



GS1 Traceability Standard

Miodrag Mitic, GS1 Global Office
CECRAL, Bogota 20-9-2006

The global language of business

www.gs1.org



GS1 Traceability Standard



"Consumer safety and traceability are currently at the forefront of both government and industry discussions.

GS1 has developed a Traceability Standard in order to meet these important needs."

Miguel A. Lopera
President and CEO
GS1





Traceability? What is its business value?



Traceability is the ability to trace the history, application or location of that which is under consideration.
(ISO 9001: 2000)

- Enables visibility of inventory across the supply chain and synchronization of consumption and procurement
- Facilitates validation of the presence or absence of attributes important to consumers and customers
- Allows manufacturers to identify and locate defective products and remove them from commerce
- Fights product counterfeiting (product authentication)
- Protects brands through accurate and quick data access
- Safeguards against bioterrorism



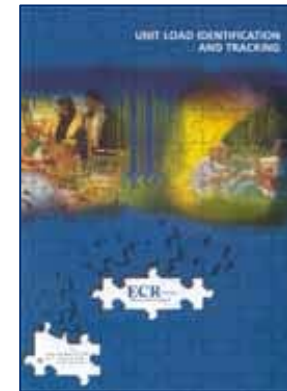


Traceability: Reoccurring ECR Europe topic



2004

- Legal compliance
- Crisis management
- Logistical flows management
- Product identification
- Bar Coding and EDI
- Consumer focus
- Enabled by GS1



2000

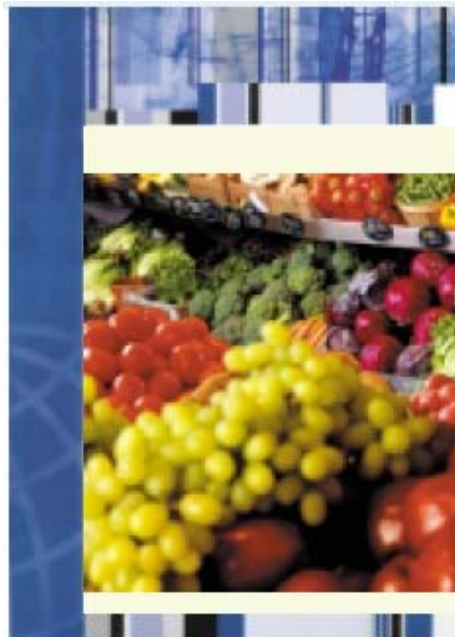




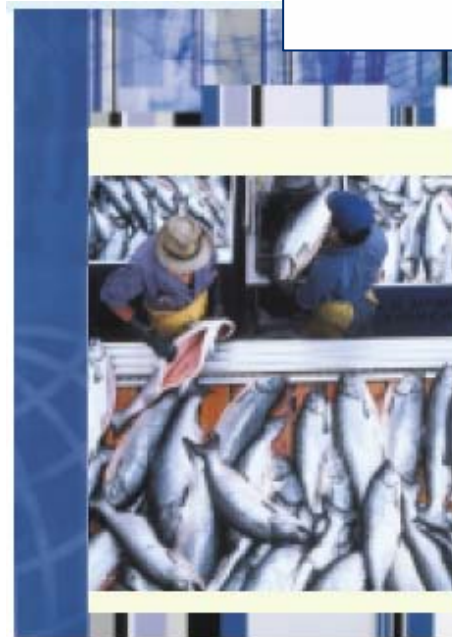
Continuous GS1 Leadership



Traceability of Beef



Fresh Produce



Traceability of Fish



Traceability Implementation





What is the GS1 Traceability Standard?



- A business process standard describing the traceability process independently from the choice of enabling technologies
- Defines minimum traceability system requirements for companies of all sizes across industry sectors
- Details the corresponding GS1 standards used within information management tools

- Meets the core legislative and business need to cost-efficiently trace back (one step down) and track forward (one step up) at any point along the entire length of the supply chain
- Describes the creation of accurate records of transactions
- Provides for fast data communication about the traceable item between trading partners





GS1 Traceability Standard: What it is not?

