



INTRODUCTION TO TRACEABILITY

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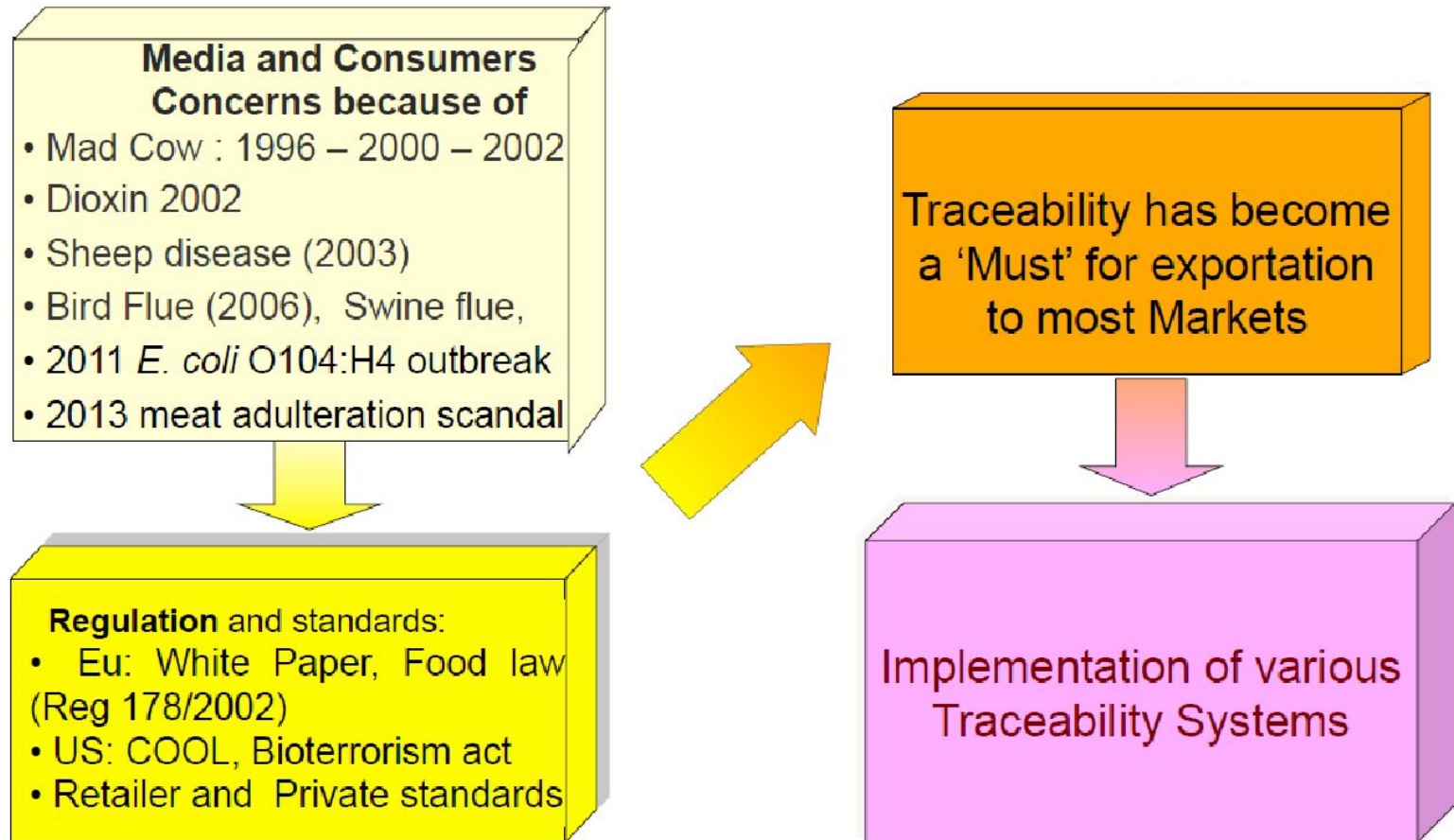


