways to reinstate this option and will advise on our website [www.rfidpros.org](http://www.rfidpros.org) when this is available again.

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### 3.2 Format

#### 3.2.1 Questions

- The exam consists of 9 sections each of which tests the candidate's knowledge of one of the subject areas set out in this guide.
- Each question will be a "multiple choice" type question
- For most questions, but not all, you will be guided as to how many correct answers are expected
- You may answer the questions in any order that you choose

#### 3.2.2 Time

- You may start the exam period at any time after the proctor has told you to start. Once you start the exam the clock is counting down your exam period
- The exam period is 90 minutes
- At the end of the exam period the system will no longer permit you to provide any further input to any question
- You may complete the exam in less than the allotted exam period but once you have closed the exam you will not be permitted to re-enter it even if the exam period has not yet expired

### 3.3 Exam Pass Level

The normal grade need for passing the RFID Professional Institute Associate Level exam is 70% of the weighed answers. Candidates are notified of their score and whether or not they have passed or failed at the end of their exam.

*However, this score is a provisional score and must not be relied upon as an indication that you have definitely passed or failed the exam.*

As with all academic and professional exams, there are occasions when the scores or a group of candidates indicate that a further normalization of the scores and associated pass level is required.

Candidates will normally be advised of their formal score and pass or fail within 21 days of taking the exam. The initial communication will be by email followed by a written letter from the RFID Professional Institute President advising each candidate of their status.

Candidates who have passed the exam will also receive a Pass Certificate from the RFID Professional Institute signed by the President and Chairman of the Institute. *This certificate is the only formal confirmation that candidate has passed the exam.*

If you have received an email that you have passed the exam but have not received your certificate within 30 days of that email then email [exam@rfidpros.org](mailto:exam@rfidpros.org) for assistance.



## 4 Examination Scope

The scope of examination for Associate level is the following:

- **What is RFID?** - RFID system types, including active, passive and battery-assisted RFID systems and related technologies. It also covers the performance characteristics of these systems and RF fundamentals.
- **Architecture Components** – The components that make up a typical RFID system and the roles each component plays
- **Privacy, Safety & Security** - Issues related to privacy, safety and security that may arise in an RFID deployment.
- **RFID Standards and Regulations** – Organizations that provide the standards that are used in RFID and the regulations in place around the world that govern the use of the technology.
- **Ecosystems and the Roles of Service Providers** - The roles of services providers related to an RFID deployment and the ecosystem that makes up the RFID industry.
- **Applications** - Common applications for different types of RFID systems across different industries.
- **RFID Evaluation & Selection** - Methods for evaluating and selecting different RFID system components
- **Solution design** – Understanding the use of different types of tags and readers, their placement and how data flows through an RFID system.
- **Deploy Steps** – The basics of the process of deploying an RFID system.

The breadth and depth of knowledge that candidates are expected to know for each of these subject areas is explained in more detail below.

## 5 What Is RFID?

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### 5.1 Scope

This section will cover the types of RFID systems, which are generally categorized by the way in which the tag, or transponder, is powered for receiving data/instructions from the RFID reader (interrogator) and transmitting data back in reply. The three main types of systems are:

- Passive – the responding tag has no power source of its own but derives its power from the reader’s transmission
  - Battery Assisted – the responding tag relies upon the reader transmission to initiate action but has an on board battery to assist with transmitting data back to the reader
  - Active – the responding tag is completely power self-sufficient and does not rely at all on the reader’s transmission for any power needs
- 

### 5.2 Knowledge Tested

Candidates are expected to know these categorizations as well as the characteristics of each type in the context of:

- Impact on data transfer rate
- Impact of read range
- Impact on costs
- Typical applications
- Frequencies normally used for each category, including:
  - Low Frequency (LF) 120 – 150 kHz
  - High Frequency (HF) 13.56 MHz
  - Ultra-High Frequency (UHF) 860 – 960 MHz
  - Ultra-High Frequency (UHF) 433 MHz
  - Microwave 2.45 – 5.8 GHz
  - Ultra Wide Band (UWB) 3.1 - 10 GHz
- Behavior of passive systems using different frequencies, including:
  - Read range
  - Typical applications
  - Performance near metals and water based liquids
  - Regulations applying to use – including transmitted power limitations
  - Mode of operation (e.g. induction)
  - Type of antenna used
- Active RFID systems, including those that use the following protocols:

