



GS1 Traceability Standard

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Scope

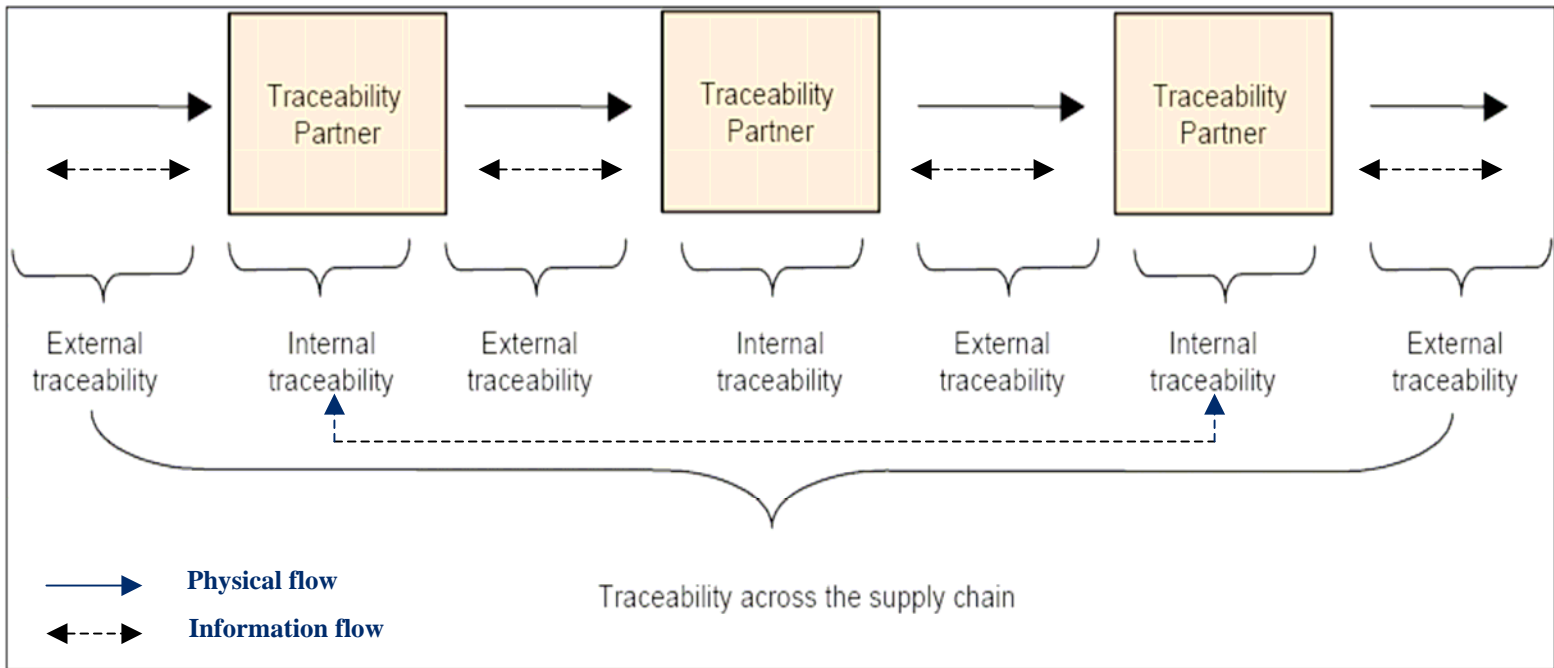
- Definition of the traceability process.
- Minimum traceability requirements for all sectors and all types of products.
- Framework for specific supply chain applications.



What, why and when?

- 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).

