

"From Farm to Fork" :
Food traceability in the
EU



Food Traceability

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What is traceability?



International
Organization for
Standardization

ISO 8402:1994

- *Traceability is the ability to trace the history, application or location of an entity by means of recorded information*



What is traceability?

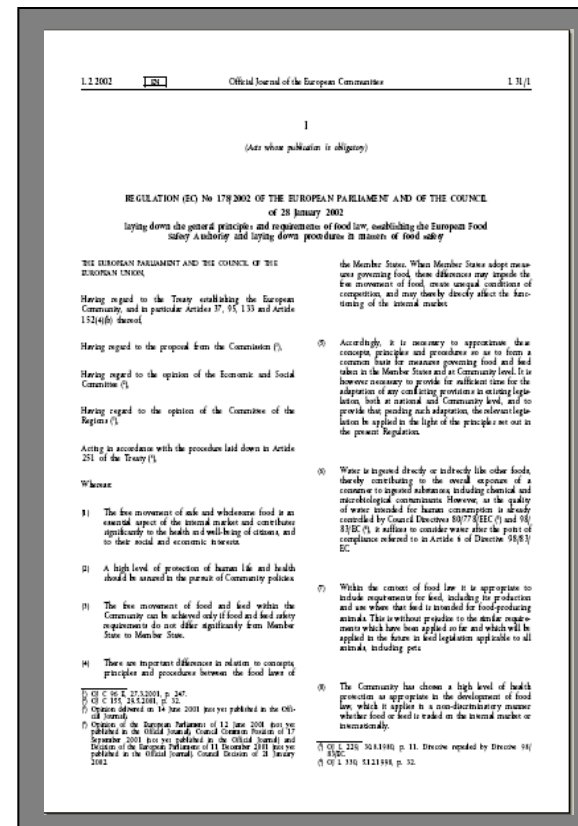
Regulation (EC) No 178/2002 (Food Law)

Traceability means the ability to trace and follow:

- a food,
- a feed,
- a food-producing animal or
- a substance intended to be, or expected

to be incorporated into a food or feed, through all stages of:

- production,
- processing or
- distribution.



► ***What is required from business operators?***

(1) Food and feed business operators shall be able to identify any person from whom they have been supplied with a food, a feed, a food-producing animal, or any substance intended or expected to be incorporated into a food or a feed.

To this end, such operators shall have in place systems which allow for this information to be made available to the competent authorities on demand.

ONE STEP BACK

- ***What is required from business operators?***
- (2) Food and feed business operators shall have in place systems and procedures to identify the other businesses to which their products have been supplied.***

This information shall be made available to the competent authorities on demand.

ONE STEP FORWARD

► Is internal traceability required?

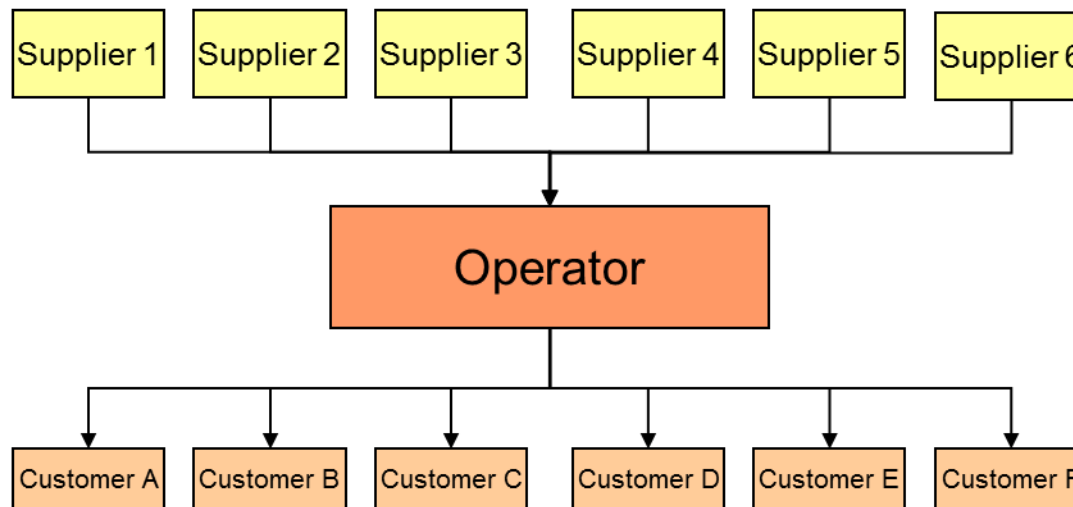
Business operators are **not obliged** to establish a link between incoming and outgoing products.

However, food business operators are **encouraged** to develop systems of internal traceability designed in relation to the nature of their activities (food processing, storage, distribution, etc.).



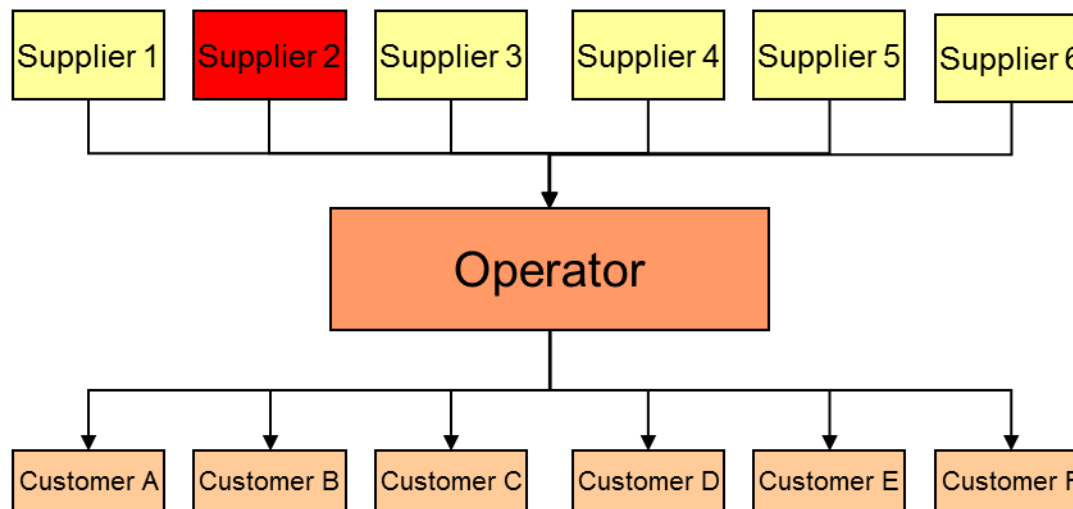
► Is internal traceability required?