- ISO 18000-7 (Savi Technology protocol)
- DASH7 (2<sup>nd</sup> generation of ISO 18000-7)
- Wi-Fi IEEE 802.11n
- Zigbee IEEE 802.15.4

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### 5.3 Knowledge Not Tested

Candidates are not expected to know:

- How the power is harvested or used
- Power levels
- Battery types
- Battery life cycles
- Waveforms or modulation schemes used
- Details of signal protocols
- Types of batteries used
- Security techniques
- Types of batteries used
- Specific details or statistics related to
  - Rain penetration performance
  - Building penetration performance
  - Power consumption
  - Location accuracy

---

### 5.4 Sample Questions

Which of the following types of RFID tag have their own power source? There may be more than one correct answer.	Passive	
	Active	X
	Battery Assisted	X
Which of the following types of RFID tag has the fastest data transfer rate?	UHF	X
	LF	
	HF	

Which of the following types of RFID tags do <i>not</i> use inductive coupling? There may be more than one correct answer	LF	
	HF	
	UHF	X
	UWB	X

Which of the following types of RFID is most accurate in determining the location of the tag?	LF	
	HF	
	UHF	
	UWB	X

Which of the following RFID air-interface protocols operates at 433 MHz? There may be more than one correct answer.	ISO 18000-7	X
	DASH7	X
	Wi-Fi IEEE 802.11n	
	Zigbee IEEE 802.15.4	

Which of the following RFID protocols operates at 433 MHz? There may be more than one correct answer.	ISO 18000-7	X
	DASH7	X
	Wi-Fi IEEE 802.11n	
	Zigbee IEEE 802.15.4	

## 5.5 Knowledge Not Tested

Candidates are not expected to know:

- Waveforms or modulation used
- Details of signal protocols
- Types of batteries used
- Security techniques
- Specific details or statistics related to
  - Rain penetration performance
  - Building penetration performance

- Power consumption
- Location accuracy

## 6 Architecture Components

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### 6.1 Scope

RFID systems are composed of a set of key system components:

- Reader (also known as an Interrogator)
  - One or more reader antennas
  - Cable to connect reader antennas to the reader (unless the antenna is integrated into the reader)
  - Tags that are placed on or in an object
  - A software application to transfer data from the reader to the system that will process the data, usually referred to as the “middleware”
- 

### 6.2 Knowledge Tested

Candidates are expected to understand:

- How each of these components is connected to one or more of the other components
  - What role each component plays in the overall RFID system
  - What physical forms the components may take (for example handheld versus fixed readers)
- 

### 6.3 Knowledge Not Tested

Candidates are not expected to know:

- How Peer to Peer or Mesh RFID systems work
  - How data is transferred between components
  - Signal or data exchange protocols
- 

### 6.4 Sample Questions

Which of the following are functions RFID “middleware” typical deliver? Choose all that apply.	To control the reader(s)	X
	To validate that the reader is complying with radio device regulations	
	To transfer data between the reader and the system that will process the read data	X
	To format data for use in backend systems	X

Why is it important to know what material on which an RFID tag will be placed on is made of?	To make sure that the tag will stay in place	
	Because metal surfaces may interfere with tag performance	X
	To avoid possible safety issues when combining materials	
	To make sure the tag is in the correct orientation	

## 7 Privacy, Safety & Security

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### 7.1 Scope

RFID is the exchange of data between an item and a reader which then hands off that data to another system for processing. That data may be used to identify an individual person directly (e.g. an employee badge) or to indirectly derive a person's identity (e.g. a credit card number which leads to the person). Such data needs to be carefully managed in order to comply with any regulatory requirements and also to respect the individual's right to privacy.