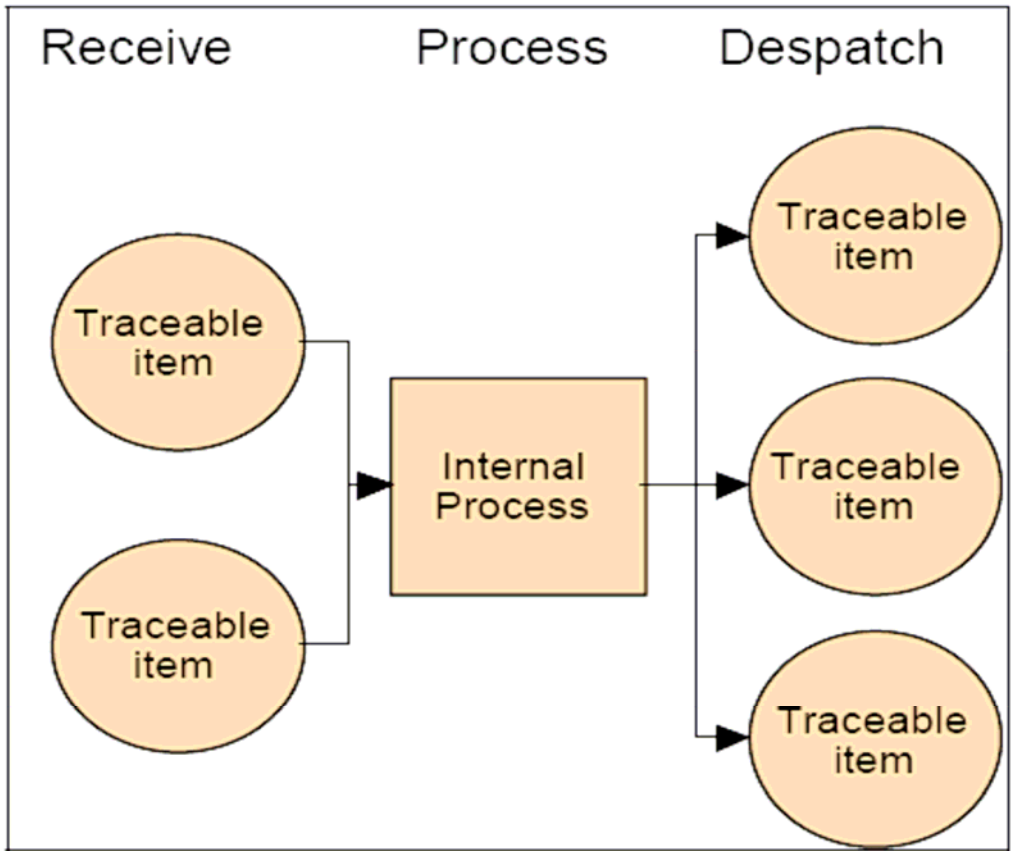
Traceability Across The Supply Chain



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



Internal Traceability (1)