Is a business operator obliged to **match inputs** and **outputs**?



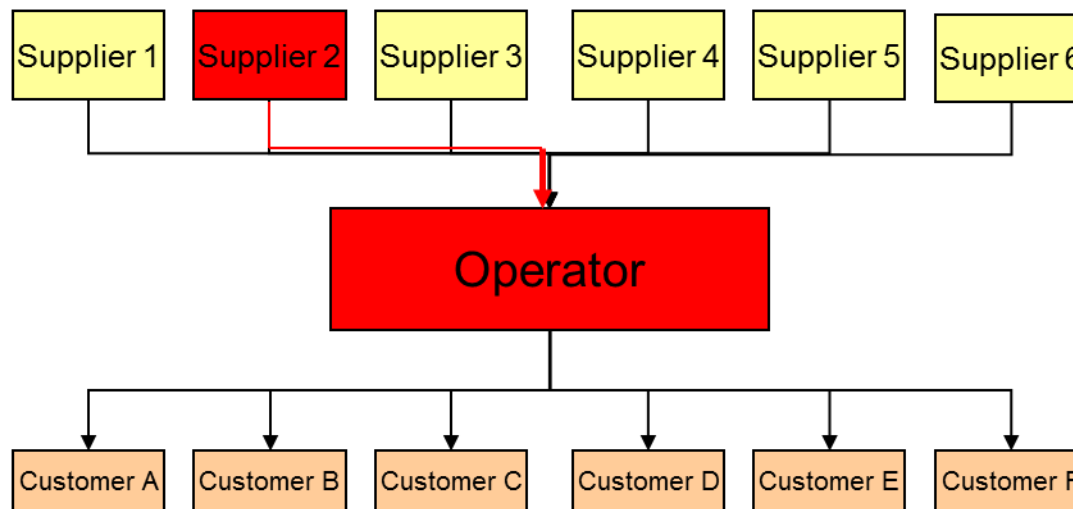
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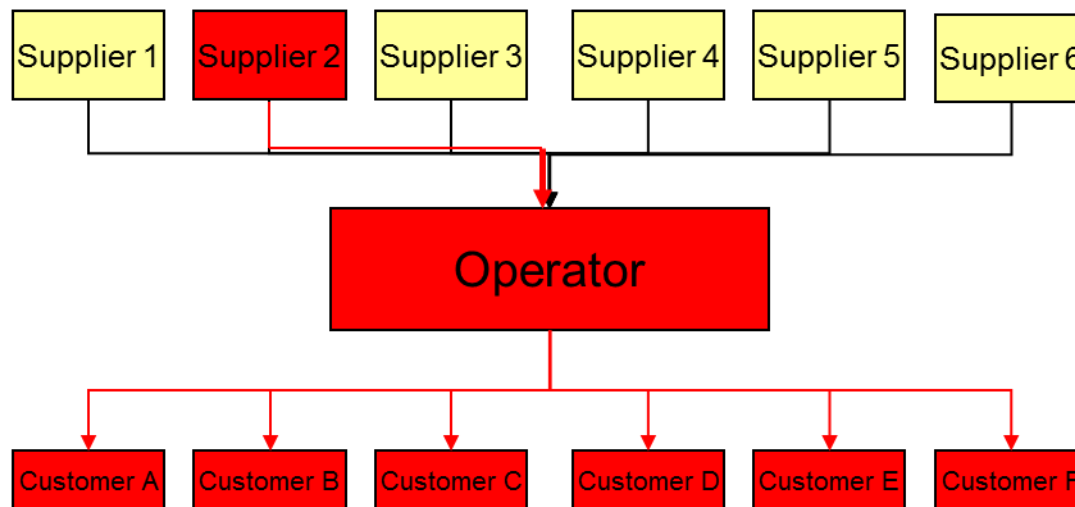
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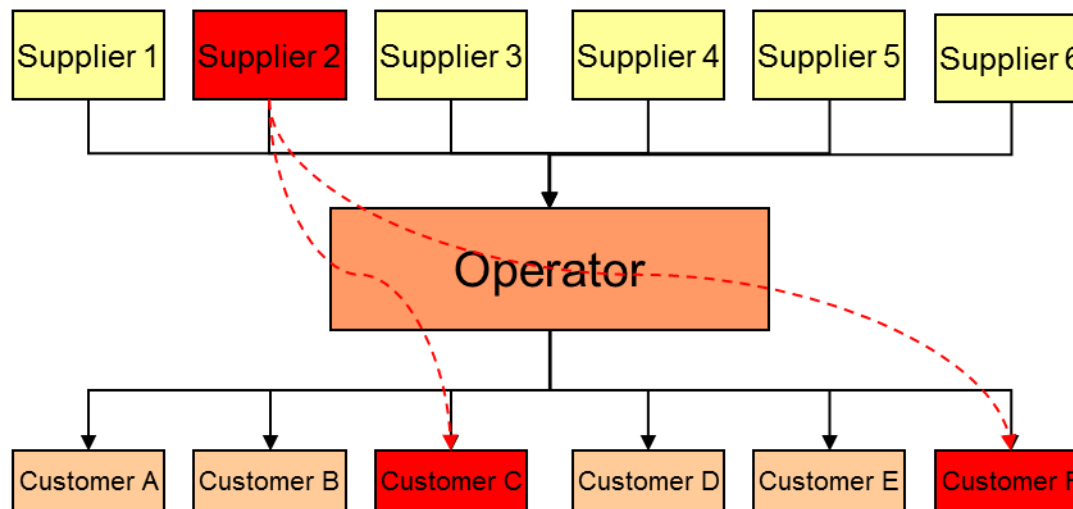
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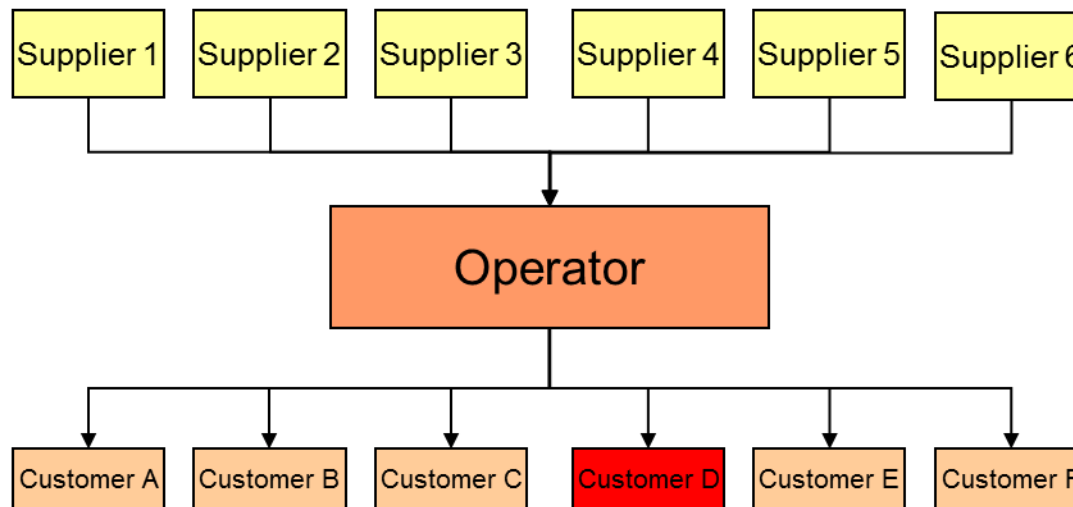
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Is a business operator obliged to **match inputs** and **outputs**?