RFID equipment uses electric current to operate and radiates energy when seeking tags of exchanging data, so it is important that all RFID equipment is operated safely, in line with health and safety regulations and without any adverse impact on the surrounding environment.

The exchange of RFID data by radio transmission could be subject to unauthorized interception of the transmission and capture of the data being exchanged. While this would require sophisticated equipment and techniques, it must still be guarded against.

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### 7.2 Knowledge Tested

Candidates are expected to know:

- What are the potential privacy issues that may arise in a RFID implementation?
- Why is it important to protect data that can identify a person?
- What are the potential safety issues that can arise from the use of RFID equipment?
- Could data exchanged between a reader and a tag be intercepted?
- What are the potential problems of intercepted data?

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### 7.3 Knowledge Not Tested

Candidates are not expected to know:

- Specific privacy regulations for a country or region
- Specific safety regulations for a country or region
- Methods by which RFID data could be intercepted
- Methods by which RFID data could be protected during transmission
- Methods by which RFID data could be encrypted
- How to interpret encrypted data



## 7.4 Sample Questions

Could a transmission of encrypted data between the reader and tag be intercepted?	Yes	X
	No	

Which of the following are recommended to ensure RFID systems do not harm workers in the area in which they are used?	Comply with the health and safety regulations where the equipment is being used	X
	Do not alter the equipment to operate outside of the manufacturer's specification	X
	Always use fixed RFID equipment with a grounded circuit	X
	Do not operate the equipment in the presence of argon gas	

## 8 RFID Standards & Regulations

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### 8.1 Scope

Global standards provide a way to ensure interoperability of RFID equipment from different manufacturers and for global use. They also provide a means to define, use and interpret data in the same way regardless of who is using the data or where that data is being used. The main Standards Developing Organizations (SDO's) for RFID are:

- ISO/IEC
- IEEE
- GS1/EPCglobal

Regulations for the use of radio devices, which includes RFID, exist in all countries and each country is responsible for defining its own regulations. Some countries are part of a regional group and others decide to model their own regulations on those of another country or group. The regulations most commonly used as a model for other countries are those of:

- The United States of America Federal Communication Commission (FCC)
  - The European Conference of Postal and Telecommunications Administrations (CEPT) through its European Telecommunications Standards Institute (ETSI)
- 

### 8.2 Knowledge Tested

Candidates are expected to know:

- Who are the global RFID standards setting and regulatory bodies
  - What are the common global Standards Development Organisations (SDO's) for each type of RFID
  - What regulations could dictate for RFID operation
    - Transmission power levels
    - Transmission channels
    - Frequency use
    - Type approval
  - Who is responsible for ensuring that RFID equipment is manufactured according to regulations
  - Who is responsible for ensuring that RFID equipment is used in accordance with the regulations of the country where it is being used
- 

### 8.3 Knowledge Not Tested

Candidates are not expected to know:

- Which government department regulates RFID for a specific country

- How power levels are set or calculated (e.g. power budget)
- Which specific channels must be used in which country (e.g. 4 channel mode)
- Specifically how allocated frequencies must be used (e.g. FHSS)
- Which government department in a specific country grants type approval

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## 8.4 Sample Questions

Who is ultimately responsible for ensuring that RFID equipment used complies with all applicable regulations?	Equipment manufacturer	
	User of the equipment	X
	Equipment seller	
	Company who services the equipment	

What frequency range does the ISO 18000-3 standard apply to?	125.00 – 134.20 KHz	
	13.56 – 13.56 MHz	X
	860 – 960 MHz	
	433 – 433 MHz	

## 9 RFID Component & Service Providers

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### 9.1 Scope

Although a RFID system is made up of many components and services, it is rare to find all of them provided by a single organisation so it is important to know who provides each of them within a deployment. The components & services typically provided are:

- RFID hardware such as
  - Readers
  - Antennas
  - Antenna hubs and multiplexors
  - Cables
- Tags
- Middleware (to exchange tag data between the reader and the system that will process the data)
- Consultancy (RFID hardware selection, process design, tag selection)
- Integration Services (integrating RFID based solutions into existing systems and process environments)

