Data collection by public bodies: Joint EFSA-Member State activities

Leif Busk, National Food Agency, Uppsala, Sweden

Stefano Cappè, Evidence Management Unit, EFSA

EFSA Expo Conference - 15 October 2015

Data management

Data collection → Data validation → Scientific data warehouse

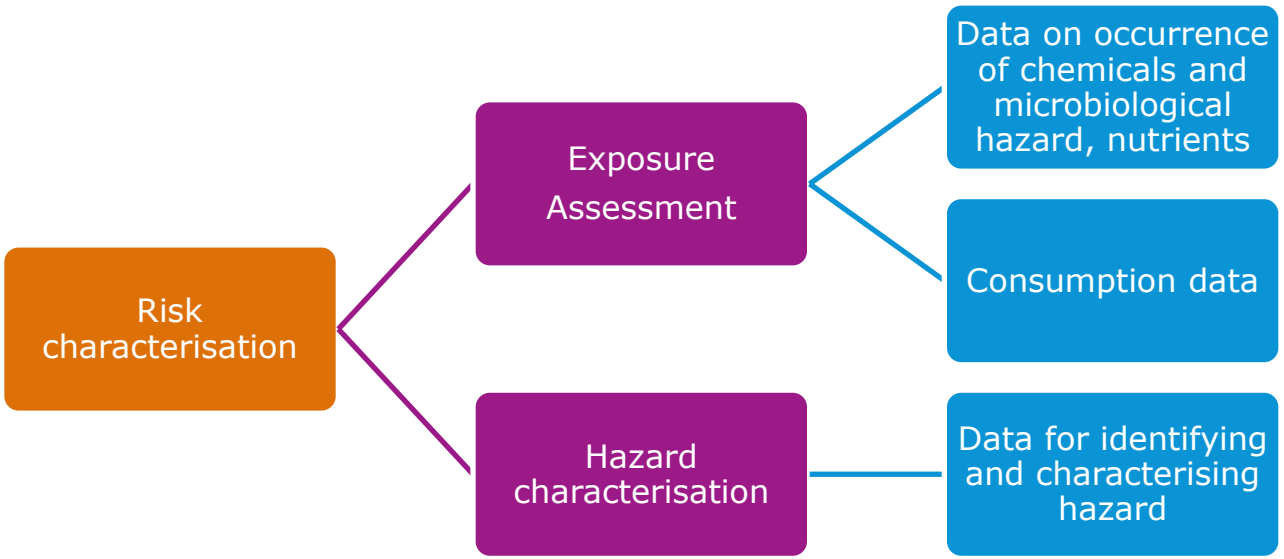
Data transmission

Data quality

Data analysis

EFSA Risk assessment

EFSA opinions



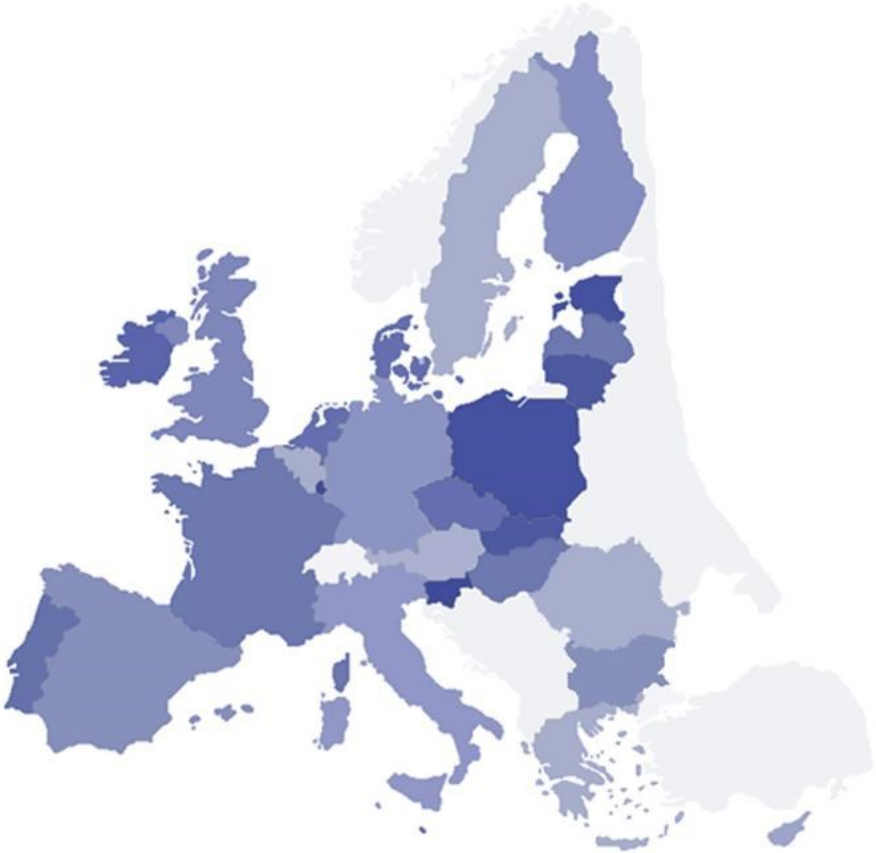