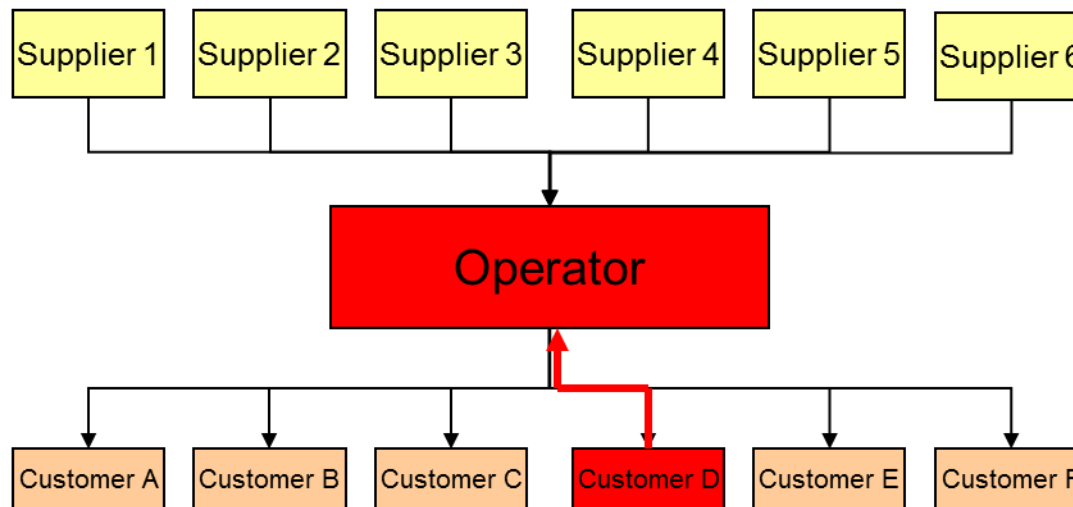
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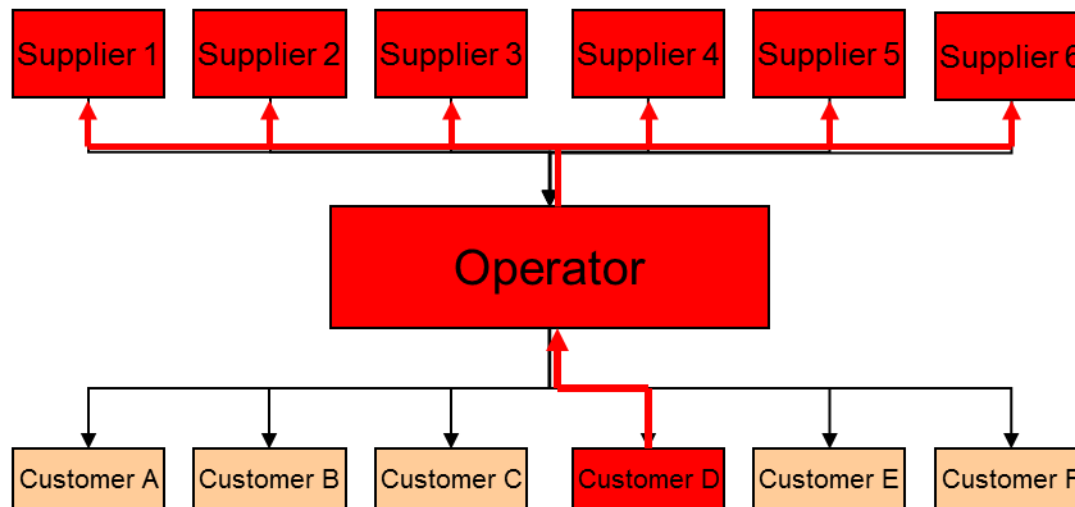
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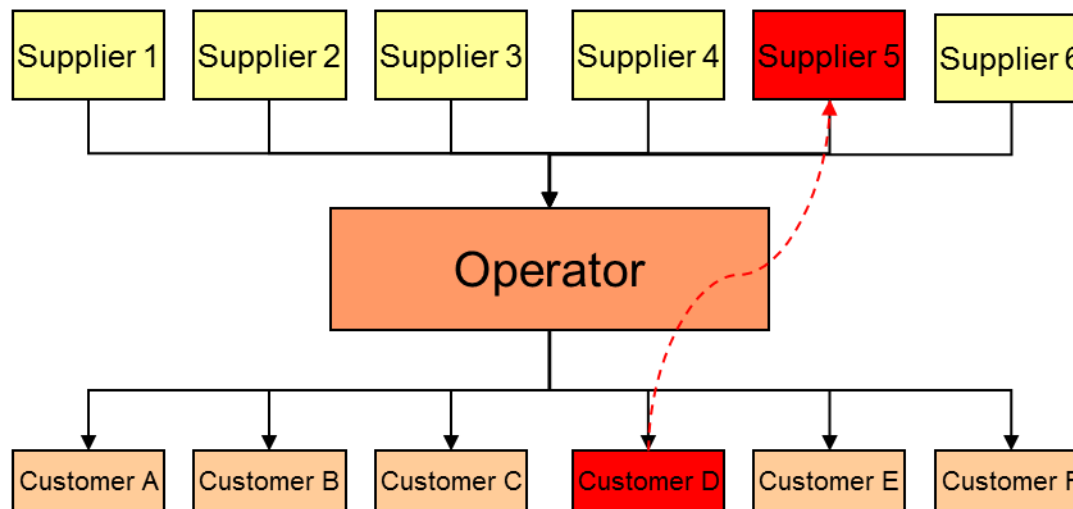
► Is internal traceability required?

