



The Global Language of Business

# RFID in apparel retail

Expert advice from a neutral source – putting you on the right track



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# Who are we?

GS1 UK is a community of over 29,000 members working in retail, foodservice, healthcare and more. We're one of 112 independent, not-for-profit GS1 organisations operating across 150 countries worldwide. We help everyone involved in making, moving and trading goods, automate and standardise their supply chain processes using the common language of GS1 global standards.



In the changing apparel landscape, our standards enable businesses to reach a new global customer base. Facilitating cross-border trading and diversifying business models, GS1's open global standards create a common thread for businesses to work together.

Our standards play their part around the world and around the clock – from scanning clothes in department stores or buying shoes online, to tracking shipments from production to the consumer. In fact, there are over 5 billion successful scans of a GS1 barcode every single day.

What's more, we make a difference for over 2 million members worldwide – enabling efficiency, safety and sustainability for a wide range of businesses and their customers.

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# What's EPC?

Electronic Product Code (EPC) enabled RFID is the global standard maintained by GS1 for RFID technology. Created in collaboration with RFID suppliers and retail users, the EPC standard defines three key elements of the technology:

1. How data is to be stored on the tag
2. How a tag talks to the reader
3. How readers talk to business systems



## Data on the tag

The data structure for tags is a simple extension of the widely used GS1 system of product identifiers. EPC RFID codes consist of each product's Global Trade Item Number (GTIN) – these are sometimes called UPC or EANs – with the addition of a serial number for each product instance and some instructions for the reader.

## Communicating that data

The EPC standard provides a blueprint for how tags and readers talk to each other – this means that as long as both are EPC compliant, any combination of tags and readers will work together. In order to do this, the industry has reduced the variability of tags and readers, uniting in the use of passive, Ultra High Frequency (UHF) tags.

## Storing and using that data

The final part of the EPC standard – how the reader links the data that it captures back into your systems – ultimately ensures the interoperability of your RFID solution. This enables the efficient, and automated, communication of data across your network of departments, suppliers and partners.

## What are the benefits of using EPC?

### Faster implementation

Building on standards already in use, helps reduce the time of implementation by 25%.

### Reduced cost

The use of one tag specification allows the market to reach a critical mass – 6.9 billion tags were used in 2014 – leading to a 75% reduction in the cost of tags since 2011.

### Flexible

As an open standard, there's no proprietary technology used, meaning you can invest in confidence as any EPC tag will work with any EPC reader.

### Fit for purpose

Our standards are created by industry for industry – taking into account best practice.

### Global reach

As a global standard you can make the most of tagging at source, with local GS1 support for your suppliers – wherever they are.

### Platform for innovation

With a stable platform to work from, technology vendors can focus on solution innovation and application areas.

We're here to help you learn about RFID and get your project up and running as quickly and smoothly as possible. To support you with this, we have our:

- Apparel RFID toolkit
- RFID training course
- Project consultancy

# Apparel RFID toolkit

We've put together the RFID toolkit to give you the support you need to kick start your RFID implementation program. It offers you advice from our team of experts from a neutral, project focused perspective.

Our toolkit is here to help you understand what is required at each stage of your projects' implementation and ensure that you get off to the right start.

## The RFID toolkit subscription includes:

- An ROI calculator developed with Cranfield University
- An implementation blueprint and timeline
- Neutral advice on your vendor selection
- A half-day session with a GS1 UK RFID expert

## So how much is it?

Subscription is £1,200 plus VAT for one year.

## How do I subscribe?

GS1 UK members can subscribe through our website – [www.gs1uk.org/rfid-toolkit](http://www.gs1uk.org/rfid-toolkit) or call **0808 178 8799** or **0207 092 3501**.

# RFID training course

## RFID in apparel: inventory management

If you're looking to find out a little more about RFID technology, understand how it works and how retailers around the world are using it – join one of our training courses.

And for those who want to prove their understanding of EPC RFID, we offer assessments with industry recognised certificate programs.

## Training course outline

- The changing apparel landscape
- The definition and usage of RFID
- Different RFID applications and benefits
- The importance of standards
- Identify, capture and share
- Next steps for implementation

## What will you learn?

- What is RFID?
- What are the use cases?
- What impact will it have on your business?
- Learnings from industry examples
- How do you get it right first time?

## Who should attend?

- Delegates from retailers who want to improve their inventory management and visibility – particularly those responsible for stock management
- Those with roles in buying, IT and supply chain
- Brand-owners that are being asked to or are thinking about tagging their products

To find out when our next scheduled training course is, check out our training directory – [www.gs1uk.org/academy](http://www.gs1uk.org/academy)

Additionally, if you have a number of staff for whom this course would be useful – contact us to arrange it onsite.