The GS1 Traceability Standard...

- ... is **not a standard for internal traceability**
Although it *does* show the inputs and outputs that must be linked by an internal traceability system.
- ... is **not a law or regulation**
Although it *is* designed to help business comply with existing and expected laws or regulations.
- ... is **not a replacement for a service or solution provider**
Although it *does* identify the types of information and core specifications that a service provider needs to consider in designing a system to manage traceability.
- ... is **not a replacement for safety or quality programmes**
Although it *complements* them when an issue arises. For example, food safety programmes such as the CIES Global Food Safety Initiative and quality assurance programmes such as EUREPGAP.





GS1 Traceability Standard: Who can benefit?



Consumers, who expect the products they purchase to be safe, perform well and deliver consistent quality.

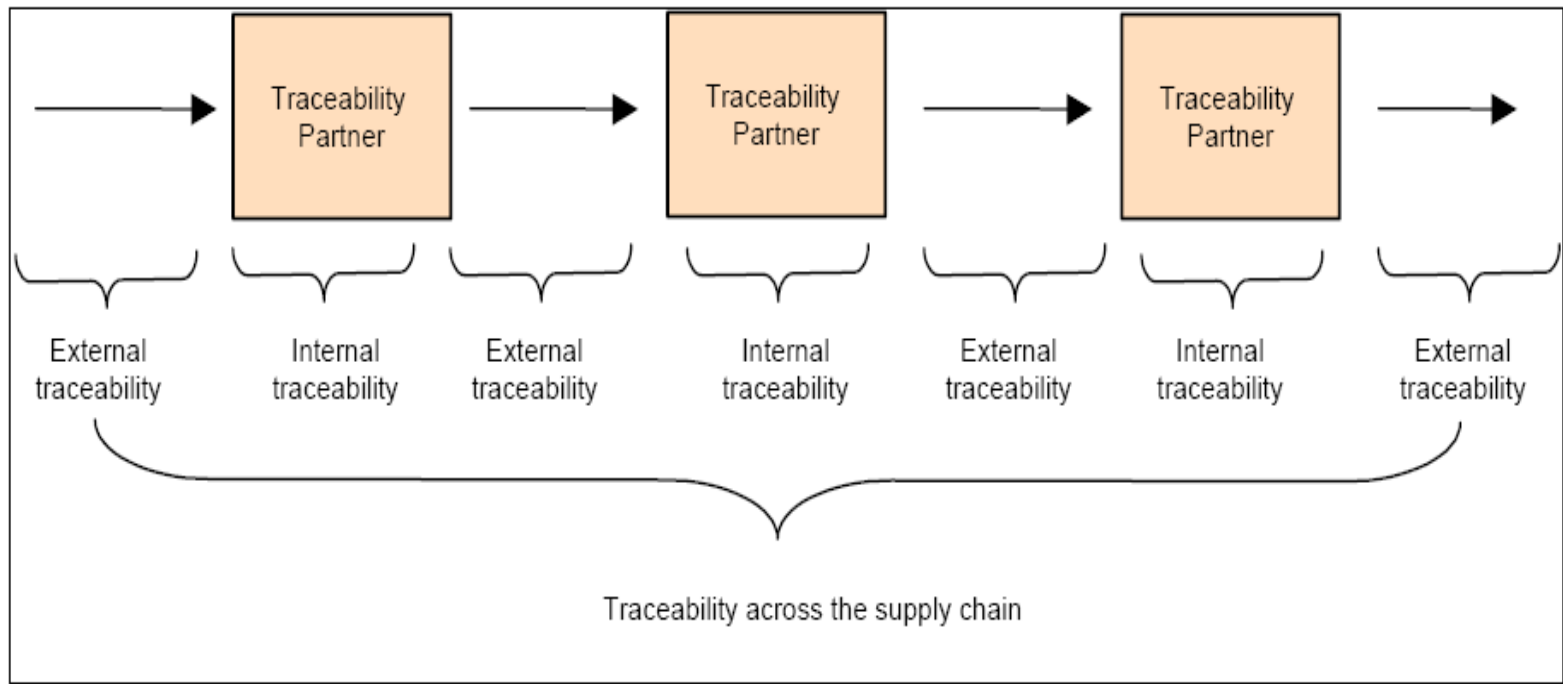
If a problem arises, the application of the GS1 Traceability Standard will make it easier to locate unsafe or defective products, and remove them from or keep them out of the supply chain.