AGENDA FOR TODAY

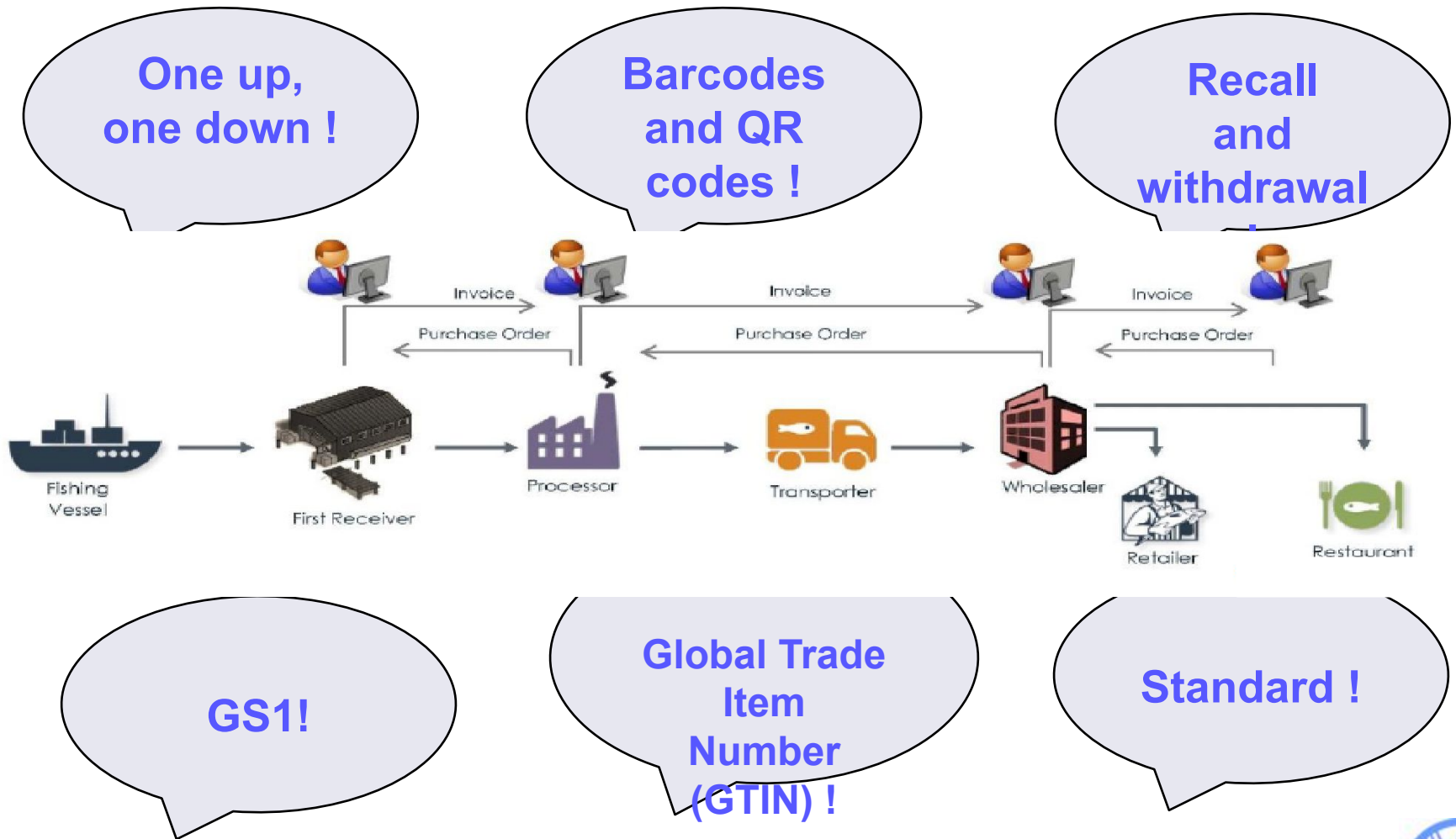
1. Introduction to traceability
2. Group work: case study



Traceability and food scares



What is traceability?



What is traceability?

- Discern, identify and trace products, ingredients, suppliers, retailers, processing operations, storage procedures through the food production chain
- Traceability within food control systems is applied as a tool to:
 - control food hazards;
 - provide reliable product information;
 - Guarantee product authenticity.
- In food safety: Recall of unsafe products can only be effective and efficient if products can be traced within a food chain.



Traceability and food safety

Codex Alimentarius

From food safety perspective

■ **Traceability** (*Codex Alimentarius Commission*)

“the ability to follow the movement of a food through specified stage(s) of production, processing and distribution”.