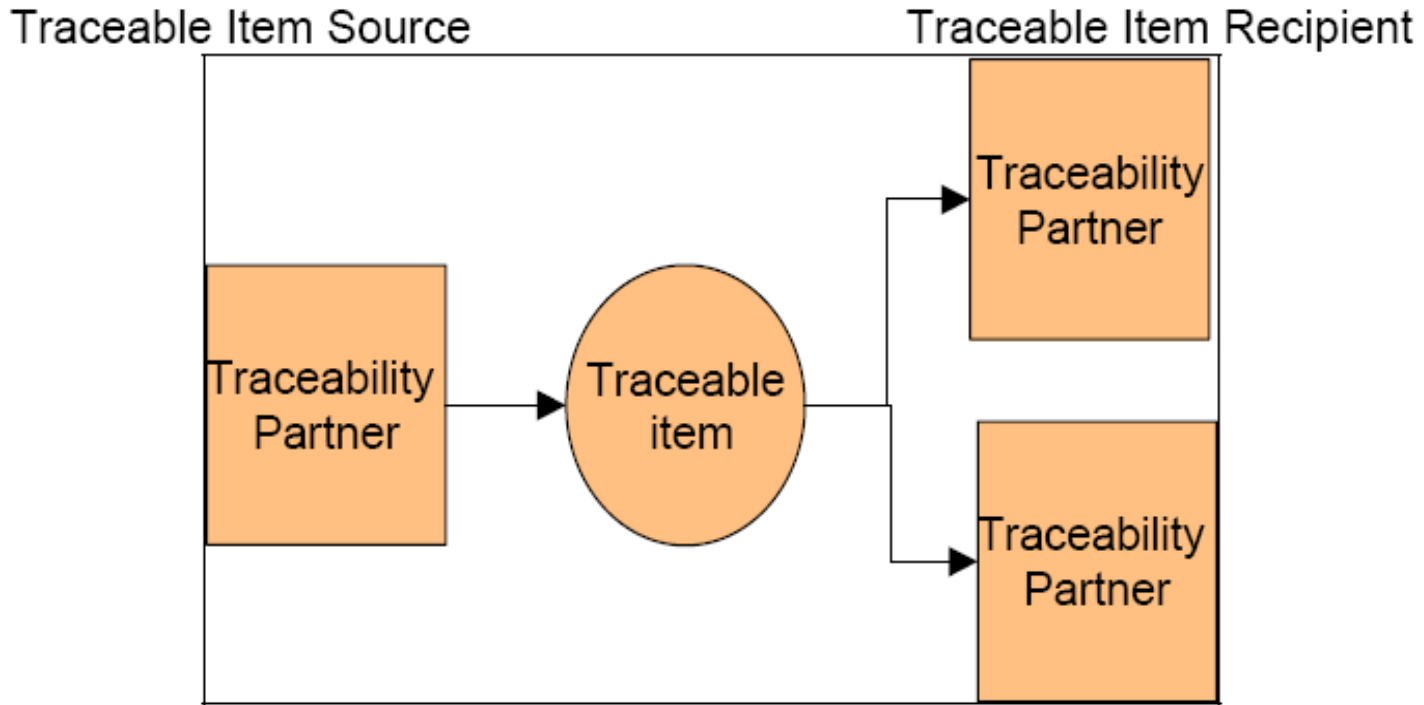


Internal Traceability (2)

- 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)





External Traceability (2)

- “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.



Traceability Process Participants-Parties

- 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).



Traceability Process Participants-Roles

- 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

Traceable Item-Identification (1)

Identification ↑

Serialised	Shipment Identification Number (SIN)	SSCC	GTIN + Serial number	GTIN + Serial
Batch/Lot	Not Applicable	Not Applicable	GTIN + Batch Number	GTIN + Batch Number
Generic	Not Applicable	Not Applicable	GTIN	GTIN

Logistical Hierarchy →





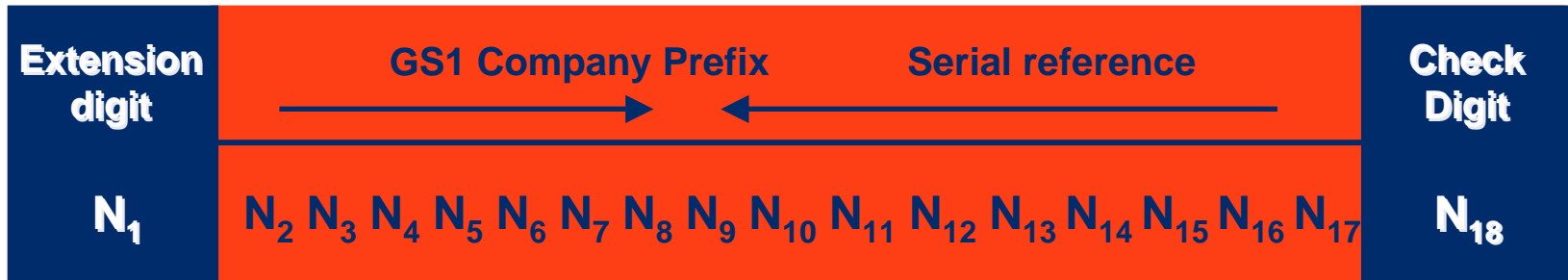
Traceable Item-Identification (2)

- 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.