Is a business operator obliged to **match inputs** and **outputs**?



► Is internal traceability required?

Is a business operator obliged to **match inputs** and **outputs**?



- ▶ **Pre-packaged food : batch number**
- ▶ **Directive 2011/91/EU** : a food may not be marketed unless it is accompanied with an indication of the lot to which the food belongs

- ▶ **Exemptions :**

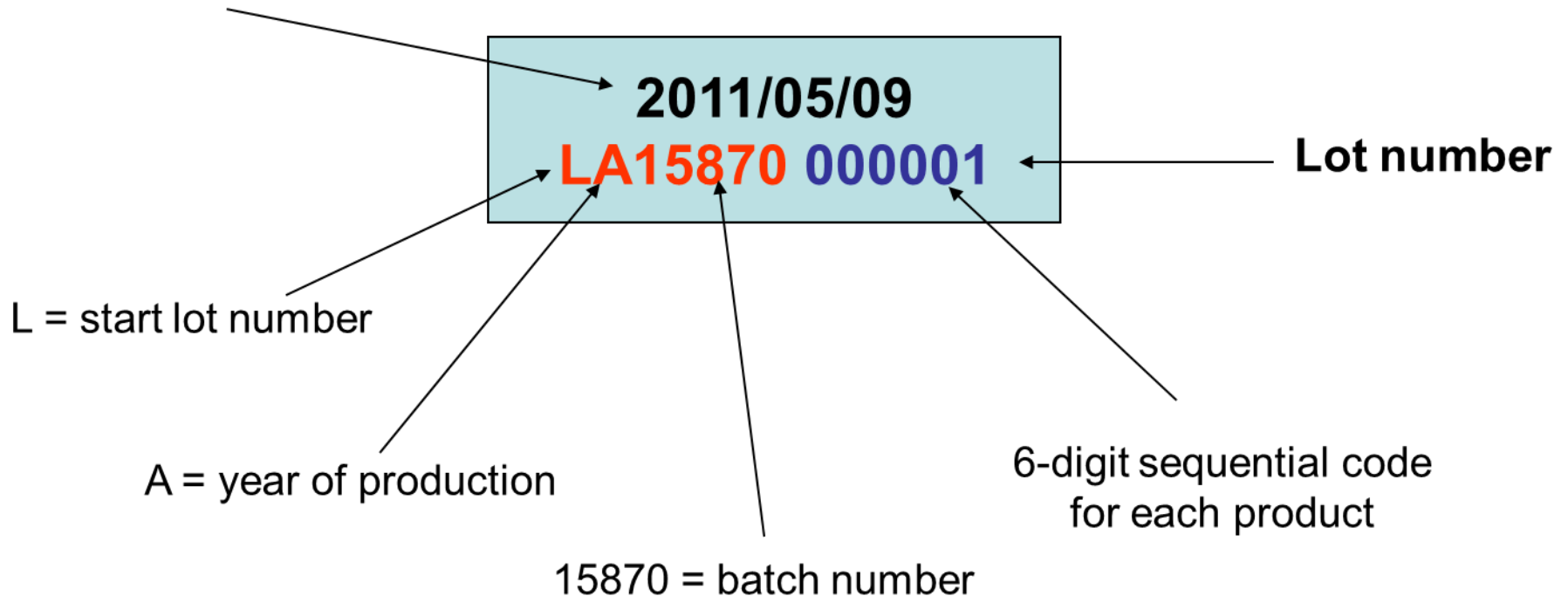
- ▶ Certain agricultural products
- ▶ Food not pre-packaged (packaged to consumer)
- ▶ Packages/containers, largest side less 10 cm²
- ▶ Individual portions of ice cream



► Pre-packaged food : lot number

Date of production

YYYY/MM/DD



► Counterfeiting of wine & spirits in China



► What is required from business operators?

