Quality Assurance. **From farm to shop.**

Traceability requirements for fresh fruit and vegetables, meat and meat products in Germany

Oliver Thelen
QS Qualität und Sicherheit GmbH, Bonn/Germany

Traceability of Agricultural Produce
UNECE Conference, 3 November 2015
Geneva, Switzerland

Quality Assurance. **From farm to shop.**

Risk and responsibility

Food industry is susceptible to crises

Food industry is characterized by

- sensitive, delicate, fragile, susceptive, unstable products
- infinite mass of products
- uncountable businesses, heterogeneous operating structures

Food industry

- supplies with agricultural produce the total population, including the weak (elderly, children, sick people)
- penetrates with agricultural produce into their private sphere
- is constantly faced with widespread scepticism in the public
- has to deal with a weak public knowledge about products, processing and marketing of agricultural produce

Particular risk and a special responsibility of the food industy!

Quality Assurance. **From farm to shop.**

Risk and responsibility

Increasing responsibility of the food industry

incrasing concentration process along the supply chain

increasing responsibility of the economy Reg. (EC) No. 178/2002

increasing globalization of trade flows

increasing relevance of public discussion on social topics

The food and feed business operators at all stages of production, processing and distribution **ensure** the requirements of **food** and **feed law** and and **verify compliance with these requirements**.

Companies **are liable for**

the **safety** of their food and feed products

all **damages** caused by feed or food imported, produced, processed, manufactured or distributed

high self-interest in security

Dioxin
communicative crisis
January 2011

EHEC
operational crisis
May-July 2011

Quality Assurance. **From farm to shop.**

Self-assessment

Important role in the system of consumer health protection

System of consumer health protection

Official control (authorities)	Self-assesment (food industry)

417 district veterinary offices supervise food safety regulations

- in the system of consumer health protection <u>equivalent</u> to official control
- since regulation (EC) No. 178/2002 <u>applicable law</u>

QS. Quality scheme for food.

methodical, systematic quality assurance

additional safeguarding through QS certification

Quality Assurance. **From farm to shop.**

Quality assurance: the QS idea

Process-oriented quality assurance – across all stages

QS. Quality scheme for food.

involving pre- and downstream stages of production and marketing, borne by the food industry, communicated to the consumer

- using short communication channels
- building mutual trust
- establishing a common understanding
- pursueing common goals
- facing crises together
- gaining credibility of the businesses

Quality Assurance. **From farm to shop.**

Quality assurance: the QS idea

Process-oriented quality assurance – across all stages

QS. Quality scheme for food.

Hygiene control temperature registration **sampling plans** HACCP **labelling of allergenic substances** recipies **animal welfare** salmonella reduction plan **animal labelling** animal health **veterinary drugs** salmonella monitoring **feed medication** raw materials **mix protocols** contamination matrix

Quality Assurance. **From farm to shop.**

Quality assurance: the QS idea

Process-oriented quality assurance – across all stages

quality assurance at supplier stage | **internal quality control self assessment** | **quality assurance at customer stage**