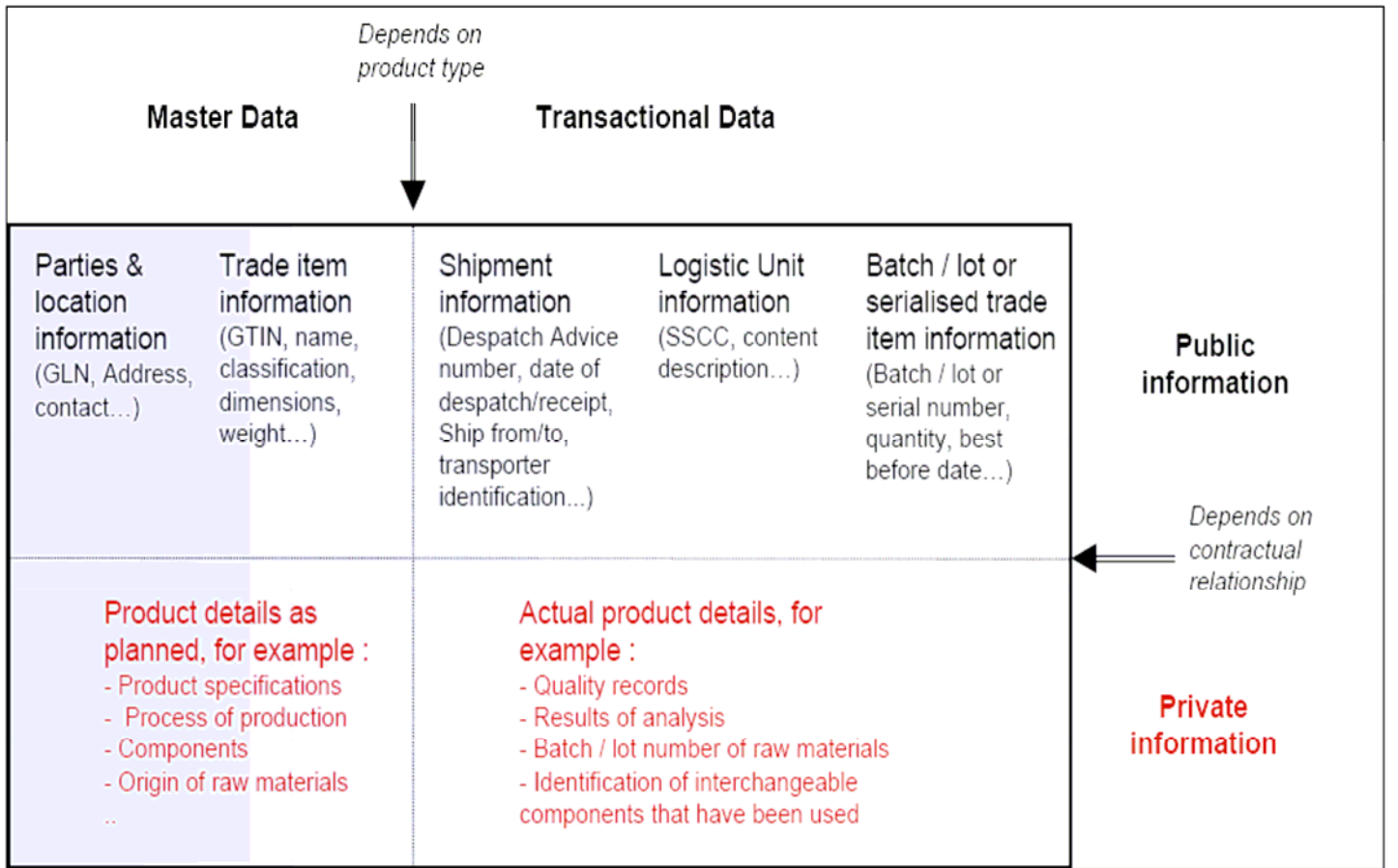


Traceable Item-Identification (3)

