# Standard Sample Description for food and feed and the EFSA's Data Collection Framework

Stefano Cappè, Francesco Vernazza

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# Standard Sample Description for food and feed

efsa
European Food Safety Authority

1. *Introduction*
2. Description
3. Guidance documents
4. Formats and requirements
5. How to submit data
6. Validation and SSD elements
7. Maintenance of the SSD
8. FoodEx2
9. Conclusions

# Before Standard Sample Description

- No official format specified
- Poor data quality
- Difficult to manage high volumes of data
- Different formats

**Harmonised way to collect data on chemical contaminants and residues needed**

**Implementation of a Standard**

# Objectives of SSD:

- **Harmonising** chemical occurrence and pesticide residue data collection in the EU

- Make **efficient** the data transmission between Member States and EFSA

  - Optimising human resource employed
  - Quality of data transmitted
  - Capacity of managing high volumes of data
  - Capacity to analyse the data and to produce valuable reports for different stakeholders
  - Flexibility to meet needs of many data collections now and in the future

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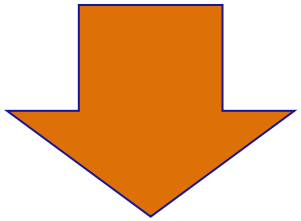
# What is the Standard Sample Description (SSD) ?

- A ***list of data elements*** that are **standardised** and can be conveniently used by both data providers and data recipients to fully **describe** samples and analytical parameters for evaluation purposes.

- The SSD includes controlled terminologies and validation rules to guarantee data quality (in data export, transmission and storage).



- A model to ***harmonise*** the collection of a wide range of measurements in the area of food and feed safety assessment.

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# Guidance documents (1)

- **Guidance on Standard Sample Description for food and feed: http://www.efsa.europa.eu/en/efsajournal/pub/1457.htm**

  Specifications aimed at harmonising the collection from Member States of analytical measurement data for the presence of harmful or beneficial chemical substances in food, feed and water.

  - Reviewed by networks end 2009; published Jan 2010
  - Contains:

    1. Variables (sample description,laboratory,organisations,analytical result description)
    2. Catalogues: (Languages (ISO-639-1), Countries (ISO -3166-1-alpha-2), NUTS (Nomenclature des Unités Territoriales Statistiques) etc…

# Guidance documents (2)

- ***Guidance on Data Exchange*: http://www.efsa.europa.eu/de/efsajournal/pub/1895.htm**

  - Reviewed by network Sep 2009; Published Oct 2010
  - Complementary to the first guideline
  - Contains:

    - transmission mechanisms
    - File formats→ XML schemas
    - Security requirements
    - Web services and FTP message exchange protocols (including validation messages) to be used for automatic exchange

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# Format and requirements

- SSD is a generic format for all data collections on contaminants and pesticides

- SSD defines 76 elements from which aprox 20 are mandatory elements to enable a unique description of the sample

  mandatory data elements ( generic +specific) must always be completed!

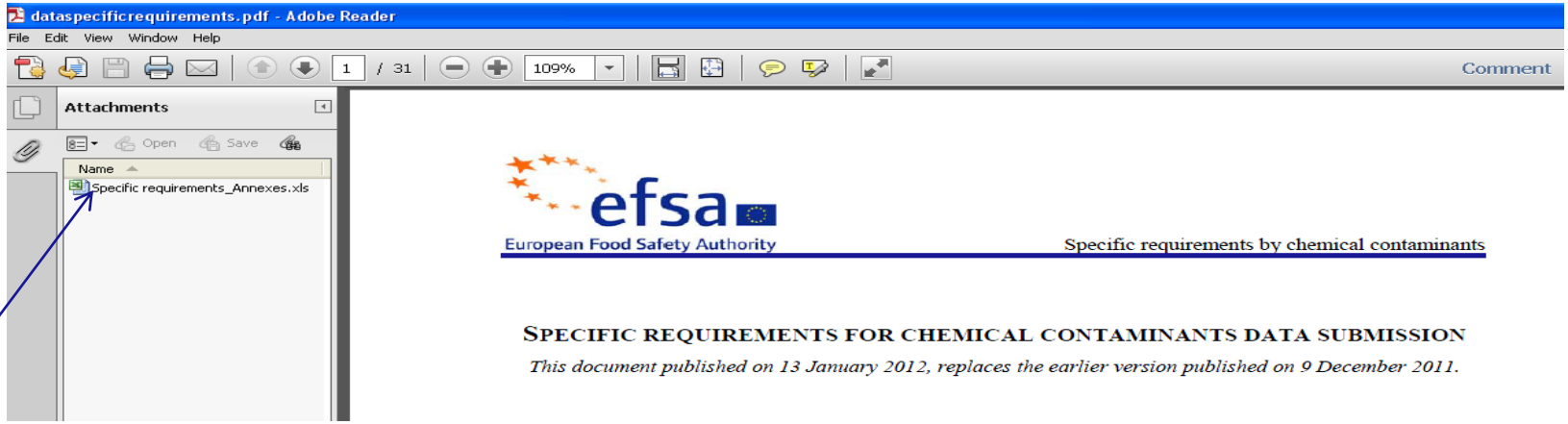
| MANDATORY | OPTIONAL |
|---|---|
| Laboratory sample code | EFSA product code |
| Language | Product full text description |
| Country of sampling | Expression of result |
| Country of origin of the product | Product comment |
| Product code | Result LOQ |
| Product treatment | Percentage of fat in the original sample |
| Year of sampling | Result value corrected for recovery |
| Sampling strategy | Result value uncertainty |
| Programme type | Analytical method code |
| Sampling method | Analytical method text |
| Sampling point | Percentage of moisture in the original sample |
| Laboratory accreditation | Area of origin for fisheries or aquaculture activities code and text |
| Result code | Ingredient |
| Year of analysis | Comment of result |
| Parameter code | Packaging |
| Type of parameter | Result LOD |
| Result unit | Month of sampling |
| Type of result | Day of sampling |
| Evaluation of the result | Area of sampling |
| | Area of origin of the product |
| | ... |