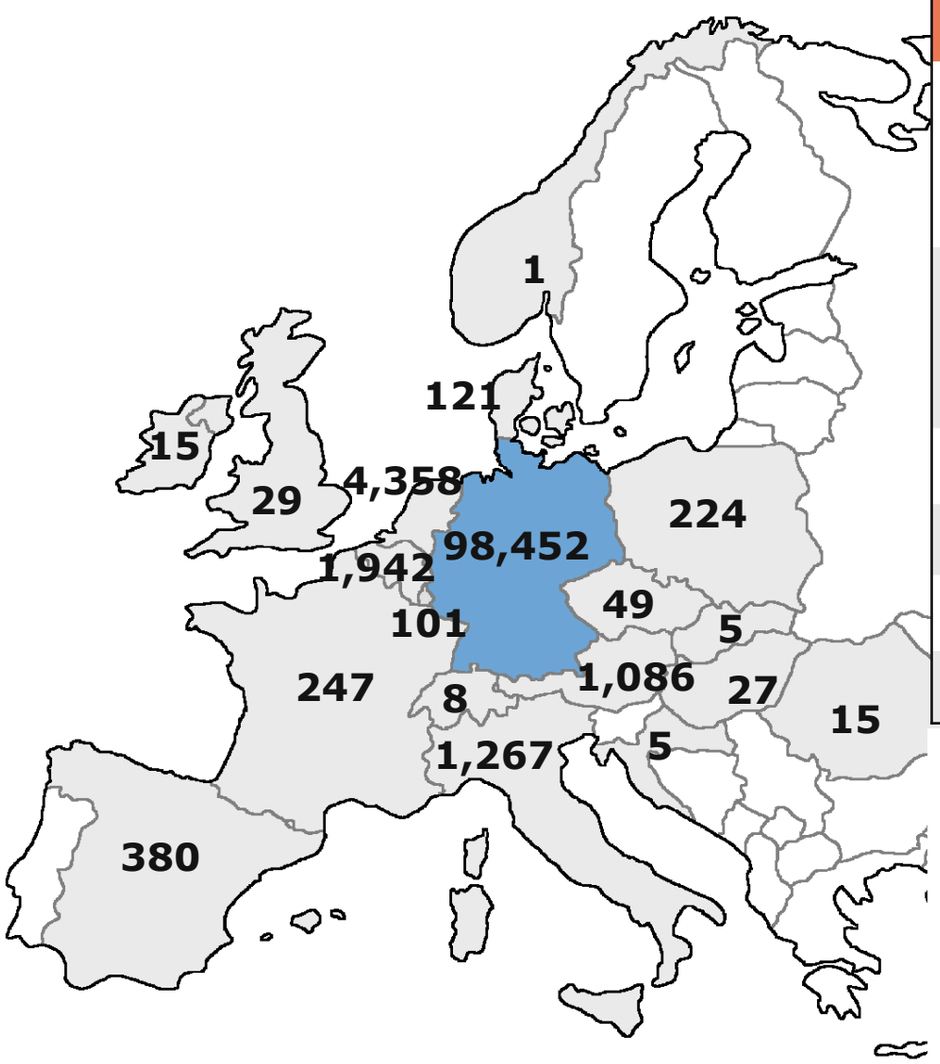
QS. Quality scheme for food.

Labelling self assessment **hygiene** trainings **incoming goods inspection** traceability **storage and transport conditions** plant protection **fertilisation** usage of authorized agents **exceedance of maximum residue levels**

Quality Assurance. **From farm to shop.**

Scheme participation

Focus on German consumer, international relevance



Stage	Total	Germany	Other countries
	108,137	**98,452**	**9,685**
Feed sector	**3,730**	**3,039**	**691**
- feed material production[1,2]	1,158	977	181
- compound feed production[3]	1,250	919	331
- trade, transport, storage[4]	1,322	1,143	179
Agricultural production	**78,135**	**69,901**	**8,234**
- cattle farming[5]	34,335	33,706	629
- pig farming[6]	39,010	33,163	5,847
- poultry farming/hatcheries	4,790	3,032	1,758
Livestock transport	**1,910**	**1,603**	**307**
Slaughtering/deboning	**465**	**355**	**110**
Processing[7]	**411**	**384**	**27**
Food retail[8]	**23,486**	**23,170**	**316**