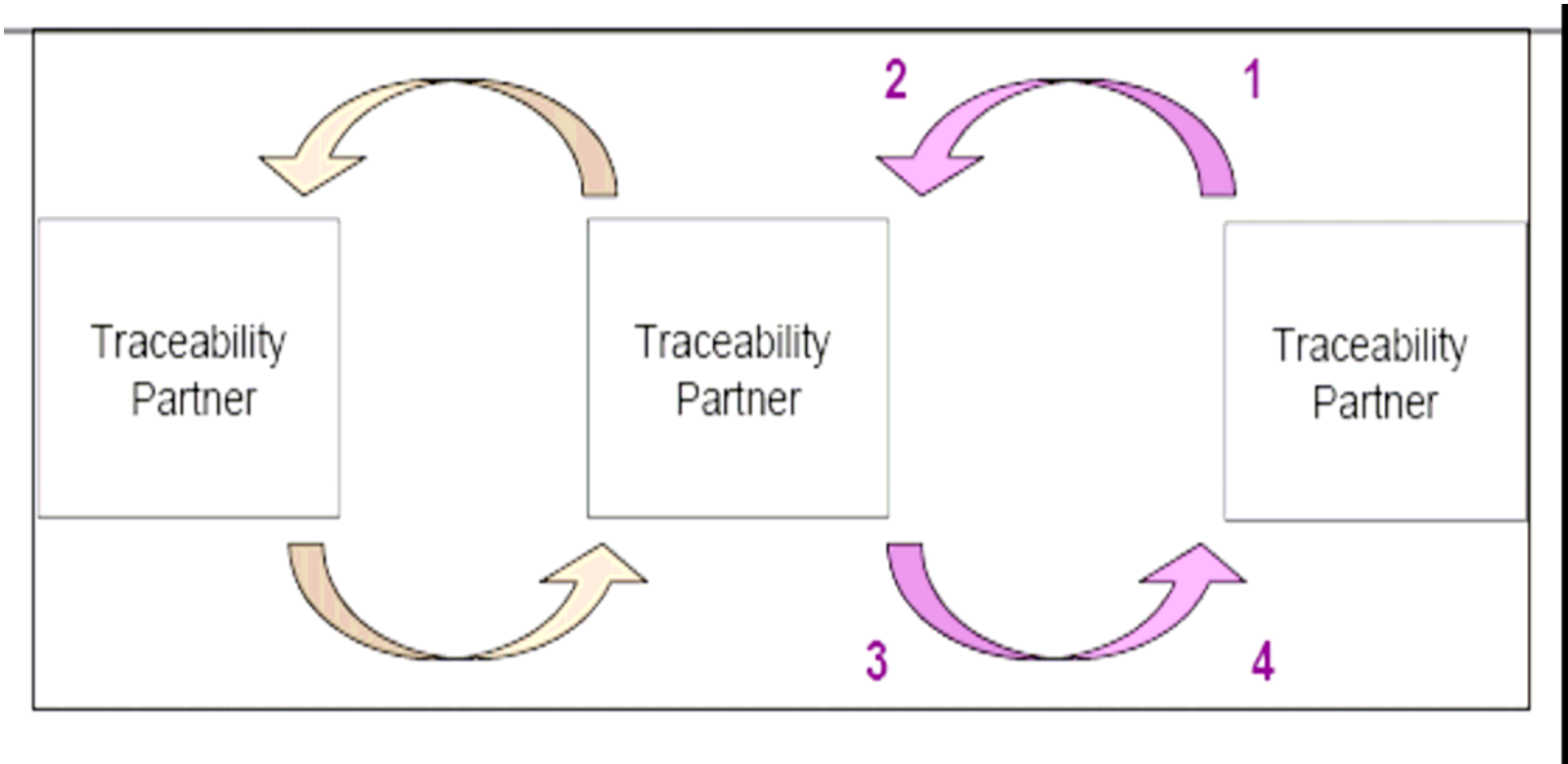
- The SSCC identifies the logistics unit.
- The SSCC is non-significant, fixed length, 18-digits number which does not contain any classifying elements
- Encoded using **Application Identifier** (00)