DATA COLLECTION

Who are involved?

- EFSA, Evidence Management Unit
- Advisory Forum
- Focal Points
- Scientific Networks
  - BSE-TSE
  - Zoonoses
  - Microbiological Risk Assessment
  - Chemical Occurrence Data
  - Pesticide Monitoring
  - Food Consumption Data

Data collection

EFSA has no laboratories



The Laboratories in the Member States are EFSA's Laboratories

Background

Regulation (Ec) No 178/2002 – Article 33

The MSs shall take the necessary measures to enable the data they collect in the fields of EFSA be transmitted to the Authority

Data Collection

EFSA forward to Member States and EC appropriate recommendations which might improve the technical comparability of the data

Data harmonisation

Appropriate recommendations

Standardisation/Harmonisation

Standard Sample Description

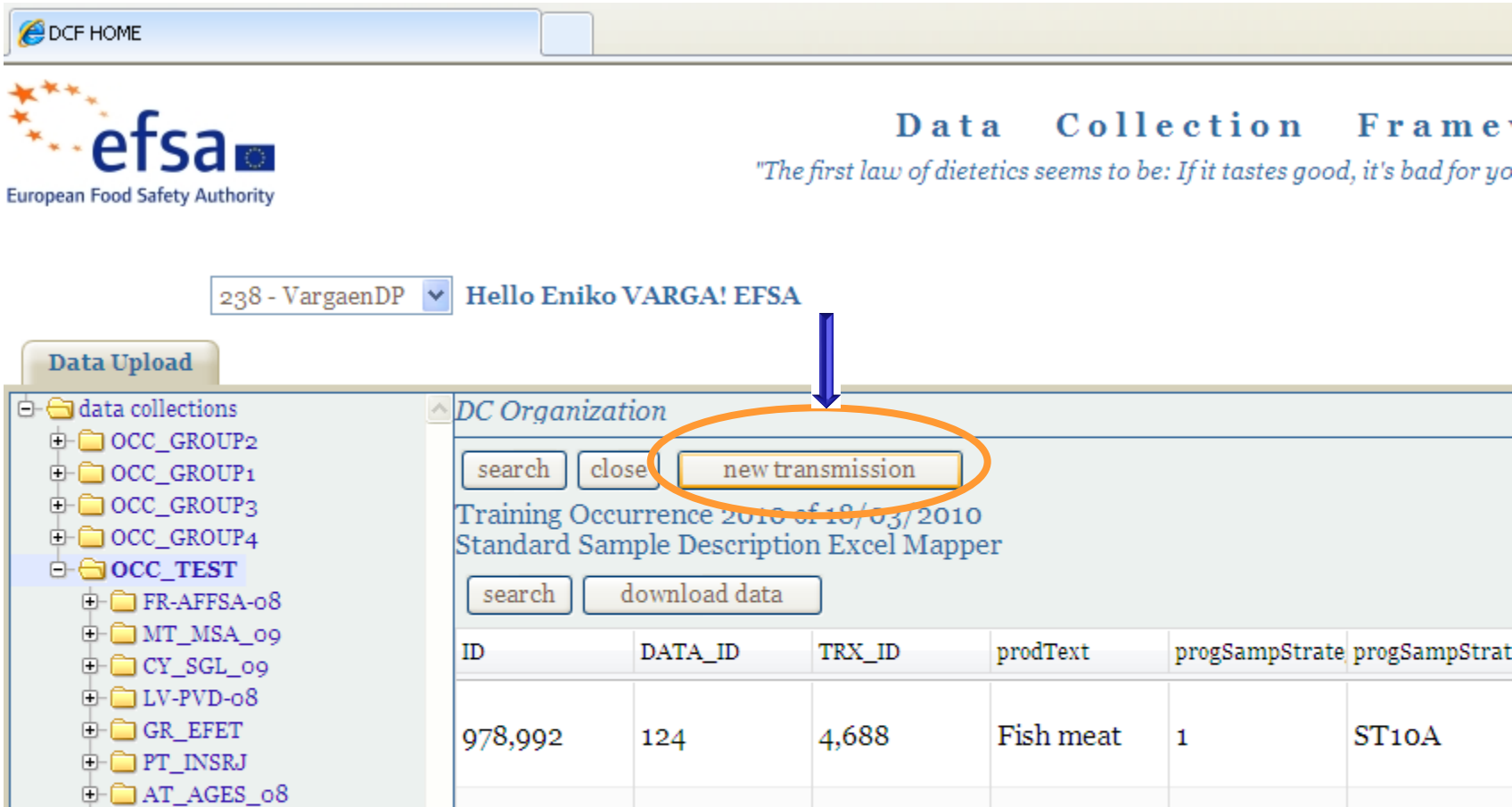
- Pesticide residues
- Chemical contaminants
- …