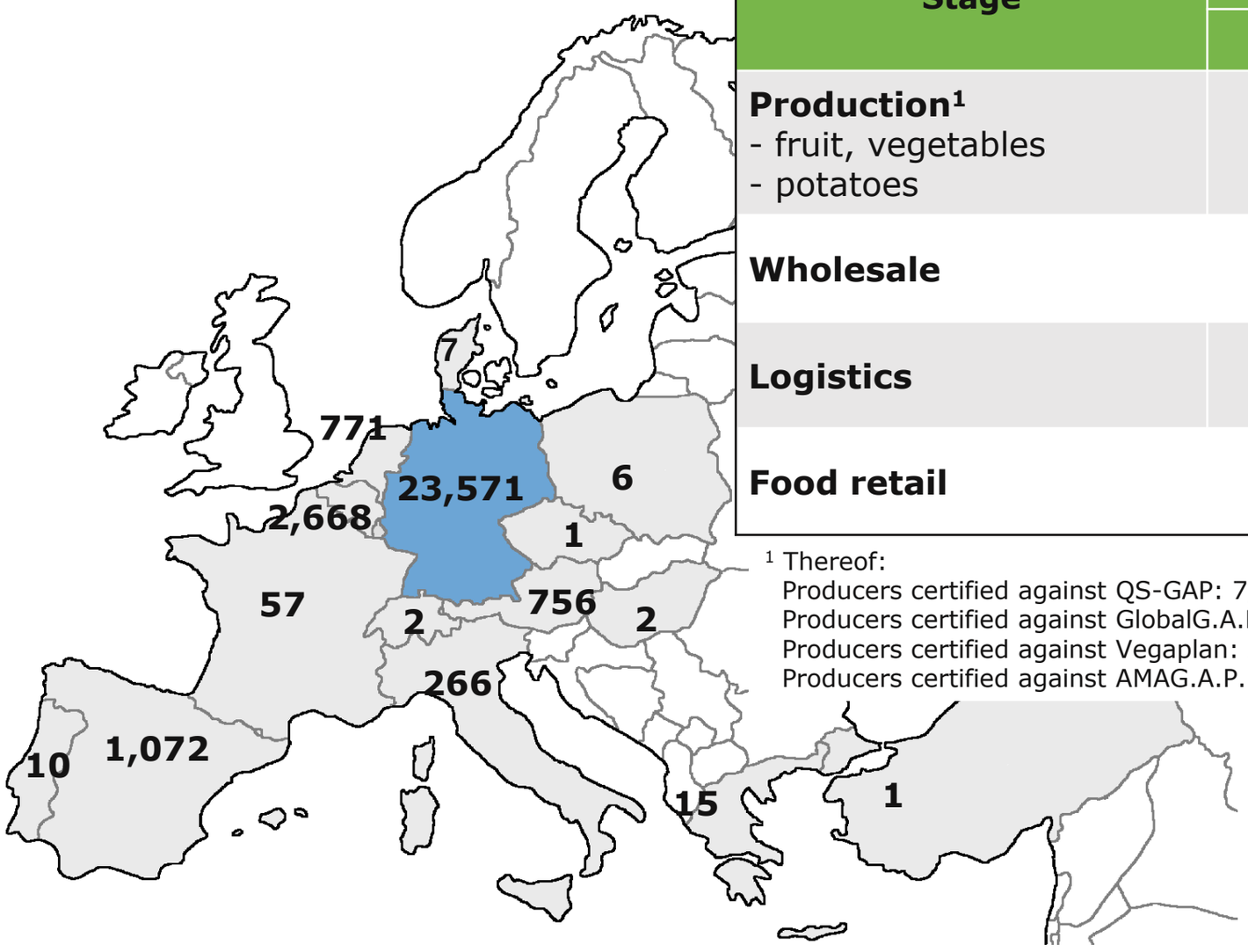
[1] Further 377 businesses eligible to deliver due to GMP+ certification
[2] Including 69 additive and premix production
[3] Including 507 mobile feed milling and mixing plants
[4] Further 4,398 businesses eligible to deliver due to GMP+ certification
[5] Further 38,756 businesses eligible to deliver slaughter cows due to QM-milk auditing
[6] Further 8,484 QSG businesses (DK) and 2,325 Certus businesses (B) with eligibility of delivery due to bilateral agreements
[7] Including 108 butchery businesses
[8] Including 143 meat wholesale companies

Status: October 01, 2015

Quality Assurance. **From farm to shop.**

Scheme participation

Focus on German consumer, international relevance



Stage	Total	Germany	Other countries
	29,266	**23,571**	**5,695**
Production[1] - fruit, vegetables - potatoes	**13,554** 10,716 2,838	**8,400** 5,614 2,786	**5,154** 5,102 52
Wholesale	**815**	**550**	**265**
Logistics	**186**	**110**	**76**
Food retail	**14,711**	**14,511**	**200**