Businesses who do not want multiple, potentially conflicting traceability systems, nor unnecessarily increased costs. The GS1 Traceability Standard can easily be adopted by just about everyone in the supply chain, without the need to purchase, create or integrate new systems.





Traceability Across The Supply Chain



In order to achieve traceability across the supply chain, all trade partners must achieve internal and external traceability.





Traceability Process Participants - Parties

A party is a generalization of a legal or physical entity

Parties can be:

- Processor/Manufacturer/Primary Producer
- Carrier/Third Party Logistics Provider (3PL)
- Importer/Exporter/Wholesaler
- Warehouse/Distribution Centre
- Retailer/Point of Sale or Service Operator
- Authorities





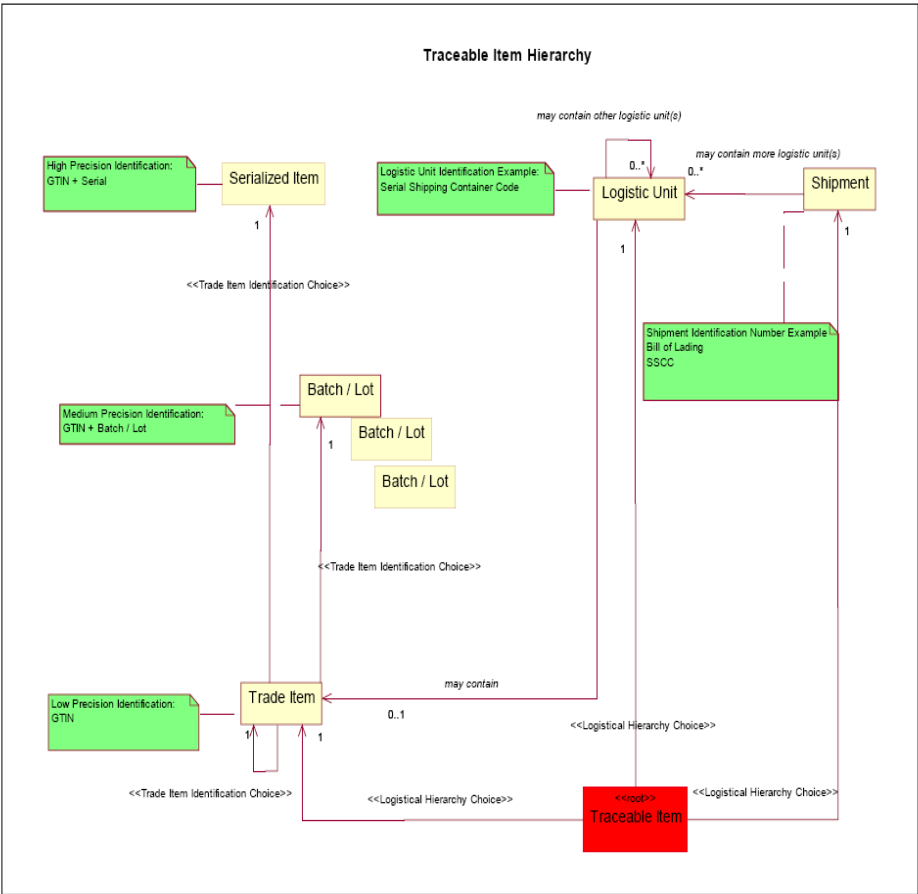
Traceability Process Participants - Roles

- A role is a specific function of a party in a specific process at a specific time
- In **physical process flow**, roles can be:
 - Traceable Item Creator
 - Traceable Item Source
 - Traceable Item Recipient
 - Transporter
- In **information process flow**, roles can be:
 - Brand Owner
 - Traceability Data Creator
 - Traceability Data Source
 - Traceability Data Recipient
 - Traceability Request Initiator