Standard Terminologies

- Parameters of analysis
- FoodEx2
- …

Tools for data collection

Use the Data Collection Framework (DCF) to allow Data Providers to transmit and validate data:



Validation and automatic feedback

DCF provides an automatic feedback to data providers:

Standard Sample Description Acknowledgment

Header

Type	dcfmsg
Version	1.0
Code	Example1.xls
Receiver's Code	EFSA
Sender's Code	EFSA
Sent date	2011-11-30T12:16:37.505

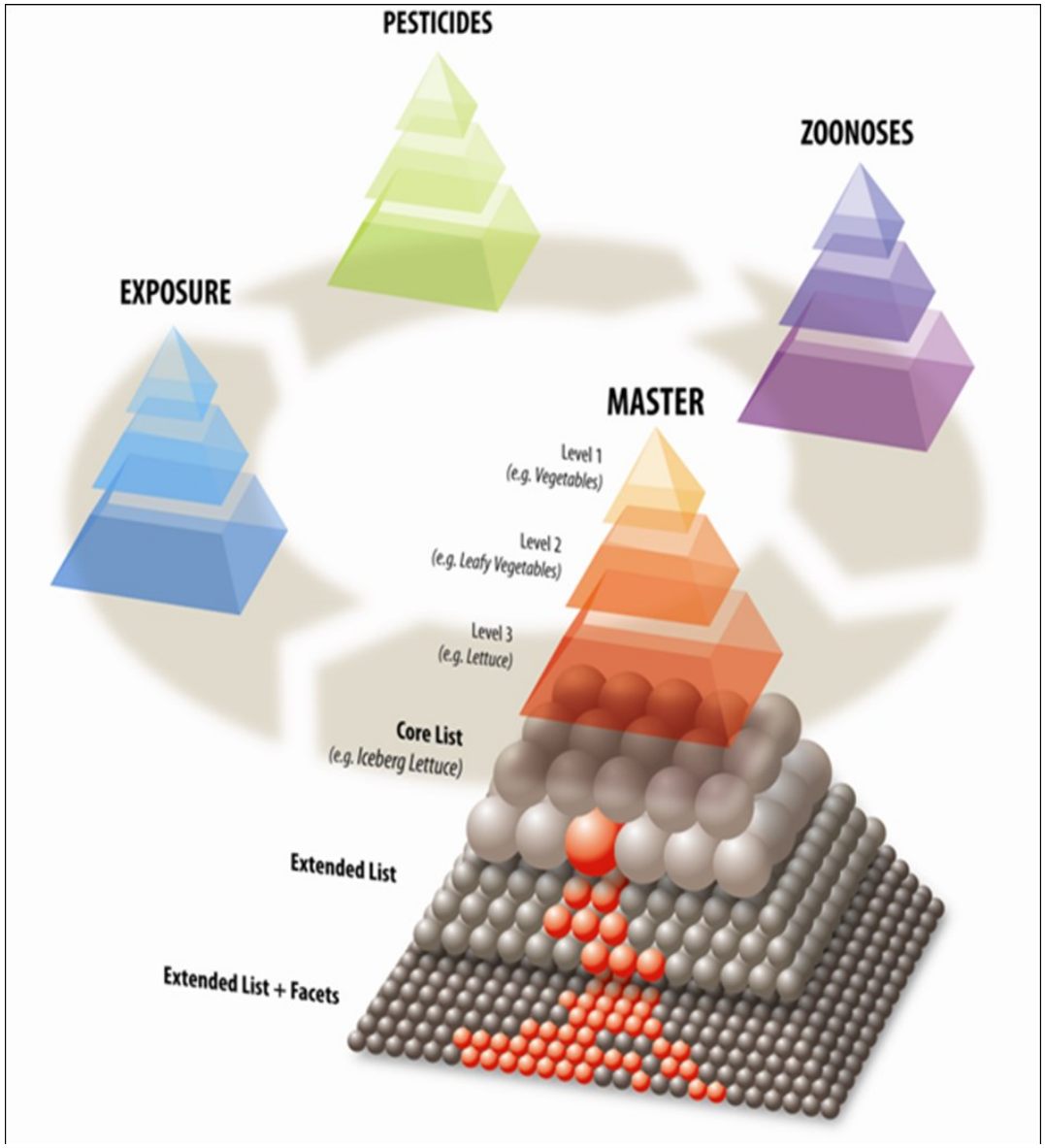
Message

Message Receive Date	2011-11-30T12:18:48.146+01:00
Message Ack Date	2011-11-30T12:18:48.146+01:00
Transmission Ack Code	02
Sender's Transaction Code	Example1.xls
Receiver's Transaction Code	7081
Data Collection Code	OCC_TEST
Data Collection Name	OCC_TEST