[1] Thereof:
Producers certified against QS-GAP: 7,021
Producers certified against GlobalG.A.P.: 3,133
Producers certified against Vegaplan: 2,358
Producers certified against AMAG.A.P.: 131

Status: October 01, 2015

Quality Assurance. **From farm to shop.**

QS in food retail

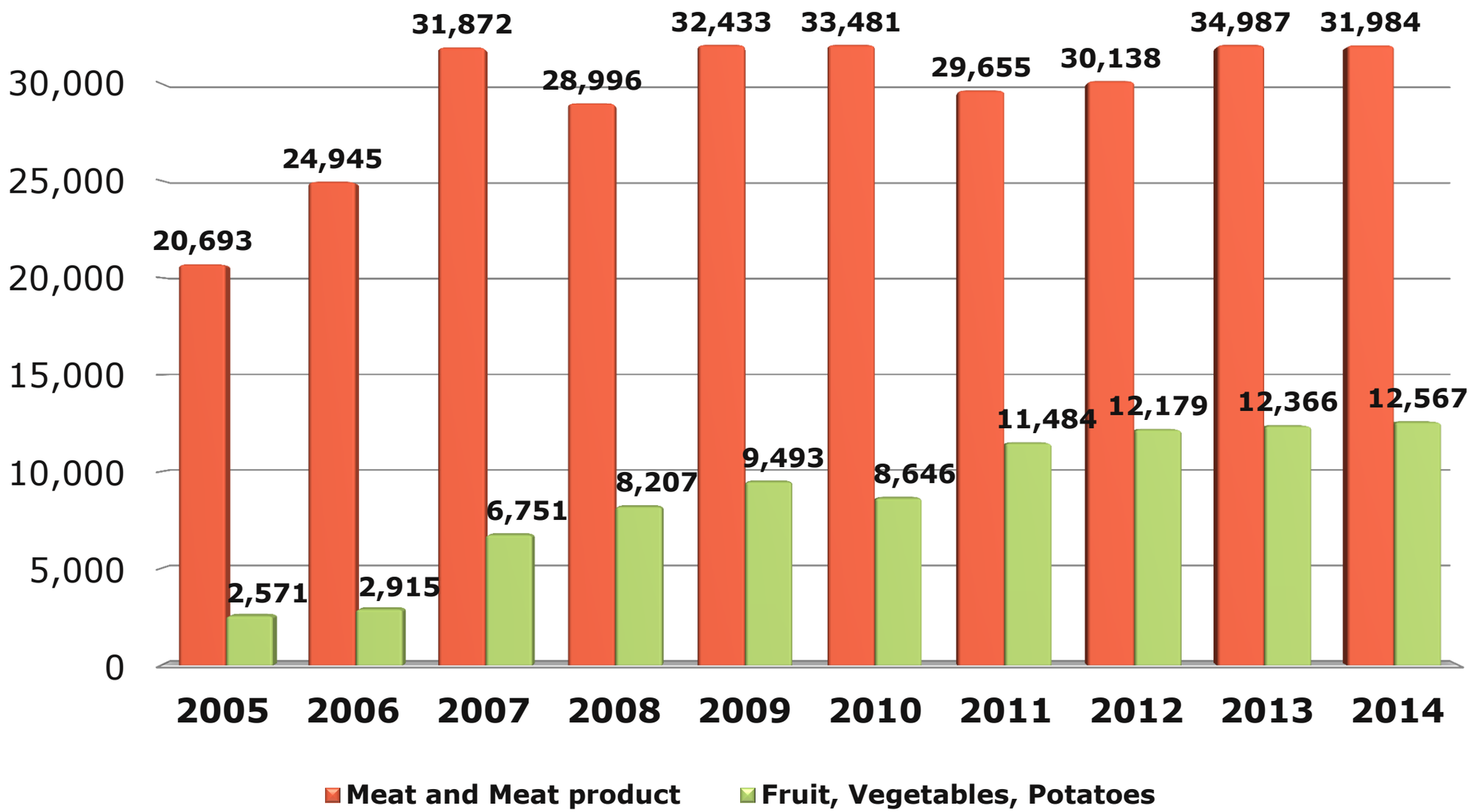
Significant role in the implementation of new requirements