(1) **ONE STEP BACK**

(2) **ONE STEP FORWARD**

(3) **LABELLING / IDENTIFICATION**

Food or feed which is placed on the market in the EU shall be adequately labelled or identified to facilitate its traceability, through relevant documentation or information in accordance with the relevant requirements or more specific provisions.



► What is required from business operators?

(1) **ONE STEP BACK**

(2) **ONE STEP FORWARD**

(3) **LABELLING / IDENTIFICATION**

(4) **SPECIFIC REQUIREMENTS**
may apply in certain sectors



► How is traceability organised?

Regulation No 178/2002 is non-prescriptive → flexibility.

However, there are specific requirements laid down in vertical legislations:

- Live animals
- Beef meat
- Fish
- Eggs
- Fruits & vegetables



► Live animals:

Producers are obliged to maintain registers indicating:

- feedstuffs used;
- medical treatments (drugs, etc.)
- results of lab test etc.



Bovine:

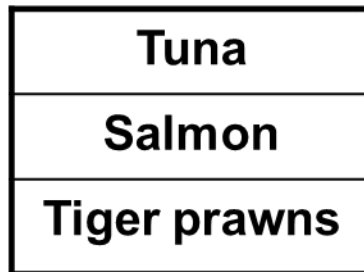
- have to carry ear tags
- any movement must be recorded



► Fish (when sold to the final consumer)

The labelling must bear:

- the commercial designation of the species



Tuna
Salmon
Tiger prawns



► Fish (when sold to the final consumer)

The labelling must bear:

- the commercial designation of the species
- the production method

Tuna	caught
Salmon	caught in freshwater
Tiger prawns	farmed (or cultivated)



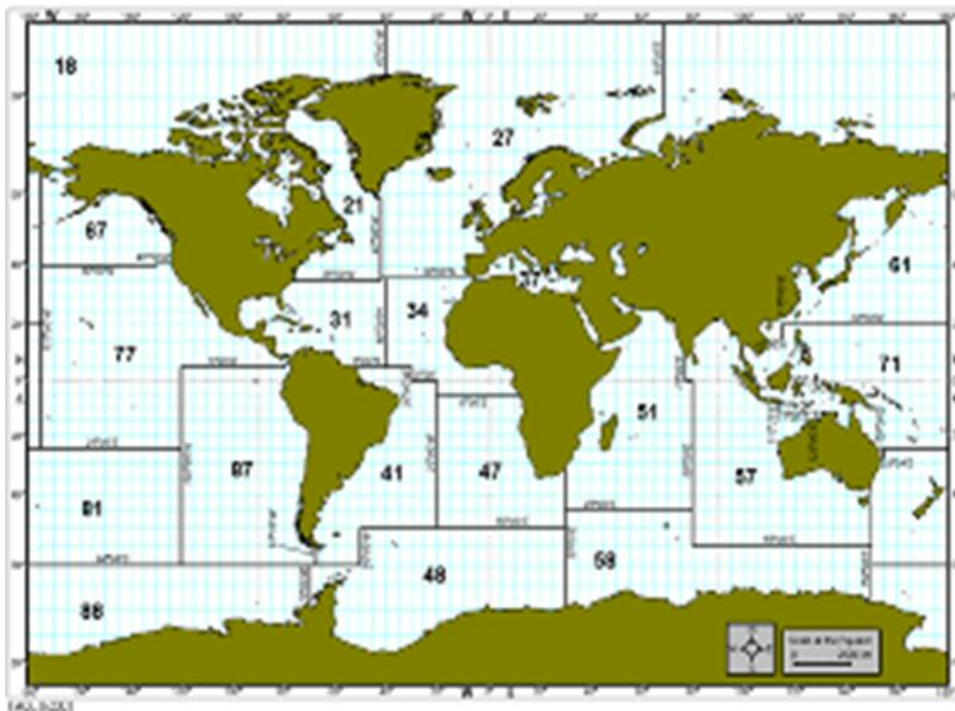
► Fish (when sold to the final consumer)

The labelling must bear:

- the commercial designation of the species

- the production method

- the catch area



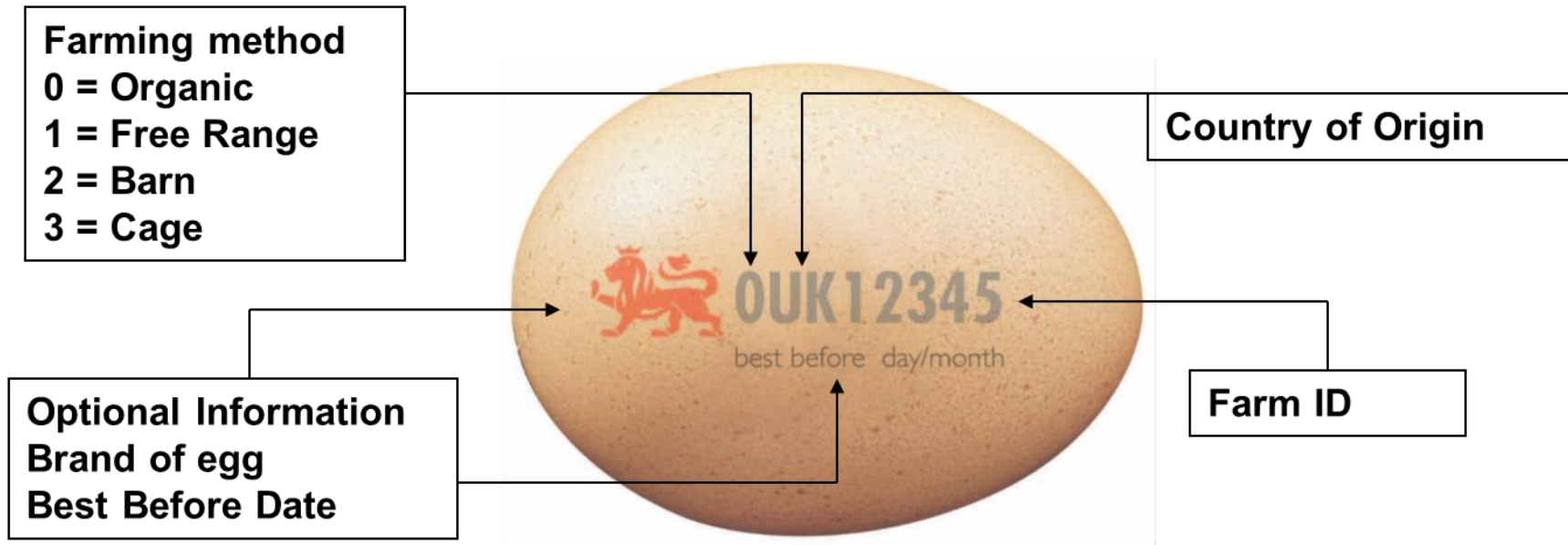
in the Pacific Ocean

in Norway

In Thailand

► Eggs:

- Category A: have to bear a code



- Category B: have to bear a mark

► Fruits and vegetables:

Producers must maintain registers indicating treatments (e.g. pesticides) applied and results of lab tests.



► Fruits and vegetables:

Common marketing standards lay down the specific indications which products must bear, such as:



Origin

Category

Weight

Traceability code

► How long should records be kept?

Shelf life	Time or records keeping
Not specified	5 years

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Shelf life	Time or records keeping
Not specified	5 years
Shelf life > 5 years	Shelf life + 6 months

► How long should records be kept?

Shelf life	Time or records keeping
Not specified	5 years
Shelf life > 5 years	Shelf life + 6 months
« Use by » date < 3 months	6 months after manufacturing

The case of Animal Identification and Traceability

➤ **Animal Identification & Traceability**

- ✓ *A traceability system cannot be achieved without costs*
- ✓ *It is necessary that the AI & T system are proportionate to the objective and goals to be achieved*
- ✓ *Depends on the objective*
- ✓ *Depends on the animal species*

➤ **Animal Identification and Traceability**

The objectives in the EU are several:

- 1. *Consumer protection & information***
- 2. *Human health***
- 3. *Animal health***
- 4. *Food Crisis***
- 5. *Fraud Prevention***
- 6. *Ensuring the functioning of a single market
(28 Member States)***

➤ **Animal Identification and Traceability**

Other major reason is the Regionalization:

- o facilitates trade despite the presence of highly contagious diseases in a region or country
- o We must know the origin of the animal and the time spent in certain areas / regions
- o The export place (place of dispatch) does not seem to be sufficient in the EU ("*one-step-back*")
- o We require further information on the "previous" movements the animal

➤ **Animal Identification and Traceability**

*An efficient AI & traceability system must rely on **four pillars**:*

- 1. Individual identification of each animal with two ear tags (depending on the species)**
- 2. A register in each holding (e.g. farm, live animal markets, slaughterhouse) and a listing of all holdings**
- 3. Individual passport for each animal which contains information on all animal movements**
- 4. A computerized database capable of tracking the animal quickly in case of illness and including untill its parents**

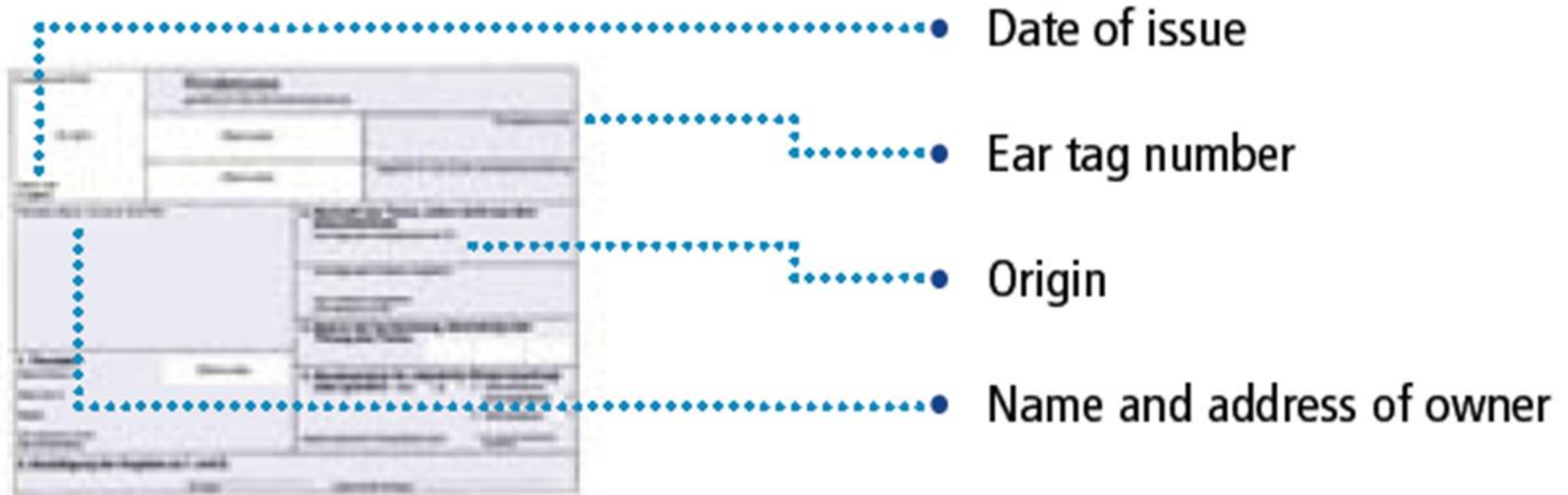
► Live animals:

Bovine have to carry ear tags:



► Live animals:

Bovine have a passport:



- **Beef** (when sold to the final consumer):
Label of pre-packaged products
must bear:



Traceability bar code

Country where animal was born

Country where animal was fattened

Country where animal was slaughtered

➤ **Animal Identification and Traceability**

- *The final test of the effectiveness of a traceability system depends very much on the **performance of the database***
- *Important: this effectiveness will depend on how the database is "fed" with the necessary information*
- *This responsibility to "feed" the database depends heavily **on farmers***

➤ **Animal Identification and Traceability**

- ❑ *Different rules have been adopted in depending on the species:*
 - ❑ **For cattle:** *Regulation 1760/2000*
 - ❑ **For sheep and goats:** *Regulation 21/2004*
 - ❑ **For pork:** *Directive 2008/71*
 - ❑ **For horses:** *Regulation 504/2008*
 - ❑ **For pets:** *Regulation 998/2003*
 - ❑ *They all share certain fundamental principles but may change in the accessory (type of identifier, type of registration, passport or for movement)*



➤ Animal identification and traceability

<u><i>Specie</i></u>	<u><i>Identification</i></u>	<u><i>Traceability (Registration of movements)</i></u>
<i>Bovine</i>	Individual	Individual (National Database)
<i>Ovine/caprine</i>	Individual (IED)*IE – <i>Comulsory for animals born from 1 January 2010</i>	Individual (Holding) and by lot (National Database)
<i>Porcine</i>	Lot/Batch	Lot/Batch (National Database)
<i>Horse</i>	Individual (IED)	N/A
<i>Pets</i>	Individual (IED)	N/A

➤ **Animal Identification & Traceability**

**Regulation (EC) No 1760/2000 of the European Parliament and the Council
for the identification and registration of bovine animals**

➤ *Definitions*

- **Scope: Bovine and buffalo**
- ***"holding"* any establishment, construction or open-air farm situated in the territory of a MS in which animals are held, kept or handled**
- ***"keeper"*: any natural or legal person responsible for the animals, on a permanent or temporary bases, including during transportation or at a market**

➤ **Animal Identification & Traceability**

**Regulation (EC) No 1760/2000 of the European Parliament and the Council
for the identification and registration of bovine animals**

- *Introduction of AI in the EU was done with the formula:*
 - **One ear tag approved by the CA applied in each ear**
 - **“Animals born after X date”...(after 1 January 1998)**
 - **More than one system of AI co-existing at the same time**

- *Other formulas:*
 - **“Big bang” (one/off): all animals**
 - **usually preferred by the Industry**

➤ **Animal Identification & Traceability**

**Regulation (EC) No 1760/2000 of the European Parliament and the Council
for the identification and registration of bovine animals**

➤ *The ear-tags must be applied:*

- **At the latest 20 days after birth**
- **Before in case the calf leaves the holding of birth**
- **Imported animals (from Third Countries):**
 - To be “EU re-identified” at the holding of destination at the latest within 20 days- it gets into the EU system
 - The original identification (TC) must be registered in the database/holding register so origin can always be traced-back

Animal Identification & Traceability

Regulation (EC) No 1760/2000 of the European Parliament and the Council
for the identification and registration of bovine animals

- *"Animal moving between different MS shall retain its original ear tag" (makes origin labelling possible)*
- *No ear-tag must be **removed or replaced** without the permission of the CA*
- *Provisions on **distribution and allocation** of ear-tags: a proper system must be in place (public/ private?)*

➤ **Animal Identification & Traceability**

**Regulation (EC) No 1760/2000 of the European Parliament and the Council
for the identification and registration of bovine animals**

➤ *The bovine database:*

- **Competent Authority must set up a database in accordance with Art. 14 and 18 of Council Directive 64/432**
- **Data Base must be fully operational and able to store all the data required in 64/432**

➤ **Animal Identification & Traceability**

**Regulation (EC) No 1760/2000 of the European Parliament and the Council
for the identification and registration of bovine animals**

➤ *DB must contain at least the following information:*

- **"For each animal:**

- the identification code,
- date of birth,
- sex,
- breed or colour of coat,
- identification code of the mother or, in the case of an animal imported from a third country, the identification number given following inspection and the corresponding to the identification number of origin,
- identification number of the holding where born,
- identification numbers of all holdings where the animal has been kept and the dates of each change of holding,
- date of death or slaughter,

➤ **Animal Identification & Traceability**

**Regulation (EC) No 1760/2000 of the European Parliament and the Council
for the identification and registration of bovine animals**

➤ *For each holding:*

- **An identification number consisting on not more than 12 digits (apart from the country code)**
- **Name and address of the holder**

➤ **Animal Identification & Traceability**

**Regulation (EC) No 1760/2000 of the European Parliament and the Council
for the identification and registration of bovine animals**

