

# Electronic traceability: the theory (part 4 of 4)

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## The agenda

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- Traceability concepts
- Stakeholder views
- Why is traceability important?
- Traceability principles
- Implementing traceability
- Stakeholder benefits of electronic traceability
- Additional materials
  - Types of traceability systems

## **Implementing traceability in a business**

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1. Establish traceability business requirements, motivators and priorities.
2. Identify / assign identities to traceable products
3. Identify / assign identities to traceable locations
4. Identify / assign identities to traceability partners
5. Discuss planning and preparations in relation to the product and business cycles.
6. Determine the traceability records that are needed
7. Determine what it will take to implement, manage and monitor the traceability system
8. Determine how to conduct withdrawals and recalls.
9. Initiate the implementation.

## Implementing a traceability system

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1. Before you start
2. Call a start-up meeting
3. Develop a process map of the selected product
4. Identify traceable unit(s)
5. Establish data recording routines
6. Map current information systems and data capture practice
7. Implement and maintain software for data recording and information management
8. Exchange data electronically

## Implementing a traceability system

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### 1. Before you start

- Check if there are traceability or coding standards for your type of products or in the industry.
- Identify the traceability implementation team.

### 2. Call a start-up meeting

- Discuss objectives and expectations.
- Decide on the scope of the implementation.
- Decide which ingredients and products are to be traced.  
*(Start with a product with a simple chain.)*
- Decide which departments and locations will be involved.
- Identify who would approve the programme.

## Implementing a traceability system

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### 3. Develop a process map of the selected product

- Document the flow of products, from reception of raw materials and ingredients, through production, to shipping of finished products.
- Document the accompanying information flows.

This flow diagramme will help to identify:

- Critical traceability points and the relevant trade units
- Recommended changes in product and information flows  
(*e.g. batch size, definition of traceable unit, less/more mixing, etc.*)
- Accountabilities and responsibilities.

## Implementing a traceability system

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### 4. Identify traceable unit(s)

- For trade units going out  
*(finished products units that go to the next company in the chain)*
- For trade units coming in  
*(shipments of raw materials and ingredients from other company, units that come from previous link in supply chain)*

#### Receiving products:

- Examine the existing product label and accompanying documentation; identify and record codes.
- If there are no codes, get codes from suppliers or use internal codes.

#### Internal processes:

- Raw material batches and production batches may use internal codes.
- Raw material batch codes must be explicitly linked to corresponding incoming trade units.
- The production batch code must be explicitly linked to the corresponding outgoing trade units.



## Traceability system

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### Data recording routines

Internal routines for recording of data; this can be broken down into several sub-steps:

- 1. Determine what types of data you want to record.
- 2. Determine the stages at which data recording should take place.
- 3. Determine how transformations should be recorded.
- 4. Determine what product-related data should be recorded.

One outcome of this phase is a plan of how manual processes must be changed to enable systematic data collection and associated data recording, and the linking between products and accompanying documentation (labels, freight forms, certificates, etc).