Vion Food Group	
B+C Tönnies	
PHW-Gruppe (Wiesenhof)	
Westfleisch	
Edeka Fleischwerke	
Wilhelm Brandenburg	
Zur Mühlen Gruppe	
Stolle Gruppe	
Sprehe Gruppe	
Danish Crown	
Gausepohl	
Müller Gruppe	

Quality Assurance. **From farm to shop.**

Closely controlled

QS-audits 2005 - 2014



Quality Assurance. **From farm to shop.**

Process controls take precedence over final product controls

Three levels of control to ensure compliance with QS requirements

SIKS – Integrity program

random sample audits	traceability checks	cooperation audits with certification body	Laboratory performance assessment

Independent Inspections and laboratory analysis

QS-approved certification bodies (accredited according to EN45011)	QS-approved laboratories (accredited according to EN17025)

Internal self assessment and documentation
company-specific self-control systems based on the QS guidelines

QS scheme Manual – guidelines, checklists

Quality Assurance. **From farm to shop.**

European traceability requirements

Regulation (EC) No. 178/2002, Article 18

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 to be, or expected to be, incorporated into a food or feed.

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.

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

Quality Assurance. **From farm to shop.**

Traceability requirements in the QS scheme

Traceability from farm to shop

QS. Quality scheme for food.

- Documentation of flow of goods
  - scheduled and incoming goods shipment receive lot number/ID.
  - relevant lot number is noted on corresponding accompanying documents (e.g. dispatch notification/fax of supplier, stock record, quality records, delivery note/packing slip, invoice to the customers, bill for the supplier)
  - relevant lot number must remain with the goods from the receipt until selling to the customers (Guideline Wholesale)
- Traceability
  - scheme participants must establish traceability systems and processes in accordance with Regulation (EC) No. 178/2002
  - information on traceability must be available to QS within 24 hours
  - internal traceability processes ensure that information can be compiled within four hours

Quality Assurance. **From farm to shop.**

Traceability requirements in the QS scheme

Traceability from farm to shop

QS. Quality scheme for food.

- Relevant customer and supplier information:
  - Name, address and telephone number
  - QS ID and/or location number
  - Type and quantity of delivered products
  - Delivery data and/or slaughtering data (slaughtering date only relevant for the slaughtering/deboning stage)
  - Batch and/or lot number (if issued during the production process)

Information on customers/supplier

company: _____ QS-Id.: _____ legal representative: _____

date: _____

Name customer	Street customer	Postal code customer	City customer	Telephon number customer	QS-Id. or location number or VVVO-number	Name of the delivered product	Amount of the delivered product	Deliver y date	Charge- or batchnumber of the product	Specific description

Quality Assurance. **From farm to shop.**

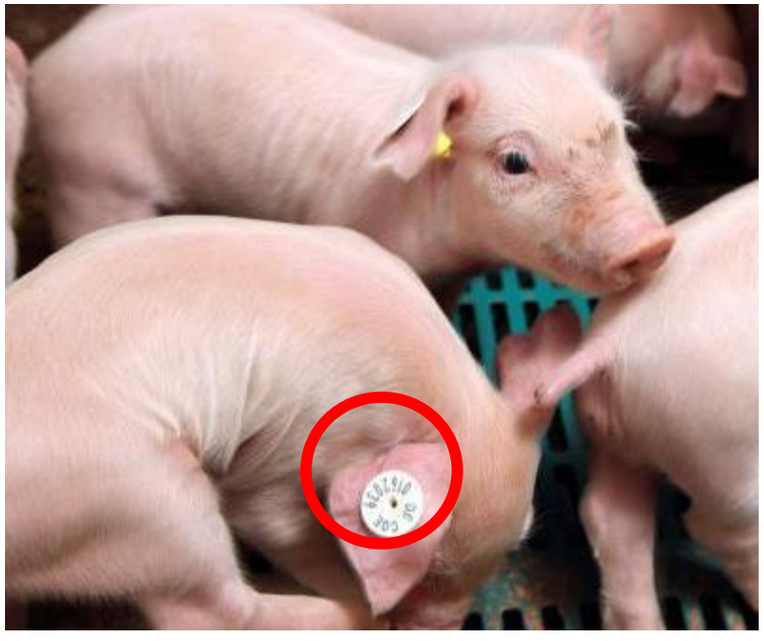
Accurate identification from farm to shop