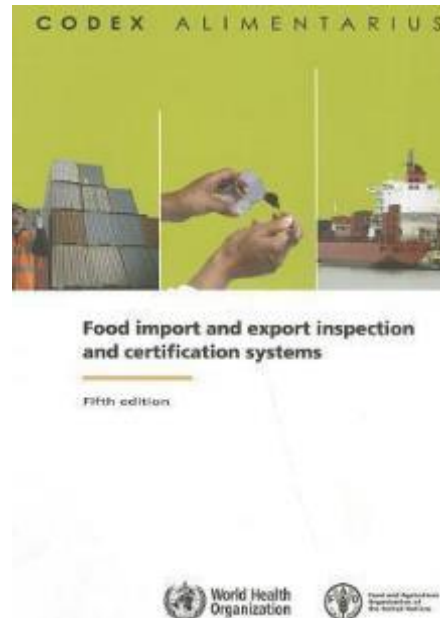


Relies on the “one step back”-
“one step forward”



Traceability and food safety

Codex Alimentarius



Principles for Traceability/Product Tracing as a Tool within a Food Inspection and Certification System (CAC/GL 60-2006) 109



Is traceability only limited to food safety?

Can you identify any practical uses, cases or other drivers for traceability in the fisheries sector?

Let's watch this: <https://www.youtube.com/watch?v=DY7dfB1Jjh8>



Drivers of traceability

Purpose of Traceability	Objective	Attributes to Trace	Example Traceability Systems
Animal Health and Food Safety	To support food safety and consumer health	Specified in food & fish safety and health regulations	Codex Alimentarius ; World Organisation for Animal Health
Security	Prevention of IUU fishing ; product authentication ; brand & product protection	Catch documentation ; accuracy of package labelling	EU IUU Regulation; US Lacey Act; FAO CDS Guidelines
Environmental (Regulatory)	Mitigation of environmental impacts	Specified in environmental and protected species regulations	US Tuna Tracking & Verification Program; CITES
Quality (Regulatory)	Consumer assurance	Specific quality attributes included in regulations	Codex Alimentarius ; EC labelling laws
Marketing and Quality (Non-regulatory)	Creation and maintenance of credence attributes environmental, food safety and ethical sourcing	Specific attributes included in public standards	FAO Guidelines; Global Sustainable Seafood Initiative ; Ecolabelling and food safety schemes