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### 9.2 Knowledge Tested

Candidates are expected to know:

- What components and/or services are typically provided in a RFID deployment
- Who typically provides them
- Who is responsible for regulatory compliance of:
  - Equipment components
  - Installed RFID system
- How the components fit together to form an overall system

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### 9.3 Knowledge Not Tested

Candidates are not expected to know:

- Specification of any components
- Names of specific component or service providers
- Name of specific software or middleware
- Details of integration into any specific system such as ERP

## 9.4 Sample Questions

Antennas must be correctly matched with the reader to maximize performance and avoid possible damage to both. What parameter is it that must be matched in this way?	Impedance	X
	Cable length	
	Manufacturer's specification	
	Antenna size	

Which of the following components are present in all RFID systems? There may be more than one correct answer.	Reader (interrogator)	X
	Reader antenna	X
	RFID transponder	X
	Software to control the reader	X

## 10 Applications

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### 10.1 Scope

RFID can be used to support many different types of commercial, government and academic activities from commercial supply chains to tracking research laboratory samples. But which type of RFID is used in any application is dependent upon how well the characteristics of the type of RFID being used matches the needs of the application it is to support.

The selection of RFID types for specific industries or applications over time has led to a natural grouping of RFID types for those industries and/or applications. This does not mean that a type of RFID is never used for anything else, only that it is often used for such an application.

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### 10.2 Knowledge Tested

Candidates are expected to know:

- What applications each of the types of RFID are typically used for
    - LF (e.g. animal tracking)
    - HF (e.g. building security)
    - HF/NFC (e.g. payment systems)
    - UHF 860-960 MHz (e.g. supply chain)
    - UHF 433 MHz (e.g. ocean container tracking)
    - Microwave 2.44 GHz (e.g. patient tracking)
    - UWB 5 GHz (e.g. equipment locating)
  - Why a specific type of RFID is the most suitable for the application it is typically used for
- 

### 10.3 Knowledge Not Tested

Candidates are not expected to know:

- Details of any specific application implementation
  - Details of the design of any specific application
  - The return on investment expected from different applications
- 

### 10.4 Sample Questions

Which of the following types of RFID is most often used for sea container tracking?	Passive UHF 860 – 960 MHz	
	Passive HF 13.56 MHz	
	Active UWB	
	Active UHF 433 MHz	X

Which of the following types of RFID is most often used for payment systems?	UHF 860 – 960 MHz	
	HF 13.56 MHz	X
	UWB	
	LF 125 kHz	

## 11 RFID Evaluation & Selection

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### 11.1 Scope

RFID systems can be made up of many different components, standards and differing RFID technology; any combination of which can have different performance, cost and implementation implications. So the correct choice of technology/components is crucial if the RFID system selected is to meet the needs that it is intended to meet. These needs typically fall into specific categories:

- Performance – the ability for readers and tags to exchange information within a specific timeframe
- Range – the ability to execute that performance over specific ranges
- Environment - the ability to execute that performance within the target environment taking into account factors such as EMF that may interfere with performance
- Cost – a RFID system that is within the available budget
- Integration – a RFID system that can exchange data with other existing or intended systems and applications
- Stability – a RFID system that exhibits the required capability, consistency and capacity to remain stable in use
- Regulation – all of the above while remaining within regulatory compliance for the location of the RFID system

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### 11.2 Knowledge Tested

Candidates are expected to know:

- How to identify the specific needs that the RFID system is intended to meet
- Relative costs between different types of components
- Relative performance characteristics of different RFID systems/technologies
- What type of RFID system is best suited to meet those needs and why
- How to select an appropriate combination of system components to meet those needs
- Which standards are optimum for tag data
- The type of regulatory constraints that may apply

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### 11.3 Knowledge Not Tested

Candidates are not expected to know:

- How to program components
- Specific component costs
- Specific regulations for all global regions



- Details of signal or data exchange protocols

## 11.4 Sample Questions

Which of the following environmental factors may impact the performance of an RFID system?	Ultra-Violet Light	
	Global warming	
	Moon phase	
	EMF (Electro Magnetic Field)	X

The use of a RFID system may be subject to which of the following regulations? There may be more than one correct answer.	Domestic use regulations	
	Radio licensing regulations	X
	Radio use regulations	X
	Health & Safety regulations	X

## 12 Solution Design

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### 12.1 Scope

A RFID system has many components which global standards have helped ensure can work together. However, simply connecting the components together does not mean that the system will work effectively – the components must be configured to work together.