# Mandatory and optional fields in the SSD according *to SSD-Guidance,2010*

# Mandatory information not enough for all contaminants …

- Discussions on 5th Meeting of Expert Group Chemical Occurrence Data (EFSA, June 2011)
- Previous calls for data on contaminants
- list of specific requirements: In order to collect all information necessary for EFSA to carry out analysis and exposure assessments
- Specific requirements amended by chemical contaminant included in the continuous call published on:

***http://www.efsa.europa.eu/en/datexcallsfordata/datexsubmitdata.htm***



# DCF submissions and Business rules

- No new automatic BRs for current data collection (deadline 1October 2012)

| transmissionSet | id | transmission date | original filename | status |
|---|---|---|---|---|
| 7199 | | 16/01/2012 | | |
| 7199 | 8570 | 16/01/2012 | GRF_furan_final_up | Accepted, Valid, Current, Inserted, Fk Validation ok, BR validation OK |

but the **new specific requirements should be taken into accont when submitting data to EFSA**

- SR data compliance checked by EFSA Data Managers

- New automatic BRs from1 Nov 2012

| | | | | |
|---|---|---|---|---|
| 7037 | | 22/11/2011 | | |
| 7037 | 8373 | 22/11/2011 | DE_BVL_PAH_1111 | Rejected, Valid, Current, Inserted, Fk Validation ok, Data deleted, BR validation errors |
| 7020 | | 18/11/2011 | | |

# Priority levels

**Mandatory**: information that is essential for performing data analysis or exposure assessment. In case the data element is not correctly compiled, the respective data transmission will be rejected.

***Recommended:*** missing information of this type does not prevent from data analysis or exposure assessment; nevertheless it strongly affects the quality of the assessment.

Although the transmission will be accepted, it is strongly recommended to provide the information requested for this data elem nder to avoid additional requests for clarification at a later

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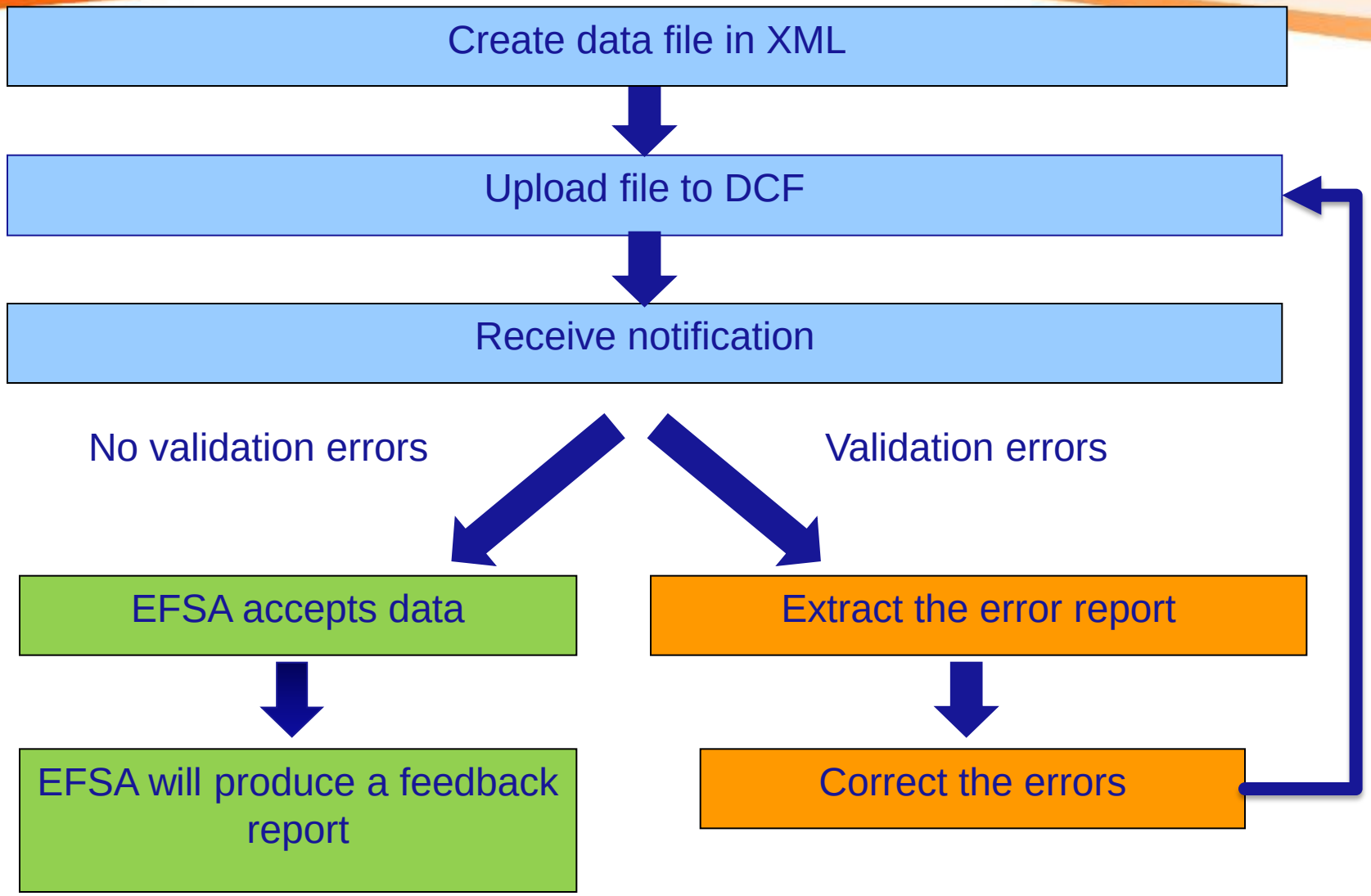
# How to submit your data