Traceability Data



Trace Request



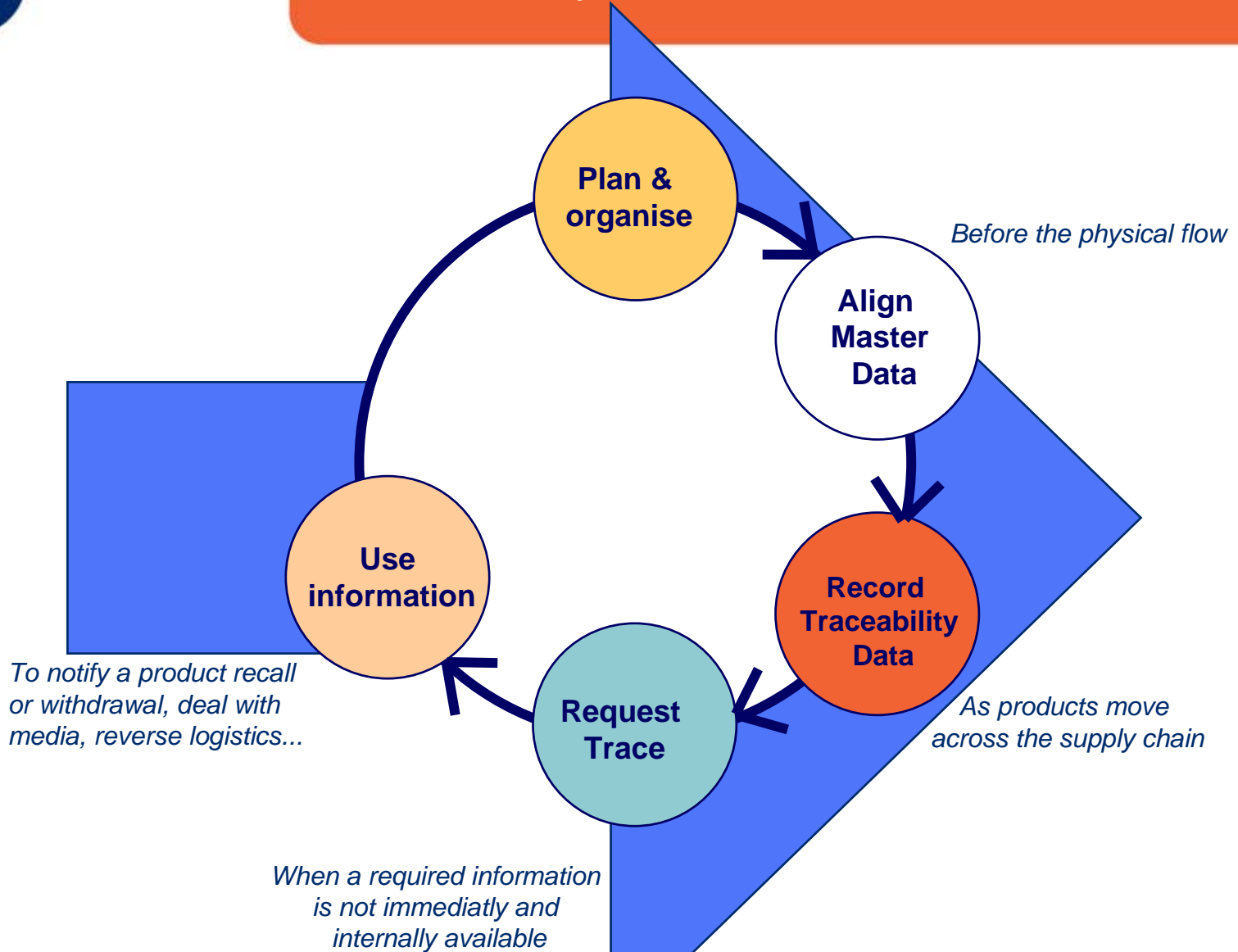


Traceability Requirements

- 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





THANK YOU!

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