As an example, although it may be possible to physically connect an antenna to a reader antenna port, if the antenna is not of the correct impedance to match that of the reader's antenna port, then the system may not function properly or may even be damaged.

Many countries also impose a specific limit on the amount of power that may be transmitted from the antenna. The power transmitted is not simply that output by the reader but is a result of the influence of many components within the system, which is why it is important to know how to configure the system overall to work in unison.

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### 12.2 Knowledge Tested

Candidates are expected to know:

- What are the components of a RFID system
  - Reader
  - Cable
  - Connectors
  - Antenna
  - Hub (not always present)
  - Multiplexor (not always present)
- What are the configuration factors that impact overall system effectiveness
  - Reader port impedance
  - Connector type/materials
  - Cable type & signal loss
  - Cable length
  - Reader antenna polarization
  - Reader antenna gain
  - Tag antenna size
  - Material tag is placed on or near
  - Tag processor type (“chip”)

What is required is knowledge of what factors must be taken into account in configuring a RFID system rather than detailed knowledge of how to do so.

## 12.3 Knowledge Not Tested

Candidates are not expected to know:

- Specification of any specific reader, antenna or tag
- Connector types or materials
- What the different types of antenna cables are
- How to calculate power transmitted at the antenna
- Details of any tag chip type

## 12.4 Sample Questions

Why is the length of antenna cable used with a fixed reader important?	Long antenna cables could pose a health and safety risk	
	Cables are priced per unit of length, so longer cables increase system cost	
	A long cable enhances signal strength	
	Cables suffer a loss of signal strength, so a long cable will reduce system performance.	X

Which of the following are types of RFID antenna polarisation?	Circular	X
	Regular	
	Linear	X
	Angular	

## 13 Deployment Steps

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### 13.1 Scope

RFID systems are rarely deployed completely stand alone because their job is to capture data about or on a physical object that is then used in further processing distinct from the RFID system itself. This means that most RFID deployments involved some form of integration into other systems and/or processes.

RFID equipment can also be impacted by the environment in which it is deployed, especially if that environment includes other radio devices or heavy electrical equipment, both of which can generate energy fields that may interfere with a RFID system.

For these reasons there are a series of steps that are usually taken in a RFID deployment in order to ensure success in integrating the RFID system into the environment in which it will be used.

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### 13.2 Knowledge Tested

Candidates are expected to understand:

- The role of “middleware” in retrieving RFID data from the reader and passing it on to the system that will eventually process or use it.
  - What type of data could be available from the reader
    - Identity of the item observed by the RFID system
    - The reader/antenna combination that observed the item
    - When the observation was made
    - The strength of the signal that was returned by the item
  - The basic steps that should be taken to ensure that other radio equipment will not interfere with a RFID deployment?
    - A “Site Survey” to establish what other radio equipment may be in use
    - Which part of the RFID radio spectrum in use may be impacted
  - The basic steps that should be taken to ensure that other electrical equipment will not interfere with a RFID deployment?
    - A “Site Survey” to establish what electrical equipment may be in use and whether or not it is creating Electromagnetic Interference (EMI)
    - Assess if any EMI present is sufficient to degrade the RFID system performance
- 

### 13.3 Knowledge Not Tested

Candidates are not expected to know:

- What format the data is in when retrieved from the reader or how it is retrieved
- How to integrate this data into other systems

- How to do a Site Survey, what equipment is used or what data is gathered. It is enough at Associate Level to know that a Site Survey must be done and in principle what is being checked