➤ *The Data Base must be able to supply:*

- **The identification number of all bovines present on a holding**
- **A list of all changes of holding for each animal starting from the holding of birth (or importation)**
- **Information shall be kept at the DB for minimum of 3 years after death of the animal**

➤ **Animal Identification & Traceability**

Regulation (EC) No 1760/2000 of the European Parliament and the Council for the identification and registration of bovine animals

➤ *Passports:*

- **One bovine, one passport**
 - Within 14 days after notification of birth
 - Within 14 days following EU re-identification for imported animals
- **Whenever the bovine moves, shall be accompanied by its passport**
- **Passports shall be completed by keeper:**
 - Immediately on arrival into the holding
 - Prior departure off the holding



The image shows a sample of a British Cattle passport, which is a yellow document with a red border. It contains the following information:

- Animal eartag:** UK123456789012
- Animal details:** Breed / Brif: HOLSTEIN, Sex / Rhyw: FEMALE, Born / Ganwyd: 01 01 2001
- Date the passport was issued and re-issued:** Issue / Version: 02 01 2001 / 01, Re-issue / Version: 01 02 2001 / 02

Labels with lines pointing to the passport fields:

- Animal eartag
- Animal details: Breed, Sex, Date of Birth and Genetic Dam
- Date the passport was issued and re-issued

➤ **Animal Identification & Traceability**

**Regulation (EC) No 1760/2000 of the European Parliament and the Council
for the identification and registration of bovine animals**

- **Death/Slaughter: passport to be
surrendered by keeper to the CA within 7
days**
- **Data Base must be able to provide at any
time the same information as to be
contained in the passport**
- **Not for intra-EU trade**

➤ **Animal Identification & Traceability**
Control and audit

- *A system of control on AI & T has to be in place*
- *FVO audits in MS and in third countries*
- *MS set up systems to ensure the compliance of CR 1760/2000:*
 - Minimum level of **controls** to be carried out
 - Application of **administrative sanctions**
- *Potential non-compliances:*
 - **For animal identification**
 - **For animal registration**
 - **For report of animal movements**
- *Sanctions could be imposed*
 - **Restrictions to bovine movements to or from the holding concerned, where justified**
 - **If the identification cannot be provided within two days, the animal could be destroyed and declared not fit for human consumption**
 - **Will depend on the number of non-compliant animals per holding (e.g.20% holding blocked)**

➤ **Animal Identification & Traceability**
Control and audit

- ☐ *Shall cover at least **10% of holdings***
- ☐ ***Minimum rate of controls** shall be increased when non compliances are found*
- ☐ ***Selection of holdings** should be based on a risk analyses*
- ☐ ***Risk analyses** shall take into account:*
 - ☐ **Number of animals in the holding**
 - ☐ **Public and animal health considerations and in particular, existence of previous outbreaks of disease**
 - ☐ **The amount of annual premium claimed or paid to the holding**
 - ☐ **Major changes in relation to previous years**
 - ☐ **Results of checks carried out in previous years (including the keeping of the register and of animal passports)**
- ☐ *A report shall be produced per every inspection.*
- ☐ *If major infringement detected, the relevant CA should be informed asap*
- ☐ *If for practical reasons it is not possible to assemble the animals within 48 hours: alternative sampling system*
- ☐ *On-the-spot checks should be unannounced*

➤ **Animal Identification & Traceability**
Control and audit

- *Member states shall take all the necessary measures **to ensure compliance with the provisions of the EU legislation***
- *Sanctions should be applied where non-compliance on identification and registration leads to a presumption of infringement of the EU law which may endanger human or animal health*
- *EU law lays down the **minimum administrative sanctions** , leaving open the possibility for MS to go far beyond taking into account the seriousness of the infringements*
- *Any sancitons must be proportional to the gravity of the breach*

➤ **Animal Identification & Traceability**
Control and audit

- *Experts from the Commission (FVO) shall verify that the MS is complying with the requirements of the EU legislation and shall make on-the-pot checks*
- *Regular FVO inspection missions are carried out in MS and in third countries.*
- *Membre States must produce an annual report on bovine and sheep and goats controls on animal identification containing information on:*
 - **Number of holdings**
 - **Number of inspections**
 - **Number of animals inspected**
 - **Breaches found**
 - **Sanctions imposed**
 - **and sent to the COM for publication**

➤ **Animal Identification & Traceability**
Control and audit

➤ *Holding Registration:*

- **Every keeper (apart from drivers) must:**
 - Keep an up-to-date register
 - To report to the CA (3-7 days):
 - All movements to and from the holding
 - All births
 - All deaths
 - Dates of those events
 - *Derogation: extend the maximum period for movements of summer grazing on different mountain areas...*

➤ **Animal Identification & Traceability**
Control and audit

- ❑ *Format of the holding register approved by CA*
- ❑ *Kept in manual or computerised form*
- ❑ *Available at all times to the CA*
- ❑ *Kept for 3 years*

➤ **Animal Identification & Traceability**
Control and audit

- *Each keeper shall supply to the CA of its Member State upon request, information on:*
- **Origin**
 - **Identification**
 - **Destination of the animals which he has owned, kept, transported, marketed or slaughtered**

➤ **Animal Identification & Traceability**
Control and audit

- *If a keeper fails to report **animal movements**, birth or deads:*
- **The CA shall restrict movement of animals to and from the holding**

Animal Identification & Traceability

Control and audit

- *If the animals comply only **with some of the provisions** on animal identification and registration: only the affected animals will be restricted, unless the number of animals exceeds 20% of the total number of the holding* (in holdings of less than 10 animals, this will apply only if the number will be more than 2)*
- *In this case all animals in the holding will be restricted (out and in)*
- *If one or more animals on a holding comply with **none** of the provisions, all animals in the holding will be restricted (out and in)*



Thank you!