Identification of livestock

QS. Quality scheme for food.

- Extract from QS guideline pig farming:

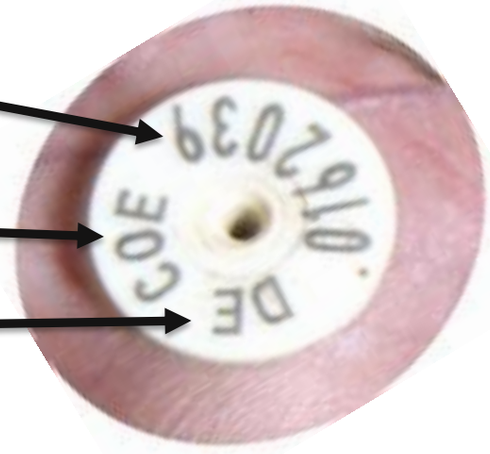
  Farmers must mark all pigs with a permanent mark from the responsible authority: this should be completed at the weaning stage at the latest.



Last 7 digits of company/location number

Rural district

Country



Quality Assurance. **From farm to shop.**

Accurate identification from farm to shop

Systematic traceability of animals/meat

QS. Quality scheme for food.

Agricultural production

- stock book
- marking of animals with stamp or ear tag

Livestock transport

- stock book
- marking of animals with stamp or ear tag

Slaughtering/ deboning

- incoming and outgoing goods documents
- list of customers and suppliers

Wholesale

- incoming and outgoing goods documents
- list of customers and suppliers

Export

- incoming and outgoing goods documents
- list of customers and suppliers

Traceability of animals

Traceability of batches

Quality Assurance. **From farm to shop.**

Accurate identification from farm to shop

Stricter traceability requirements for feed producers since 2013

QS. Quality scheme for food.

- Dioxin incident in early 2011 led to stricter traceability requirements within the QS scheme
- Requirement „Inclusion of location numbers" since January 2013:

  The location numbers must be recorded and marked in case of direct deliveries of bulk compound feed to agricultural businesses