For further assistance, please contact Ben Clarke on **020 7092 3541** or email [academy@gs1uk.org](mailto:academy@gs1uk.org)



### Build your business case

What are the benefits of using RFID?  
How do we find opportunities to impact sales or control costs using RFID?  
How do we engage the business to gain support from management and relevant stakeholders?



### Build your project team

How will RFID adoption affect my company?  
Which departments should participate in our RFID implementation program?



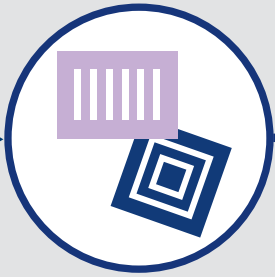
### Tagging your product

How do you meet your trading partners' tagging requirements?  
Are our products 'RFID friendly'?  
Where should we put the RFID tag on our products?



### Buying equipment and services

How do we find solution providers for tags, readers, software and integration services?  
What do we need to tell our solution providers about our RFID implementation?



### Moving from barcodes to RFID

How do we transition from the barcodes we use on products today to RFID?  
How does serialisation factor into RFID?  
How do we know we're programming our RFID tags correctly?



### Managing a serialisation plan

What is serialisation management?  
How do we match a serial number management plan to the way our company operates?



### Consumer notice and privacy

What is the GS1/EPC global consumer privacy guideline?  
How can we implement RFID in a way that protects the trusting relationship we have with our customers?



### System integration and data

How do we take advantage of the data from all those RFID 'reads'?  
How can we use RFID 'read' data to communicate with our trading partners?  
How can we integrate this new RFID data into our existing IT systems?



### Bringing it all together

How do you ensure a strong ROI?  
How can RFID improve our business processes?  
How can we apply the use of RFID to our assets, locations, documents and service relationships?

# RFID consulting

## Delivering lasting transformational change

Implementing EPC enabled RFID in your business is a major infrastructure project that has many effects across your entire organisation. Our expert practitioners – who've got over 100 years of RFID implementation experience between them – are here to help you get your project right the first time.

We offer a unique consulting service, because we are:

**Impartial** – as a neutral and independent not-for-profit organisation, you can be assured of unbiased trusted advice guiding your project.

**Experts** – as the creators of the global standard for RFID – EPC – we have unparalleled knowledge of the technology and its application in retail.

We can help you take your project from understanding the technology, to shaping your pilot and all the way through to implementation. Take a look at our sample project plan, outlining the different aspects we can help you with – the plan can be tailored to your precise business requirements, depending on where you are in your RFID journey.

### Phase 1

#### Training and education

- Develop a solid understanding of RFID and how it can be applied
- Learn the basics of tags, readers and software

### Phase 2

#### Discovery

- 'As is' process analysis
- Identify current challenges and key stakeholders
- Understand business objectives and gather all necessary requirements
- 'To be' process definition
- Develop a high level roadmap and benefits statement

### Phase 3

#### Initiate programme

- Set the project's scope
- Develop a project plan
- Create a detailed business case and roadmap
- Define the project's KPIs
- Shape pilot activity

### Phase 4

#### Vendor selection\*

- Agree functional specifications
- RFP creation and management
- Advise on tag, reader, middleware and other application software requirements
- Establish test scenarios

\*Final vendor selection rests with the company

### Phase 5

#### Pilot

- Define pilot's success criteria
- Pilot installation
- Evaluate pilot's performance, analyse gaps and react accordingly
- Advice on process redesign
- Recommendations for the full scale implementation

### Phase 6

#### Implementation

- Project and programme management
- Readiness testing
- Training and knowledge transfer to all impacted staff at the appropriate level
- Onboarding of supplier community

### Phase 7

#### Performance measurement

- Review results and take any appropriate action
- Make recommendations for future use to extract maximum ROI on RFID investments

Ongoing – quality assurance

- Maintain results and compliance beyond each project phase
- Ensure sustainability of benefits



## Why work with us?

We deliver lasting transformational change – enabling industries, organisations and teams to achieve their long-term goals. And we make change happen for you – helping you to increase sales, reduce costs and deliver improved safety.

## How we help you achieve success

We aim to truly understand your business priorities. We enable you to benefit from industry best-practice, working pragmatically with you so you achieve your goals.

To find out more about our consultancy services for the apparel sector, or to discuss your requirements in more detail, please contact [apparel@gs1uk.org](mailto:apparel@gs1uk.org) or call **0808 178 8799** or **020 7092 3501**.

## Contact us

### GS1 UK

Staple Court  
11 Staple Inn Buildings  
London WC1V 7QH

**T** +44 (0)20 7092 3521

**F** +44 (0)20 7681 2290

**E** [support@gs1uk.org](mailto:support@gs1uk.org)

[www.gs1uk.org](http://www.gs1uk.org)