Errors Details

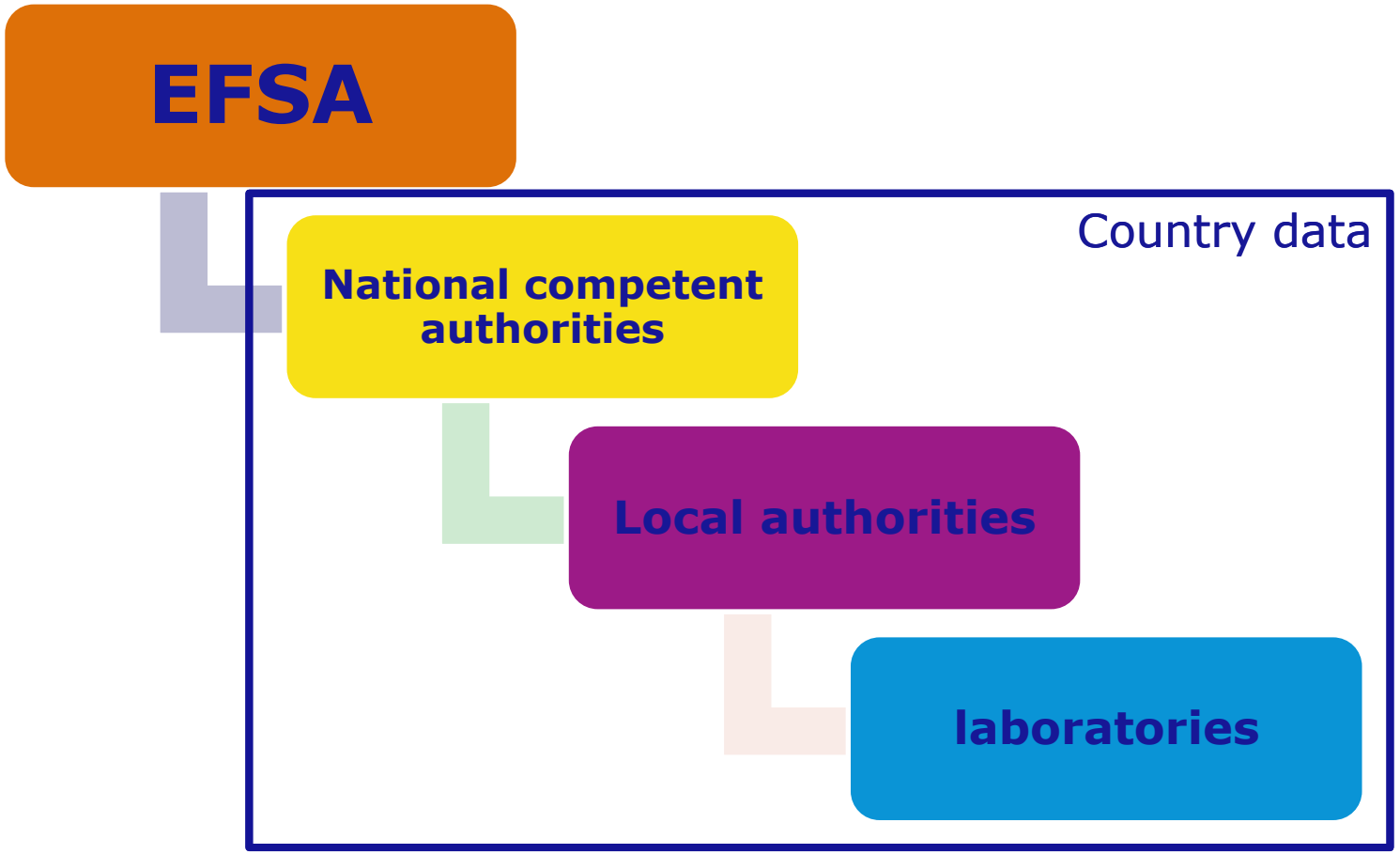
Type	Rule code	Error code	Error Description	Variables	Example
E	INSERT_FAIL	INSERT_FAIL	5 rows of the file : Example1.xls were not inserted (7081/8417)		
E	BR03A	ER14B	The result LOD must be less than the LOQ	resLOD$<=$resLOQ	1$<=$.8
E	BR03A	ES28B	Sample year cannot be greater than the analysis year	sampY$<=$analysisY	2011$<=$2010
					$RF-XXXX-XXX-

Tools for standard terminologies - FoodEx and FoodEx browser



Harmonisation influence

Standardisation of data reporting is across different domains and the entire data collection chain