One step back- one step forward



*Unique
identification*



*Data capture
and
management*



*Data
communication*



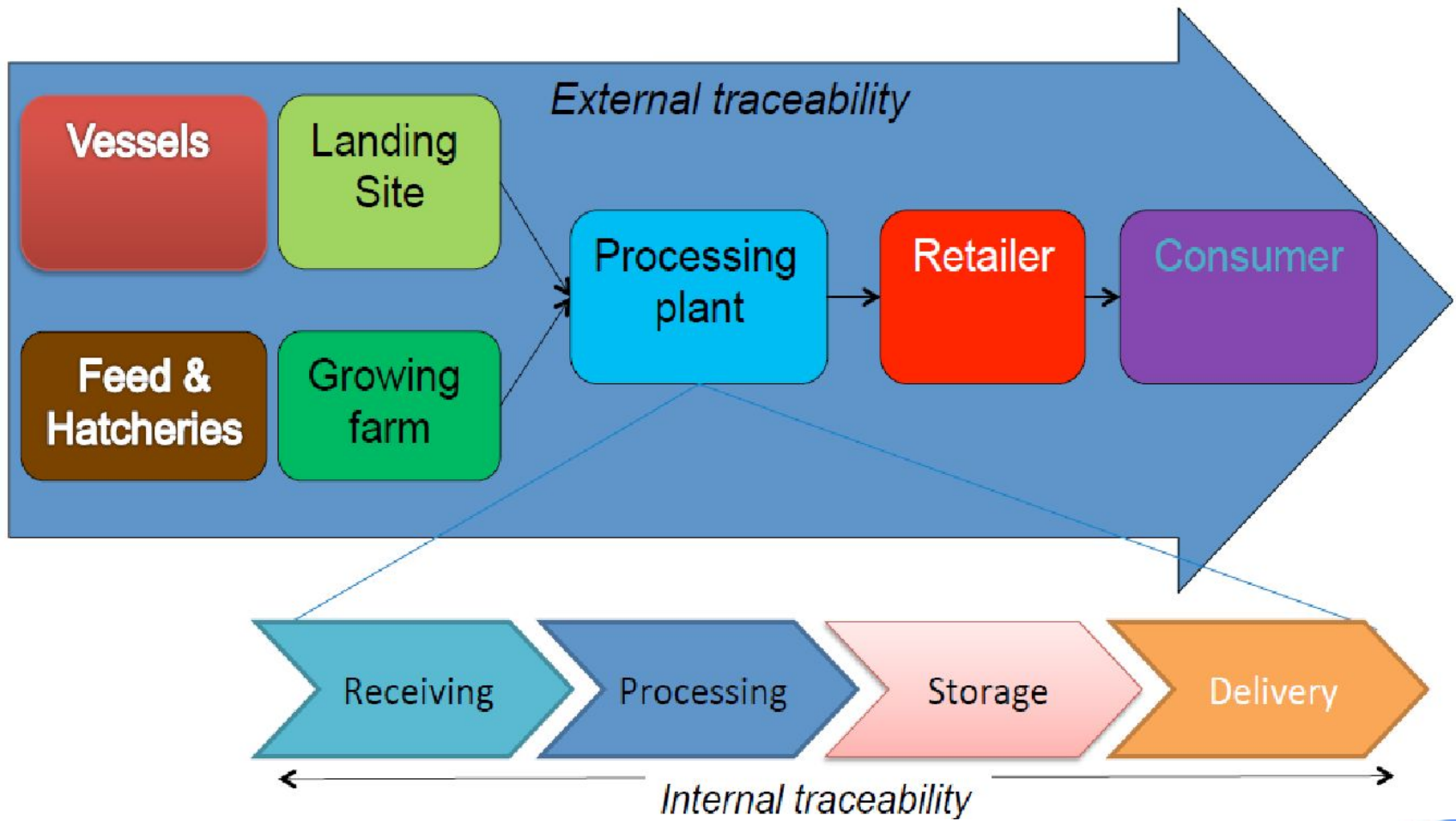
Along the food chain

What is traceability?

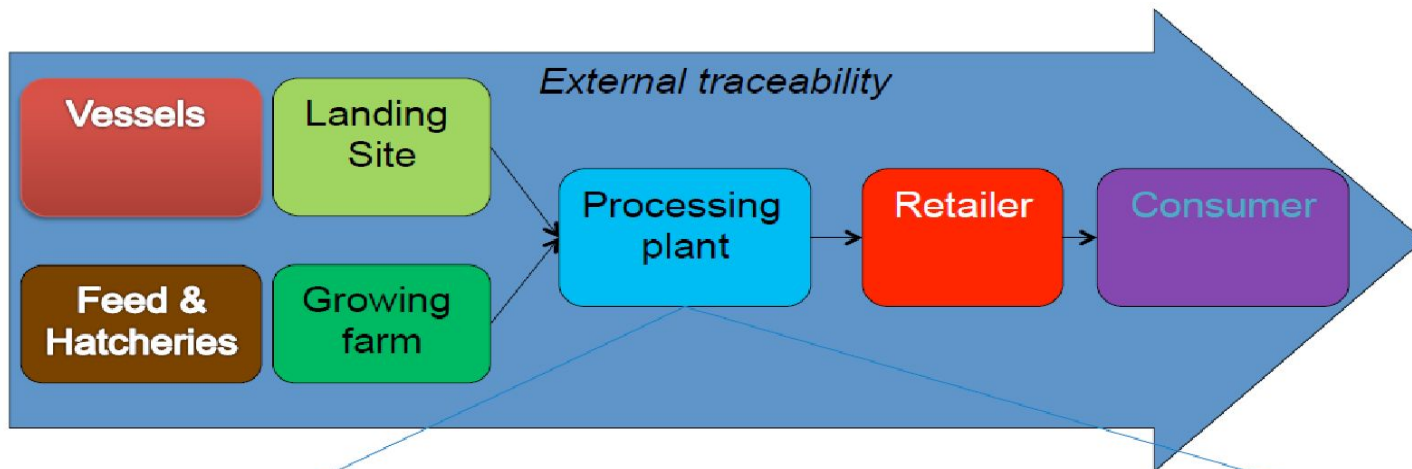
- Codex Alimentarius: “Traceability/ product tracing: the ability to follow the movement of a food through specified stage(s) of production, processing and distribution.”
- “...ability to track any food, feed, food producing animal or substance that will be used for consumption through all stages of production, processing and distribution”. Regulation (EC) 178/2002
- ISO: “...ability to trace and follow food, feed, and ingredients through all stages of production, processing and distribution. ISO 8402