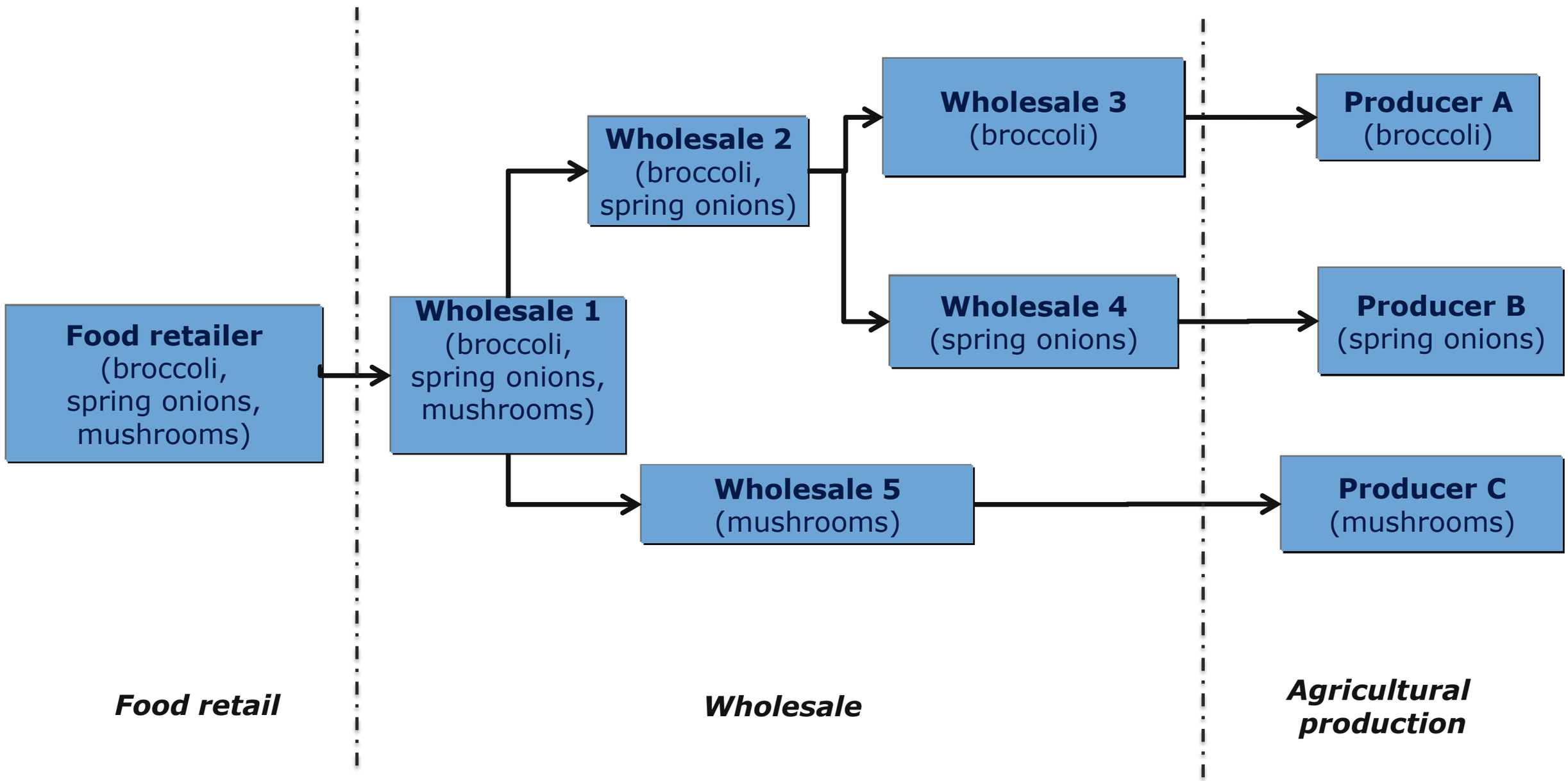
  - Farmer transfers number (s) and checks regularly if allocation is correct
  - Feed distributor asks about the number actively and marks number (s) on the bill of delivery/invoice

improves traceability even more and helps tracking supply routes (e.g. from potentially defective batches in case of incidents)

Quality Assurance. **From farm to shop.**

Frequent traceability checks

Complex flow of goods



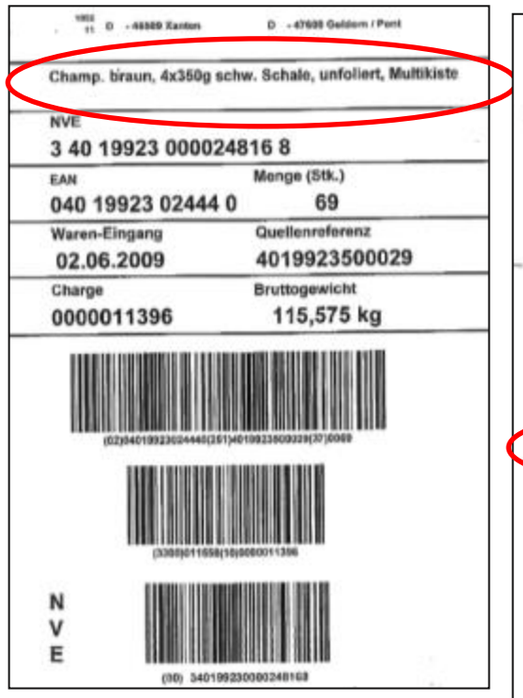
Quality Assurance. **From farm to shop.**