- The official file format for the Standard Sample Description is XML (eXtensible Markup Language)

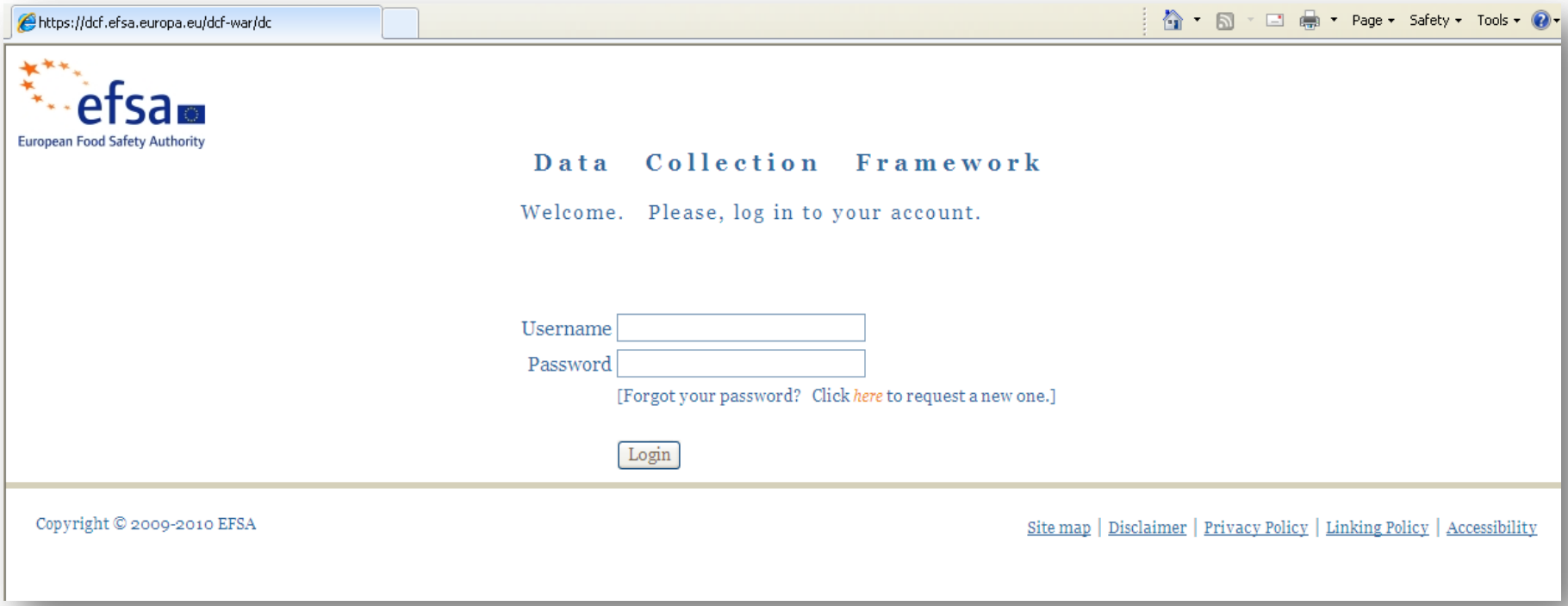
- File in **XML** can be **manually uploaded on the DCF** or electronically transmitted to EFSA via FTP or SOAP protocols

# Data uploading process



# Login

https://dcf.efsa.europa.eu/dcf-war




**Uses same login and credentials system as ScienceNet**

# Login

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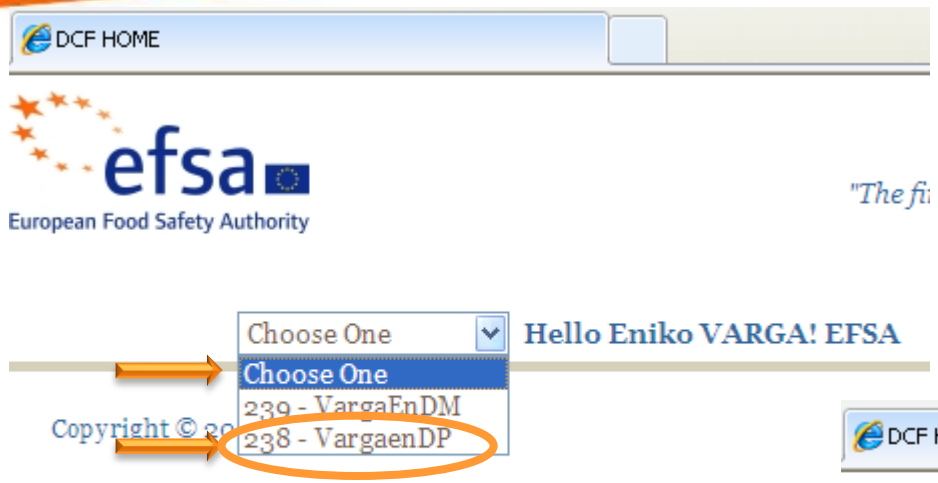
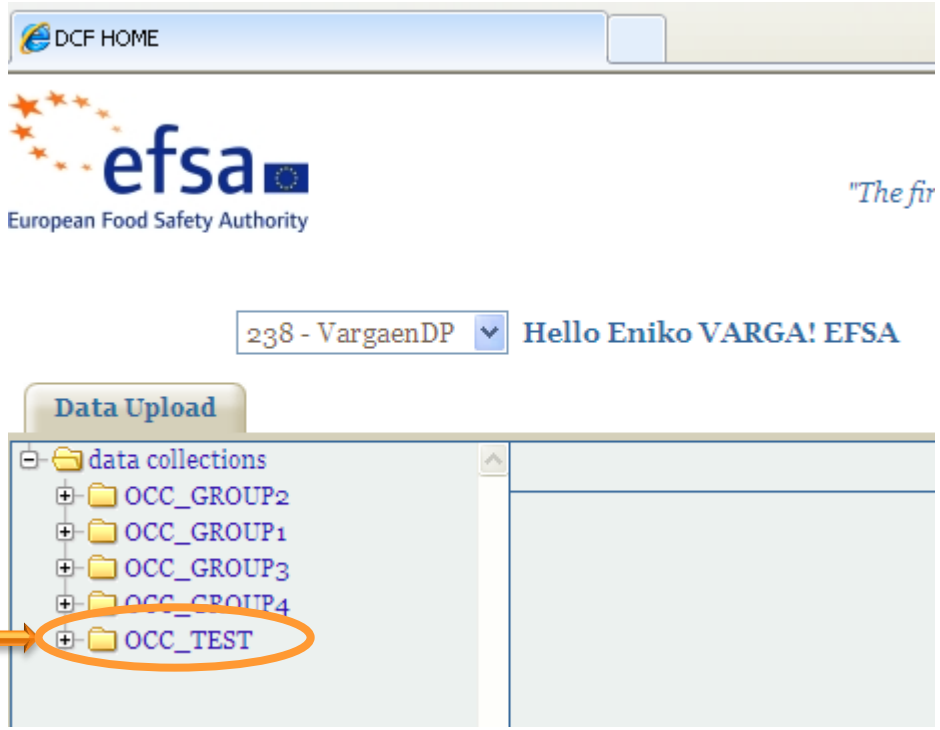
## Uses same login and credentials system as ScienceNet