Internal and external traceability



External traceability (1/2)



Regulation (EC) No 931/2011 of 19 September

- Communication of food operators with suppliers and customers

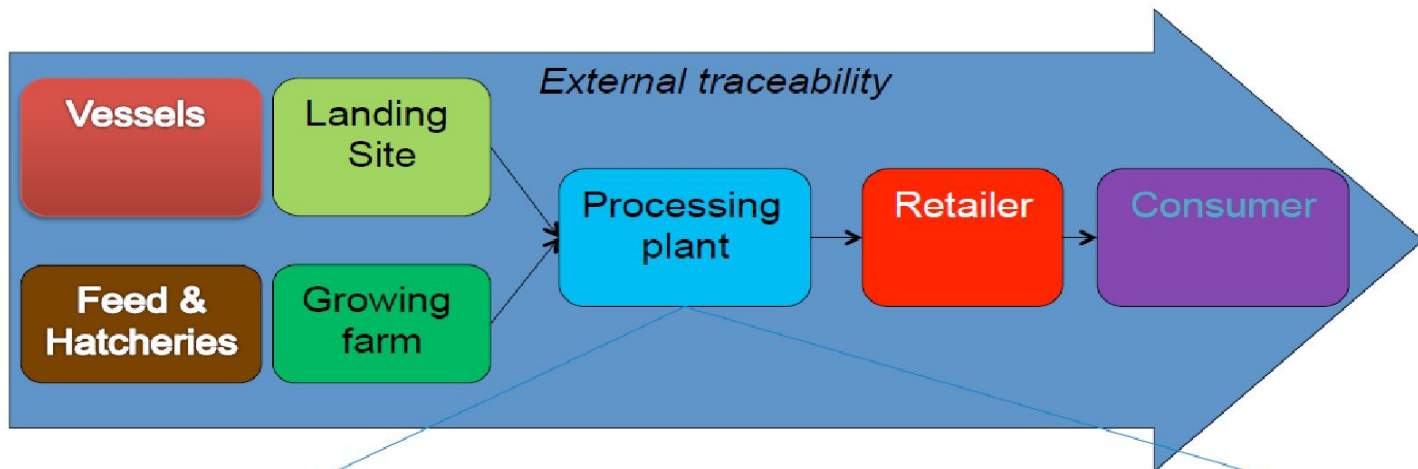
Food operators have to:

- give a **unique identification** or batch/lot number to all supplied products
 - raw material
 - ingredients, additives, etc.

With **additional information** such as description of the food, quantity/volume of the food, name and address of the supplier and recipient, date of dispatch.



External traceability (2/2)

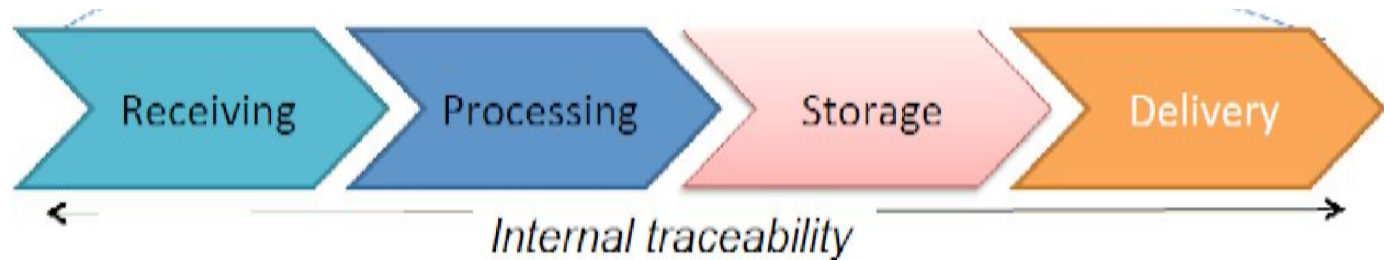


- share this information between members of the supply chain (N-1; N+1) ,
- on request, share the information with the Competent Authority.

Such information is communicated by labels:

- Paper-based documents
- Computerized documents.