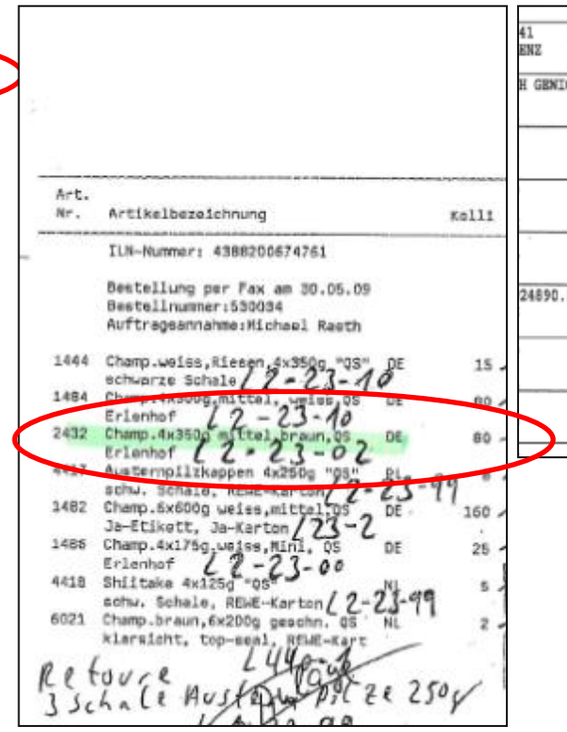
Accurate identification from farm to shop

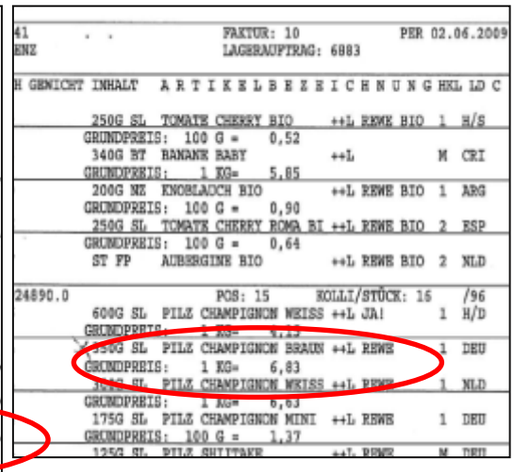
Identification of fruit, vegetables and potatoes

QS. Quality scheme for food.

Delivery bill (Producer)	Delivery bill (Wholesale)	Delivery bill (Retail warehouse)	Customer receipt (Food retailer)







Quality Assurance. **From farm to shop.**

Frequent traceability checks

Reaction rate

Porc	24 hours	20 hours	2 hours
Beef	25 hours	2 hours	3 hours

Fruit, vegetables, potatoes	5.6 hours	0.9 hours

Quality Assurance. **From farm to shop.**

Summary

Traceability with the help of quality assurance across all stages

- Particular risk and increasing responsibility of the food industry
- Self-assessment of food industry in the system of consumer health protection equivalent to official control, since regulation (EC) No. 178/2002 applicable law
- The QS idea: process-oriented quality assurance across all stages with focus on the German consumer
- European traceability requirements according according to Reg. (EC) No. 178/2002
- Traceability requirements in the QS scheme:
  - documentation of flow of goods,
  - participants must establish traceability systems and processes,
  - definition of relevant customer and supplier information,
  - accurate identification of livestock,
  - systematic traceability of animals/meat,
  - stricter traceability requirements for feed producers since 2013,
  - accurate identification of fruit, vegetables and potatoes,
- Conduction of frequent traceability checks within integrity program

Quality Assurance. **From farm to shop.**

QS. Quality scheme for food.

Oliver Thelen
QS Qualität und Sicherheit GmbH

Phone: +49 (0) 228 35068 130
Email: oliver.thelen@q-s.de
www.q-s.de

Thank you for your attention.