Scope

- Definition of the traceability process.
- Minimum traceability requirements for all sectors and all types of products.
- Framework for specific supply chain applications.
• What is Traceability?
  • Traceability is the ability to trace the history, application or location of that which is under consideration. (ISO/IEC 9001: 2000)

• Why Traceability?
  • To meet regulatory requirements or business requirements for efficient defective product recalls and withdrawals within the context of quality, safety and security assurance and supply chain visibility.

• When Traceability?
  • To respond to the authorities or a customer complaint.
  • When information is not available internally, and the information must be requested and provided by the trading partner(s).
In order to achieve traceability across the supply chain, all traceability partners must achieve internal and external traceability.
Internal Traceability (1)
Internal process may be:

- Movement
- Transformation
- Storage
- Destruction

Every traceability partner has a responsibility to maintain data that links input into a transformation process with the output, and that links the original and final location after movement.
External Traceability (1)
• “One step up, one step down” principle.

• The brand owner must ensure the uniqueness of the identification of the traceable items (by using a GTIN and/or SSCC) and label them at source.

• Identification data carrier must remain on the traceable item until it is consumed or destroyed.
• A party is a generalization of a legal or physical entity.

• Parties can be:
  • Carrier/Third Party Logistics Provider (3PL)
  • Processor/Manufacturer/Primary Producer
  • Wholesaler/Retailer/Point of Sale or Service Operator
  • Warehouse/Distribution Centre
  • Authorities

• Parties are required to be uniquely identified (by using a GLN).
A role is a specific function of a party in a specific process at a specific time.

In the information process flow, roles can be:
- Brand Owner
- Traceability Data Creator
- Traceability Data Source
- Traceability Data Recipient
- Trace Request Initiator

In the physical process flow, roles can be:
- Traceable Item Creator
- Traceable Item Source
- Traceable Item Recipient
- Transporter
Traceable Item-Hierarchy

• Traceable Item Hierarchy (from highest to lowest):
  • **Shipment**
    • May contain one or more logistics unit(s)
    • For example: truck load, vessel, 10 pallets of various items
  • **Logistics unit**
    • May contain other logistics unit(s)
    • May contain one or more trade item(s)
    • May be a trade item
    • For example: pallet, container
  • **Trade item not crossing the POS**
    • A trade item
    • Batch/lot of trade item
    • Serialized trade item
    • For example: carton, bag
  • **Trade item crossing the POS**
    • Consumer units
<table>
<thead>
<tr>
<th>Serialised</th>
<th>Shipment Identification Number (SIN)</th>
<th>SSCC</th>
<th>GTIN + Serial number</th>
<th>GTIN + Serial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Batch/Lot</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
<td>GTIN + Batch Number</td>
<td>GTIN + Batch Number</td>
</tr>
<tr>
<td>Generic</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
<td>GTIN</td>
<td>GTIN</td>
</tr>
</tbody>
</table>

Logistical Hierarchy
• The GTIN is the basis for product identification.
• Additional information (e.g. batch/lot number, serial number, expiration date) to uniquely identify a product or grouping of products is required to comply with legal requirements.
• Where appropriate, other information may be needed, e.g. for chilled and fresh food, a Best Before Date should be added.
• When the logistic unit is a trade item, it is also identified with a GTIN.
• The SSCC identifies the logistics unit.
• The SSCC is non-significant, fixed length, 18-digits number which does not contain any classifying elements
• Encoded using Application Identifier (00)
## Traceability Data

<table>
<thead>
<tr>
<th>Master Data</th>
<th>Transactional Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parties &amp; location information</td>
<td>Trade item information (GTIN, name, classification, dimensions, weight...)</td>
</tr>
<tr>
<td>(GLN, Address, contact...)</td>
<td>Shipment information (Despatch Advice number, date of despatch/receipt, Ship from/to, transporter identification...)</td>
</tr>
<tr>
<td></td>
<td>Logistic Unit information (SSCC, content description...)</td>
</tr>
<tr>
<td></td>
<td>Batch / lot or serialised trade item information (Batch / lot or serial number, quantity, best before date...)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Public information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depends on contractual relationship</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Product details as planned, for example:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Product specifications</td>
</tr>
<tr>
<td>- Process of production</td>
</tr>
<tr>
<td>- Components</td>
</tr>
<tr>
<td>- Origin of raw materials</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Private information</th>
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</thead>
<tbody>
<tr>
<td>Depends on contractual relationship</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Actual product details, for example:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Quality records</td>
</tr>
<tr>
<td>- Results of analysis</td>
</tr>
<tr>
<td>- Batch / lot number of raw materials</td>
</tr>
<tr>
<td>- Identification of interchangeable components that have been used</td>
</tr>
</tbody>
</table>
Trace Request
Traceability Requirements

• Minimum Information Requirements
  • Who is my traceability partner?
    • GLN
  • What is the traceable item?
    • GTIN/SSCC/Batch or Lot Number
  • Where was it shipped from or shipped to?
    • GLN
  • When did I receive/dispatch it?
    • Records (accurate and retrieved in a timely manner; e.g. by EDI)

• Technical Requirements
  • User Interface
  • Security
  • Performance
  • Quality
  • Backwards Compatibility
Traceability Process

1. Plan & organise
   - Before the physical flow

2. Align Master Data
   - As products move across the supply chain

3. Record Traceability Data
   - When a required information is not immediately and internally available

4. Request Trace
   - To notify a product recall or withdrawal, deal with media, reverse logistics...

5. Use information
THANK YOU!

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