If you need additional DCF accounts for your team contact
contaminants@efsa.europa.eu
(max 3 people per organisation)
Request by 10th December

# Data collection group



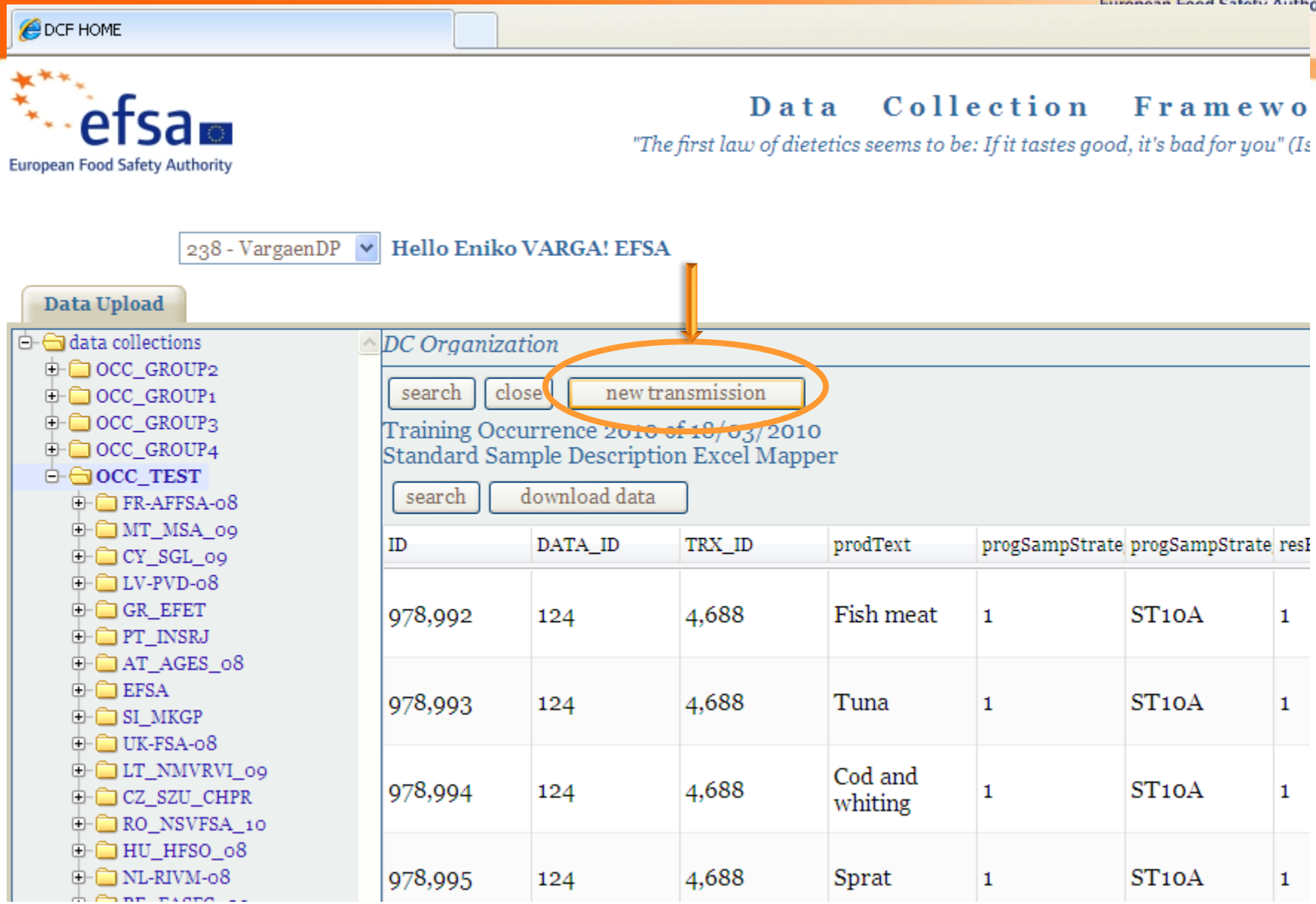

**OCC_TEST**: test data collection for occurrence
**OCC_GROUP1**: for dioxins and DL PCBs, non-DL PCBs, BFRs, PFAS, mineral oil hydrocarbons, melamine and analogues, organ chlorine compounds etc...
**OCC_GROUP2**: for 3MPCD esters. Ethyl carbamate, PAHs, furan, acrylamide
**OCC_GROUP3**: for marin biotoxins, mycotoxins, plan toxicants and other biological origin toxicants (e.g. Biogenic amines)
**OCC_GROUP4**: for metals and other substances not included above (Nitrates, lead, cadmium, arsenic, mercury, fluorine, nitrite etc...)