### 13.4 Sample Questions

Which of the following data could be provided by an RFID system? There may be more than one correct answer.	Identity of the item observed by the RFID system	X
	The reader/antenna combination that observed the item	X
	When the observation was made	X
	The strength of the signal that was returned by the item	X

The main purpose of a RFID site survey is to?	Map out the total area that the RFID system will operate over	
	Gather users' opinions as to the advisability of implementing RFID at the site	
	Determine where the RFID readers should be placed	
	Determine if any Electromagnetic Interference (EMI) or other radio devices would interfere with the RFID system transmissions	X

## 14 Preparing for Your Exam

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### 14.1 Planning for Success

You are likely to pass the exam if you have studied the subject areas set out in this curriculum and are familiar with RFID terms and applications, the different types of RFID systems, common terms related to RFID and the components that make up an RFID system. If you have spent time installing, using and managing RFID equipment, that will help you even more.

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### 14.2 Some Steps to Take Before Taking the Exam

#### 14.2.1 Study

Study the subject areas outlined in this exam guide. Remember that the exam is not focused on a specific form of RFID and you will be tested on different aspects of all types of RFID systems, including passive LF, HF and UHF RFID, active systems and hybrid systems.

If you are an experienced RFID professional then you may feel that it's not necessary for you to review the curriculum subject areas. But we advise you against this approach because:

- You may be tested on an aspect of RFID that you have not become familiar with in your career so far
- RFID technology and applications are constantly changing
- The curriculum provides a structured check list to make sure you have covered everything that you may be tested on

#### 14.2.2 Where to Get Information on RFID

There are a number of primers on RFID on the Web to help you get started, including:

- [https://en.wikipedia.org/wiki/Radio-frequency\\_identification](https://en.wikipedia.org/wiki/Radio-frequency_identification)
- <http://www.rfidjournal.com/get-started>
- <http://cottonsrevolutions.org/applications/blog/Technology/2011-12-05/RFID-Primer>

Many of the RFID protocols used in industry are covered by the ISO -18000 series standards, formally called the “Parameters for Air Interface Communications.” You can find an explanation of these standards at:

- <http://www.hightechaid.com/standards/18000.htm>

There are many more ISO standards related to RFID but you do not need to know them all for this exam, which focuses mainly on air interface protocol standards and one of the most common global standard RFID identification schemes, the Electronic Product Code (EPC) standards. You can find details about these at:

- <http://www.gs1.org/epcrfid-epcis-id-keys/epc-rfid-tds/latest>

There are many more GS1/EPC standards related to RFID but you do not need to know them for this exam.

### 14.2.3 Glossary of RFID Terms

A number of Web sites have glossaries of RFID terms, including:

- RFID Journal: <http://www.rfidjournal.com/glossary/>
- AIM, the Association for Automatic Identification & Mobility: [http://www.aimglobal.org/?page=rf\\_glossary](http://www.aimglobal.org/?page=rf_glossary)

### 14.2.4 Case Studies

- The AIM site has a number of case studies, which can be found at: [http://www.aimglobal.org/?rfid\\_casestudies](http://www.aimglobal.org/?rfid_casestudies).
- RFID Journal has free case studies, which can be found at: <http://www.rfidjournal.com/free-case-studies>

### 14.2.5 News and other information

There are several websites that offer news about RFID deployments, products, standards development and other issues. Among these are:

- RFID Journal: <http://www.rfidjournal.com/>
- RFID Solutions Online: <http://www.rfidsolutionsonline.com/>
- RFID Ready: <http://www.rfid-ready.com/>

### 14.2.6 Get Trained

The RFID Professional Institute maintains a list of companies that provide RFID training. The list can be viewed at

- <http://rfidpros.org/rfid-certifications/training/>

*The RFID Professional Institute offers this list of organizations providing RFID training, either online or instructor led. Some training offerings may be aimed specifically at preparing students for an RPI certification examination; others may not. The Institute does not claim that the list is all inclusive. Likewise, the inclusion of an organization on the list should not in any way be construed as a recommendation by the Institute, or guarantee that a student taking the organization's training will pass an RPI certification examination.*