Traceable Item - Hierarchy

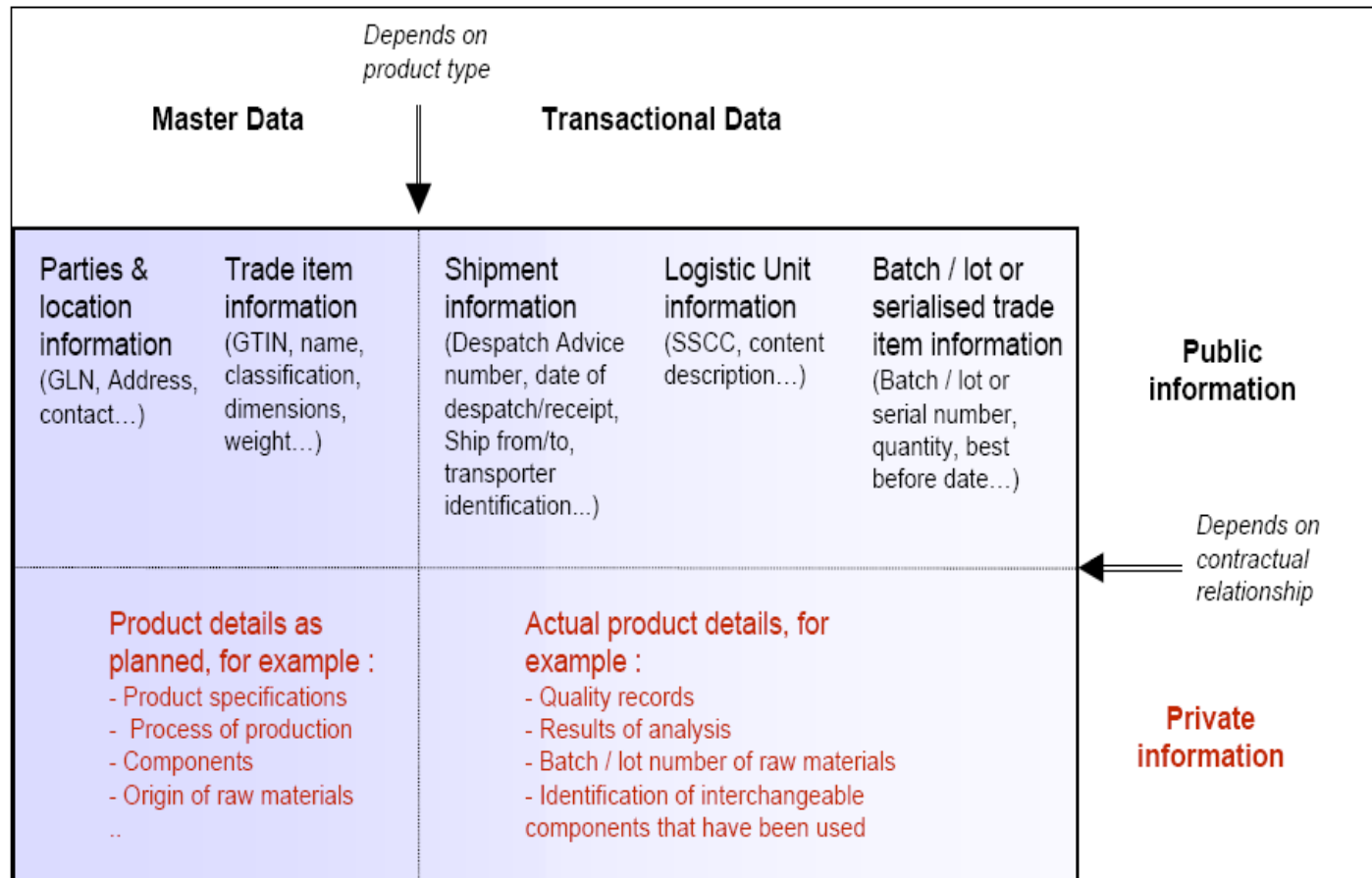


- 1. Shipment
- 2. Logistic Unit
- 3. Trade Item
 - Batch/Lot
 - Serialized





Traceability Data - Organization





Traceability Process - The GS1 Standard





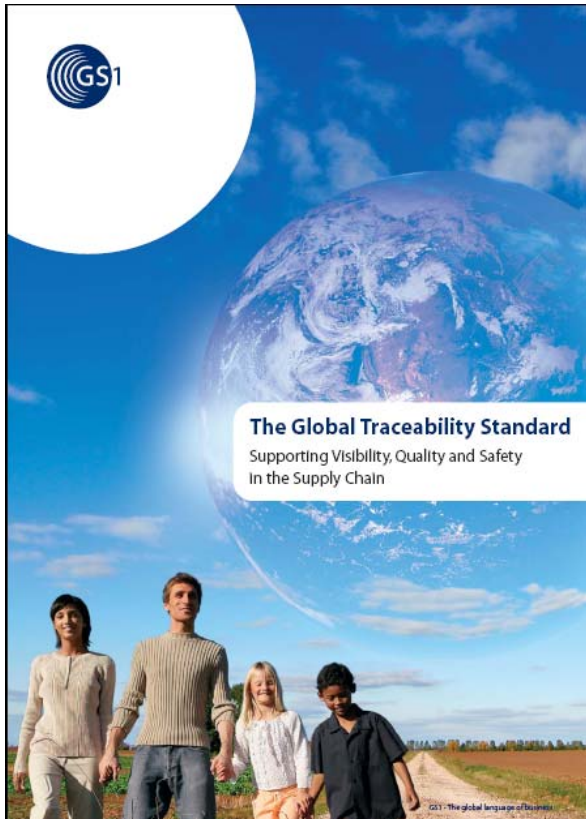
Innovation: 5 Sub-processes in 18 steps

Use Case	Plan and Organize		Align Master Data				Record Traceability Data						Request Trace			Use Information		
	1. Determine how to assign, collect share, and keep traceability data.	2. Determine how to manage links between inputs, internal processes, and outputs.	3. Assign identification to the party	4. Assign identification to physical locations	5. Assign identification to asset as appropriate.	6. Assign identification to trade item	7. Exchange Master Data	8. Assign Identification to the traceable item when it is created.	9. Apply the identification to the identification carrier on the traceable item or in an accompanying document when a transformation takes place.	10. Capture the identification of the traceable item or the asset containing it from the identification carrier when dispatching and receiving the traceable item.	11. Collect all other data including traceability information from internal and external sources by any method.	