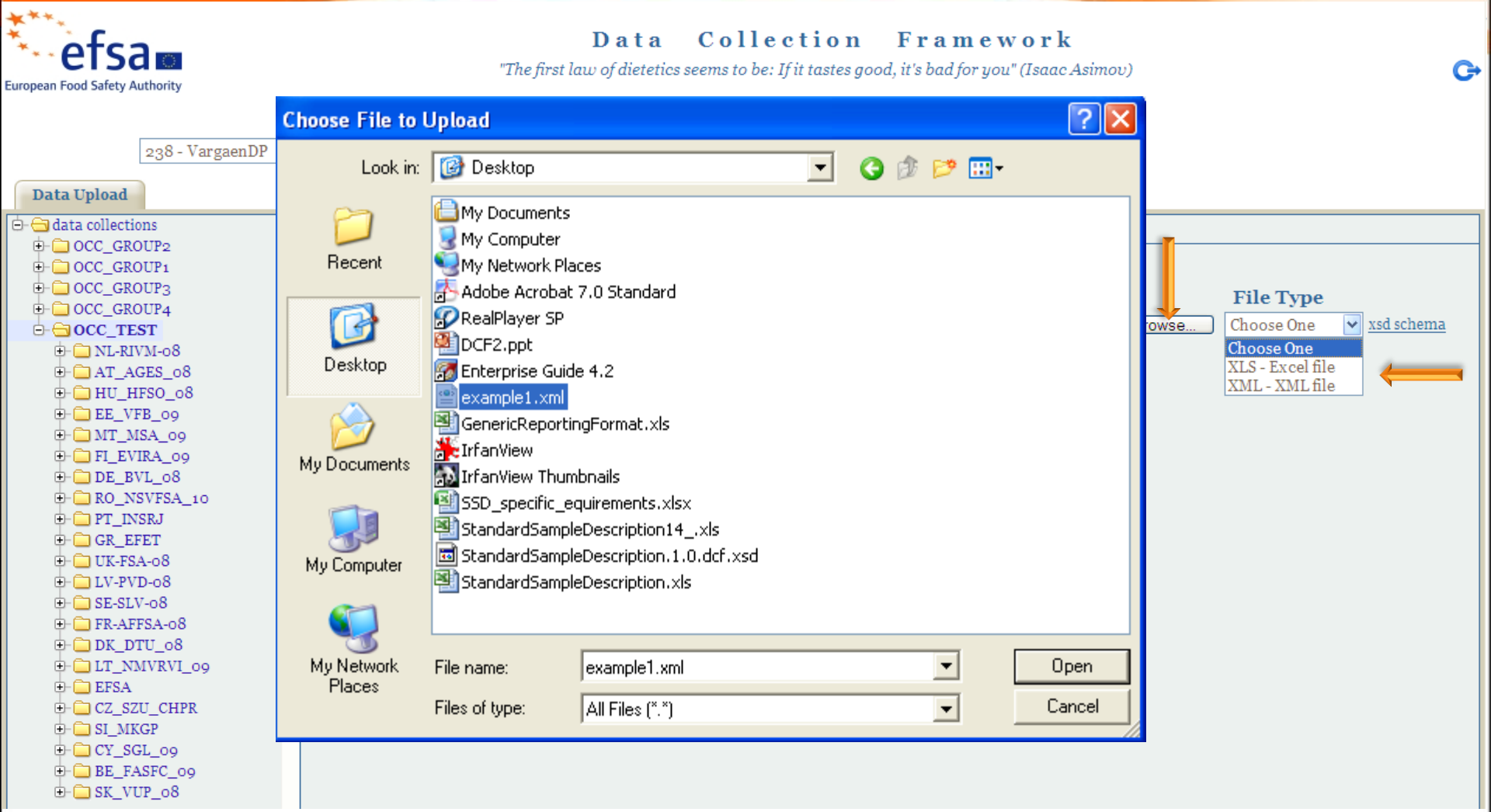
# Pilot in OCC_TEST

- For the pilot phase of this article 36 project:
  - Transmit in OCC_TEST
  - Check automatic validation (acknowledgment)
  - When OK then ask to contaminants@efsa.europa.eu for an evaluation
  - Finally send to the correct group
- After pilot phase send directly to the correct group