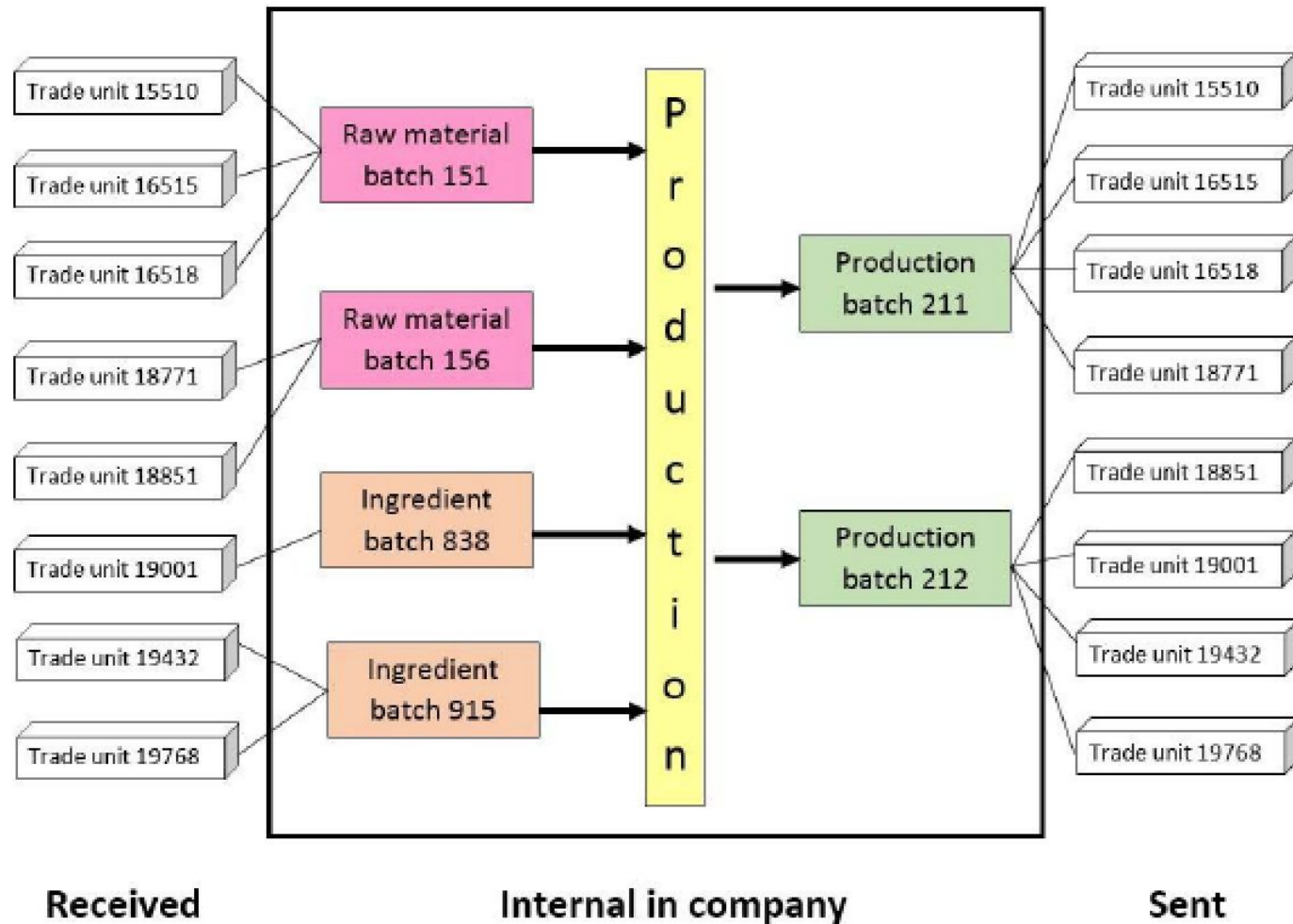
Internal traceability



Food operators have to detail each step from raw materials to supplied finished product, for only internal use.

In case, at one of these steps, there is mixing, splitting, processing, repacking, each new product must have its own batch identifier, related to the parent one.

Internal traceability



Batch: could be “raw material batches” (fish component), “ingredient batches” (other components) and “production batches”

Trade unit: quantity of material (fish product) that is sold by one trading partner to another.