Data management

Data collection

Data validation

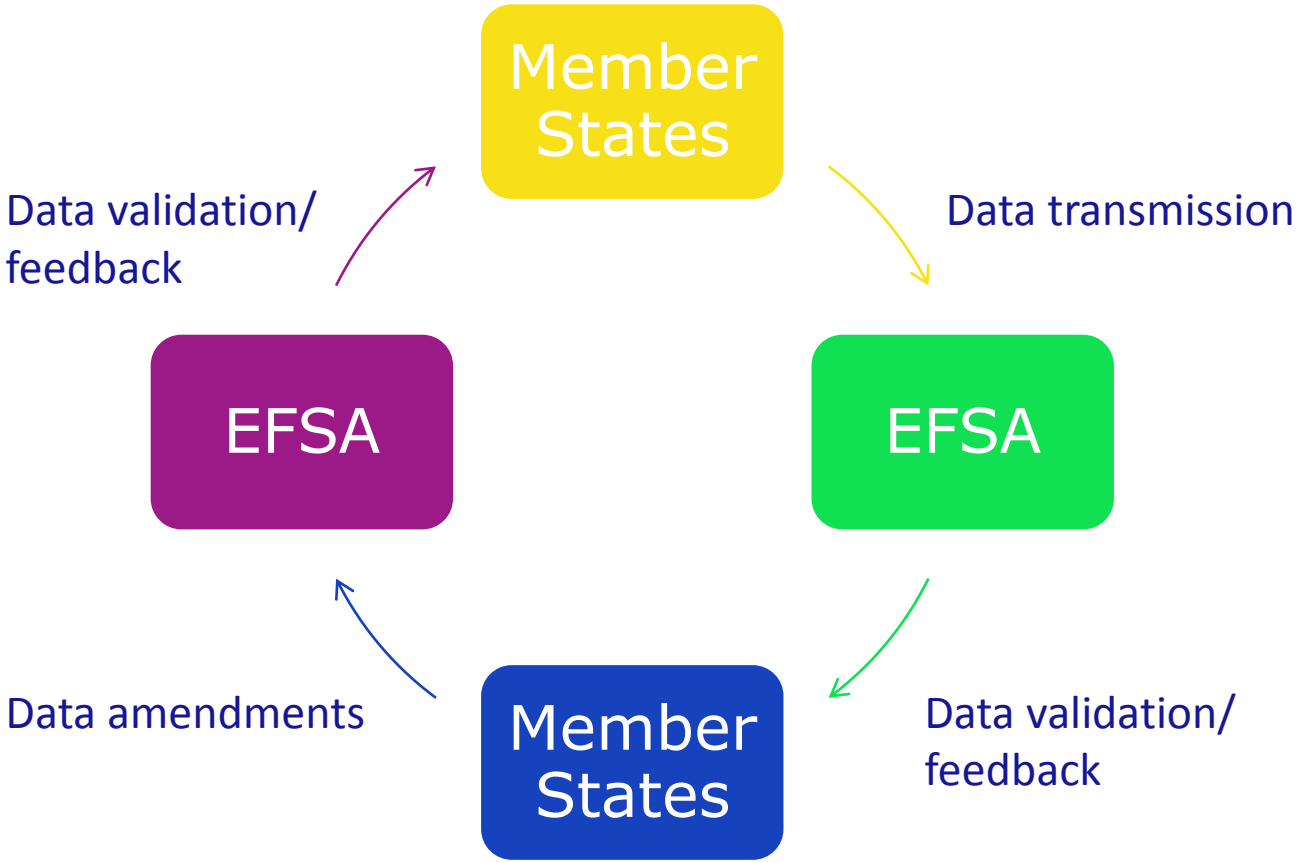
Scientific data warehouse

Data transmission

Data quality

Data analysis

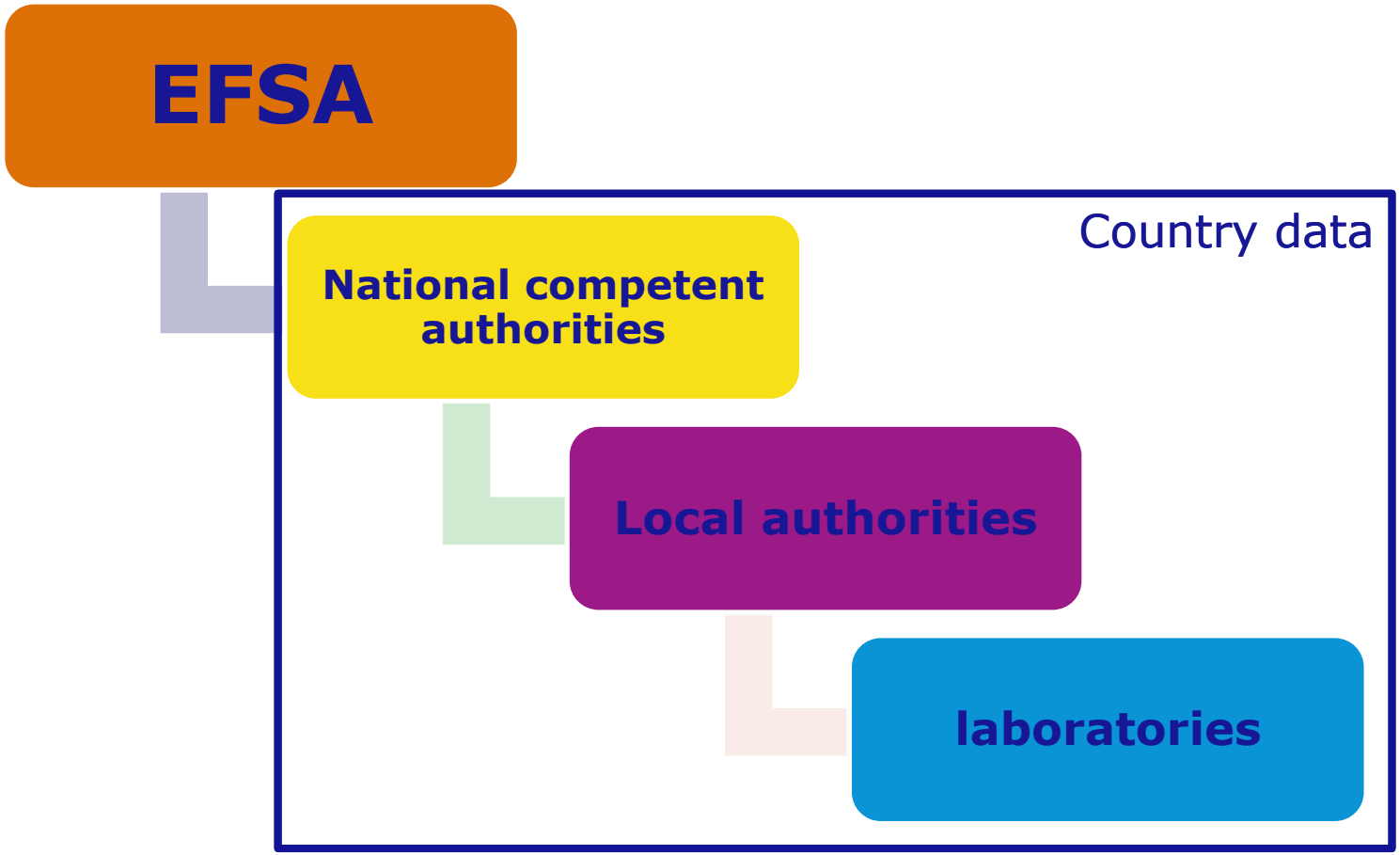
Data validation



Joint iterative data quality assurance process

Data quality

Data quality is an issues across different domains and the entire data collection chain



Data quality

- Exploiting the data will increase the demand of high quality data
  - Gain efficiency in all steps of data collection chain
- Data quality is win-win deal both for data providers and receivers

Data management

Data collection

Data validation

Scientific data warehouse

Data transmission

Data quality

Data analysis

Data domains

Consumption

Consumption data
- Comprehensive Food Consumption
- EUMenu

Chemicals

Standard Sample Description
- Chemical contaminants
- Pesticide residues
- Additives occurrence

Zoonoses

- Prevalence
- Antimicrobial resistance
- Food borne outbreaks
- Animal disease
- Animal population

Chemical hazard

Toxicological data from EFSA opinions

Currently stored in data warehouse

Data warehouse access

Simplifying:

Specific differences exists in different data domains

EFSA and EC	WG and panel members	Data providers and reporting officers	Others
• All raw data • All data via aggregated dashboards or exports	• Raw data: subset needed for the EFSA opinion, for the duration of the WG, panel • Data via aggregated dashboards or exports	• Access to raw data provided • Raw data access from other organisation when bilateral or multilateral agreements exists (e.g. circle of trust) • Data via aggregated dashboards or exports	• All data via aggregated dashboards or exports

Scientific data warehouse

Open to new areas of collaboration in exploiting data

- Share Exposure Assessment
  - Increased workload – need to further share production of scientific opinions
  - Better use of specific competence in MS
- Beyond National Competent Authorities
  - Academia
  - Industry

Conclusions

Food safety data governance

- Member States
- European Commission
- EFSA
- Industries

How should we increase the efficient use of this refined machinery?

Thank you for your attention!