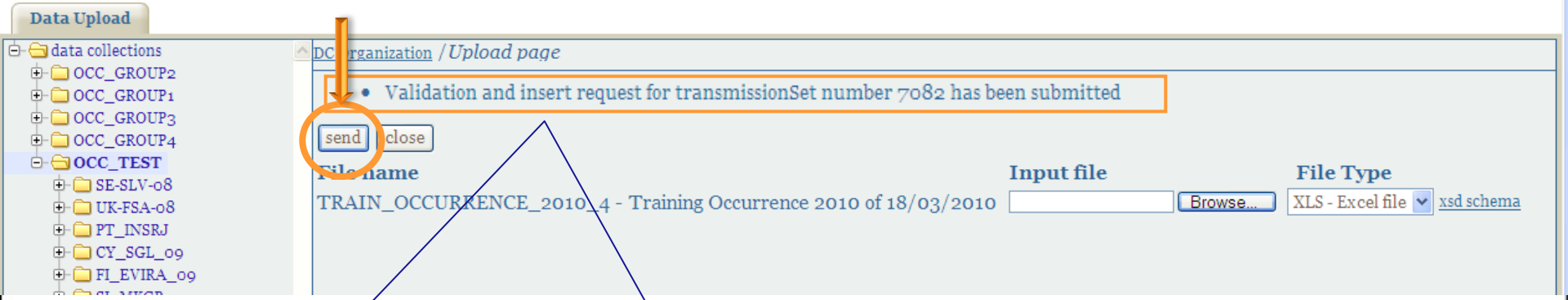
# Start new transmission



# Select...


Data Collection Framework
"The first law of dietetics seems to be: If it tastes good, it's bad for you" (Isaac Asimov)
238 - VargaenDP
Data Upload
data collections
OCC_GROUP2
OCC_GROUP1
OCC_GROUP3
OCC_GROUP4
OCC_TEST
NL-RIVM-08
AT_AGES_08
HU_HFSO_08
EE_VFB_09
MT_MSA_09
FI_EVIRA_09
DE_BVL_08
RO_NSVFSA_10
PT_INSRJ
GR_EFET
UK-FSA-08
LV-PVD-08
SE-SLV-08
FR-AFFSA-08
DK_DTU_08
LT_NMVRVI_09
EFSA
CZ_SZU_CHPR
SI_MKGP
CY_SGL_09
BE_FASFC_09
SK_VUP_08
Choose File to Upload
Look in: Desktop
Recent
Desktop
My Documents
My Computer
My Network Places
My Documents
My Computer
Adobe Acrobat 7.0 Standard
RealPlayer SP
DCF2.ppt
Enterprise Guide 4.2
example1.xml
GenericReportingFormat.xls
IrfanView
IrfanView Thumbnails
SSD_specific_equirements.xlsx
StandardSampleDescription14_.xls
StandardSampleDescription.1.0.dcf.xsd
StandardSampleDescription.xls
File name: example1.xml
Files of type: All Files (*.*)
Open
Cancel
File Type
Choose One
xsd schema
Choose One
XLS - Excel file
XML - XML file

# Finalise data transmission




Validation and insert request for transmissionSet number 7082 has been submitted

'Upload notification' by e-mail

No validation errors

Validation errors

# Upload notification

**Upload notification**

NoReply@efsa.europa.eu

Extra line breaks in this message were removed.

Sent: Wed 11/30/2011 12:07 PM

To: VARGA Eniko

Message | DCF20111130120725.zip (4 KB)

The following files have been processed:

ID: 8416
setID: 7080
Original file name: Example1_corr.xls
Unique generated file name:
IT231201111334120441831019231585676358936.xls
Sender user : vargaen: Eniko VARGA
Sender account name: VargaenDP Sender account id: 238 Sender organization: EFSA

No validation errors

**Upload notification**

NoReply@efsa.europa.eu

Extra line breaks in this message were removed.

Sent: Fri 12/2/2011 3:58 PM

To: VARGA Eniko

Message | DCF20111202155813.zip (4 KB)

The following files have been processed:

ID: 8437
setID: 7101
Original file name: example1c.xml
Unique generated file name:
IT231201112336155143964075488767033744800.xml
Sender user : vargaen: Eniko VARGA
Sender account name: VargaenDP Sender account id: 238 Sender organization: EFSA Anomalies list:
Warning: Problems in the execution of the validation script : example1c.xml. See transmission's Error File for detail. (7101/8437)

Validation errors

# Viewing an error report

European Food Safety Authority

Data Collection Framework

*"The first law of dietetics seems to be: If it tastes good, it's bad for you" (Isaac Asimov)*

238 - VargaenDP **Hello Eniko VARGA! EFSA**

Data Upload

- data collections
  - OCC_GROUP2
  - OCC_GROUP1
  - OCC_GROUP3
  - OCC_GROUP4
  - OCC_TEST
    - SE-SLV-08
    - UK-FSA-08
    - PT_INSRJ
    - CY_SGL_09
    - FI_EVIRA_09
    - SI_MKGP
    - EE_VFB_09
    - EFSA
      - transmissions