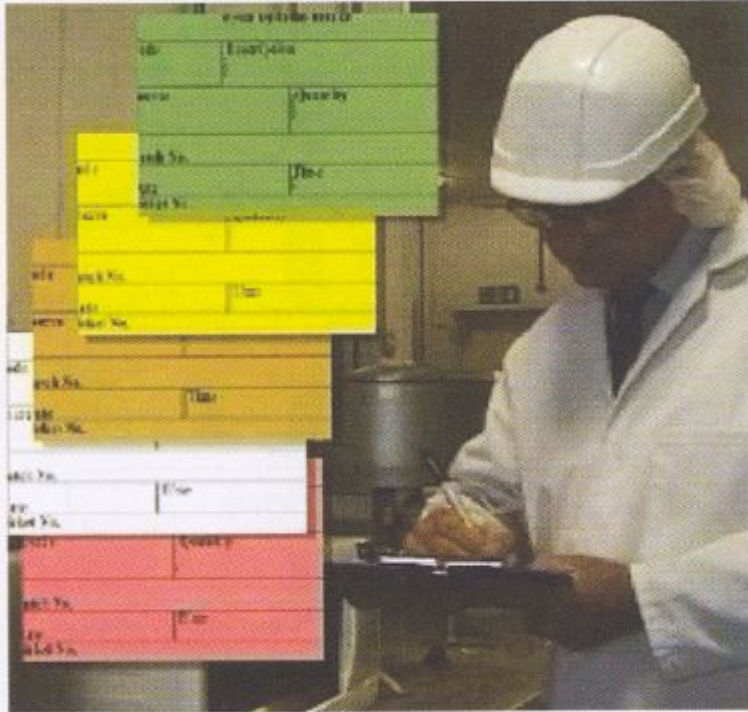
Traceability systems

- Traceable unit to be singularly characterized
 - batch, lot
- Packaged product or traded item: carton, crate
- Logistic unit: bin, container, etc.
- A shipment , movement of a product...
 - Serial number
- To ensure the traceability of each lot/batch, it should be adequately labelled
 - Tag, sticker, printing on product packaging



Traceability systems

Simple traceability systems on paper



Raw material intake tickets colour coded by day of arrival e.g. Monday - pink Tuesday - white etc.

Traceability on paper / Raw material reception

Color code and manual record on forms

Traceability systems

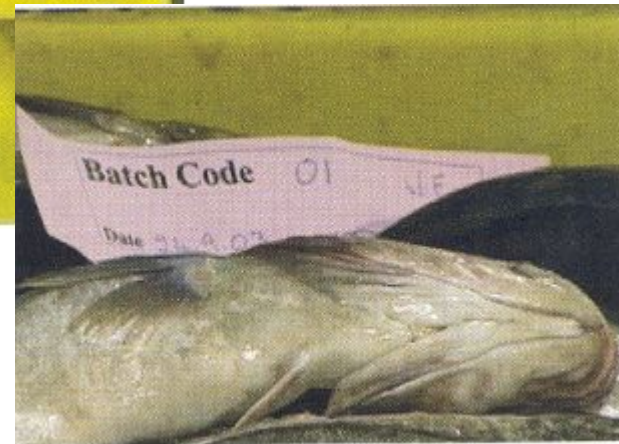
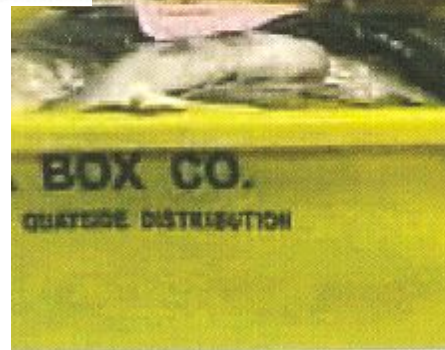
Simple traceability systems on paper

INTAKE TICKET		1
Code <i>1121</i>	Description <i>Haddock Large Gutted Fresh</i>	
Source <i>Jubilee (agent)</i>	Quantity <i>150x 40kgs</i>	
Batch No. <i>01</i>	Time <i>07.30</i>	
Date <i>24/09/03</i>		
Ticket No. <i>1 of 10</i>		

Simple records and one or more labels. Labels are used to convey internal on paper.



Label



Record

Traceability systems

Combined systems: forms and electronic records



Fish box labels with product information both written and in bar code (above).

Product information input to a computer by using a handheld scanner (below).



Additional information can be entered into the scanner using the key-pad (above).

Traceability systems

- Required information on the label vary according to the relevant regulatory framework (*next presentation- EU Food Law*)
- But commonly required:
 - Identification number of each lot
 - Fish operator identification/Aquaculture production unit
 - Commercial designation and scientific name
 - Production method description
 - Net weight
 - Date marking and storage information to consumers
 - Allergens