12. Share relevant traceability data (send information by any method).	13. Store traceability data.	14. Initiate the trace request	15. Receive the Trace Request	16. Send a Response.	17. Receive a Response	18. Take action
Physical Process Flow Roles																		
Traceable Item Creator	X	X	X	X	X		X	P	P	X	X	X	X	X	X	X	X	X
Traceable Item Source	X	X	X	P	X		X			P	X	X	X	X	X	X	X	X
Traceable Item Recipient	X	X	X	P	X		X			P	X		X	X	X	X	X	X
Transporter	X	X	X	X	X		X			X	X	X	X	X	X	X	X	X
Information Process Flow Roles																		
Brand Owner	X	X	X	X	X	P	X	X					X	X	X	X	X	X
Traceability Data Creator	X	X	X	X	X		X	X			X	X	X	X	X	X	X	X
Traceability Data Source	X	X	X	X	X		X			X	X	P	X	X	X	X	X	X
Traceability Data Recipient	X	X	X	X	X		X			X	P		X	X	X	X	X	X
Trace Request Initiator														P			P	X

P: is the primary role responsible for the specific use case.
X: designates a role involved in the specific use case.



For more information



www.gs1.org/traceability





L'Oréal video





For more information:

Miodrag Mitic

General Manager GS1 Solutions

✉ miodrag.mitic@gs1.org

💻 www.gs1.org/traceability