*Transmissions*

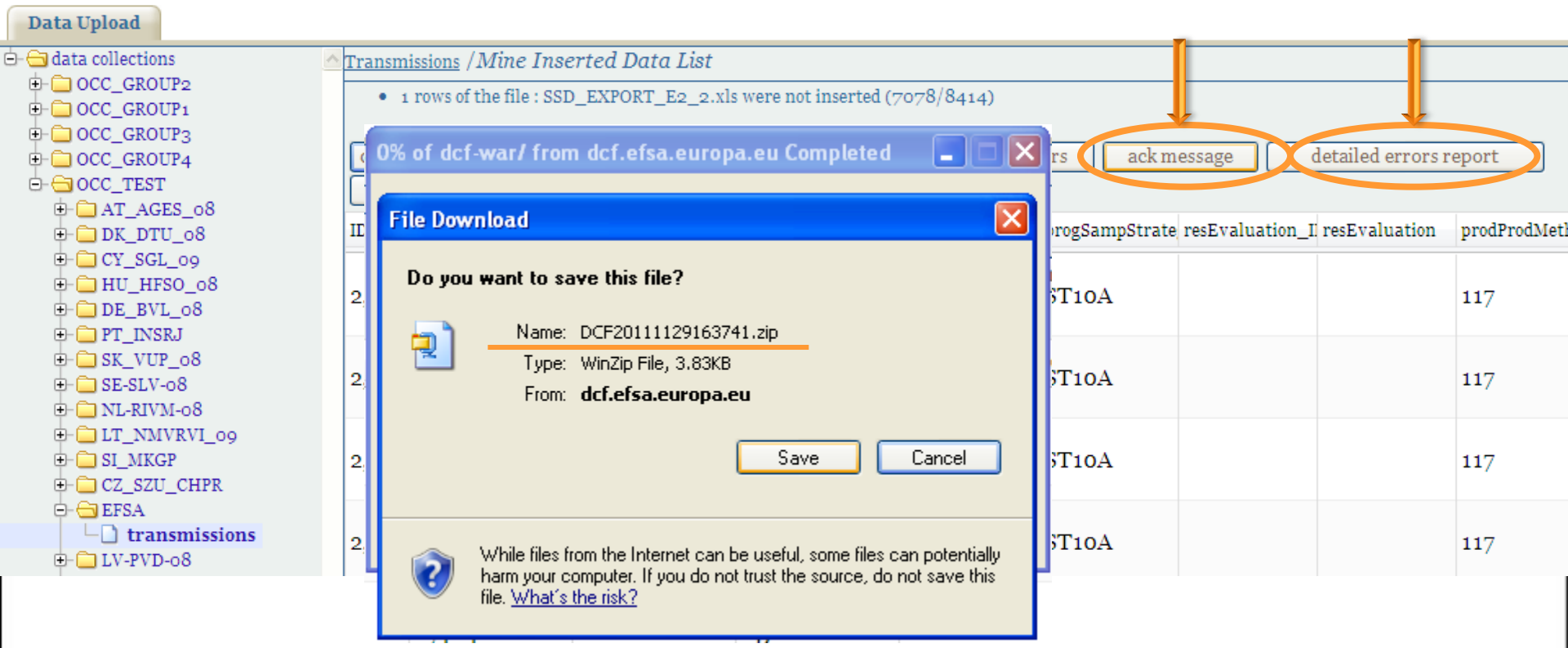
open | cancel | close | delete | donwload | donwload all

| transmissionSet | id | transmission date | original filename | status | account |
|---|---|---|---|---|---|
| 7081 | | 30/11/2011 | | | |
| 7081 | 8417 | 30/11/2011 | Example1.xls | Proposed, Valid, Current, Partially inserted, Fk Validation failed, BR validation errors | VargaenDP |
| 7080 | | 30/11/2011 | | | |
| 7080 | 8416 | 30/11/2011 | Example1_corr.xls | Proposed, Valid, Current, Inserted, Fk Validation ok, BR validation OK | VargaenDP |
| 7079 | | 30/11/2011 | | | |
| 7079 | 8415 | 30/11/2011 | Example1.xls | Rejected, Valid, Deleted, Partially inserted, Fk | VargaenDP |

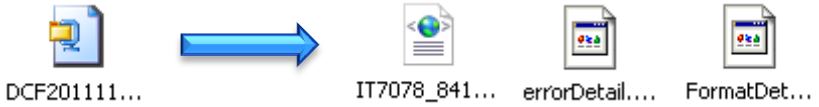
open | cancel | close | delete | donwload | donwload all

| transmissionSet | id | transmission date | original filename | status |
|---|---|---|---|---|
| 7081 | | 30/11/2011 | | |
| 7081 | 8417 | 30/11/2011 | Example1.xls | Proposed, Valid, Current, Partially inserted, Fk Validation failed, BR validation errors |

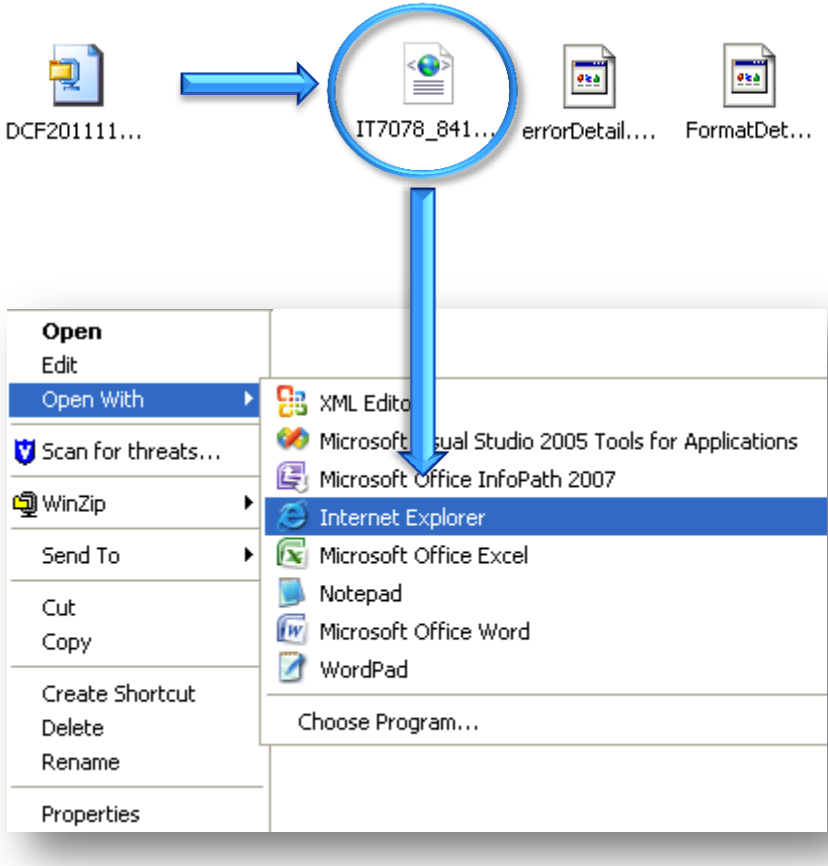
# Viewing an error report




- Read the report sent by DCF  save the .zip file
- Extract the content



# Viewing an error report




- Open the .xml file using the Internet Explorer

# Viewing ack message

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## 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 | Num Records |
|---|---|---|---|---|---|---|
| E | INSERT_FAIL | INSERT_FAIL | 5 rows of the file : Example1.xls were not inserted (7081/8417) | | | 5 |
| E | BR03A | ER14B | The result LOD must be less than the LOQ | resLOD$<=$resLOQ | 1$<=$.8 | 1 |
| E | BR03A | ES28B | Sample year cannot be greater than the analysis year | sampY$<=$analysisY | 2011$<=$2010 | 1 |
| E | BR08A | ER07A | Parameter text should be completed if code is RF-XXXX-XXX-XXX | paramText$paramCode$=$"RF-XXXX-XXX-XXX" | $RF-XXXX-XXX-XXX$=$"RF-XXXX-XXX-XXX" | 1 |
| E | BR08A | ER11A | Analytical method text should be completed if method code is F001A | anMethText$anMethCode$=$"F001A" | $F001A$=$"F001A" | 1 |
| E | BR08A | ER14A | The result LOD must be completed if the result type is LOD | resLOD$resType$=$"LOD" | $LOD$=$"LOD" | 1 |
| E | BR08A | ER15A | The result LOQ must be completed if the result type is LOQ | resLOQ$resType$=$"LOQ" | $LOQ$=$"LOQ" | 1 |
| E | BR08A | ER24B | For fat weight results the percentage fat must be reported | fatPerc$exprRes$=$"B003A" | $B003A$=$"B003A" | 1 |

# Viewing Detailed Error Report

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## Standard Sample Description Detailed Error Report

| Sequence Numb | Type | Rule code | Error code | Error description | Variables | Variable values | Record code |
|---|---|---|---|---|---|---|---|
| 1 | E | BR12A | ES30D | The combination of sample day, month and year must be less than the analysis date | sampD$sampM$sampY$<=$analysisD$analysisM$analysisY | 11$11$2011$<=$10$10$2011 | R_Sample_Ergot_2011_7 |
| 2 | E | BR12A | ES30D | The combination of sample day, month and year must be less than the analysis date | sampD$sampM$sampY$<=$analysisD$analysisM$analysisY | 11$11$2011$<=$10$11$2010 | R_Sample_dioxin_2011_4 |
| 3 | E | BR03A | ES28B | Sample year cannot be greater than the analysis year | sampY$<=$analysisY | 2011$<=$2010 | R_Sample_dioxin_2011_4 |
| 4 | E | BR03A | ER14B | The result LOD must be less than the LOQ | resLOD$<=$resLOQ | 1$<=$.8 | R_Sample_Ergot_2011_7 |
| 5 | E | BR08A | ER07A | Parameter text should be completed if code is RF-XXXX-XXX-XXX | paramText$paramCode$=$"RF-XXXX-XXX-XXX" | $RF-XXXX-XXX-XXX$=$"RF-XXXX-XXX-XXX" | R_Sample_Ergot_2011_94 |
| 6 | E | BR08A | ER11A | Analytical method text should be completed if method code is F001A | anMethText$anMethCode$=$"F001A" | $F001A$=$"F001A" | R_Sample_Cd_2011_1 |
| 7 | E | BR08A | ER14A | The result LOD must be completed if the result type is LOD | resLOD$resType$=$"LOD" | $LOD$=$"LOD" | R_Sample_Ergot_2011_3 |
| 8 | E | BR08A | ER15A | The result LOQ must be completed if the result type is LOQ | resLOQ$resType$=$"LOQ" | $LOQ$=$"LOQ" | R_Sample_Ergot_2011_5 |
| 9 | E | BR08A | ER24B | For fat weight results the percentage fat must be reported | fatPerc$exprRes$=$"B003A" | $B003A$=$"B003A" | R_Sample_dioxin_2011_4 |

# The simplified format

- To help data providers manually entering data in the SSD format, DCM unit has developed a simplified format:
  - Same data elements as the SSD: use label of variables (e.g. "Country of Sampling") instead of the variable name (e.g. sampCountry)
  - Use text descriptions (e.g. Italy) of the variables instead of codes (e.g. IT)
  - Provide some macro programs to browse and choose elements from the hierarchies in the SSD

# The simplified format: Instructions

- The simplified format is located here:

http://www.efsa.europa.eu/en/datexcallsfordata/datexsubmitdata.htm

**MS Excel ® Simplified Format**

- Instructions:
  - **Download** (save as) the standardsampledescription.xls
  - **Download** (save as) e.g. the simplified format (GenericReportingFormat.xls)
  - **These two files must be in the same folder**
  - **Open the standardsampledescription.xls and enable macros**
  - **Open GenericReportingFormat.xls and enable macros**
  - **Start fill out the form**

# Simplified format :Advantages and disadvantages

**Advantages (+):**

- Highlights mandatory fields
- Easy compilation following instructions (.xls format)

**Disadvantages (-):**

- No direct upload into the EFSA db
- Needs to be sent by email to *contaminants@efsa.europa.eu* → No immediate feedbacks
- EFSA data managers transform Simplied-format into SSD structure, validate and upload the file in the db→need for clarifications if missing mandatory information /validation errors

# Data conversion before transmission to EFSA

- Processing Simplified Format files creates a considerable effort on EFSA side

- DCM available to provide support via article 36 projects to set up a procedure for converting data from Simplified format to XML directly at national level

**In the article 36 project therefore MS Excel ® Simplified format cannot be used to transmit your data to EFSA and only XML files through the DCF will be accepted (or Web services).**

# Example from Excel

| | A | B | C |
|---|---|---|---|
| 1 | labSampleCode | lang | sampCoun |
| 2 | IT-2009-11-23-000001 | en | IT |
| 3 | IT-2009-11-23-000001 | en | IT |
| 4 | IT-2009-11-23-000002 | en | IT |
| 5 | IT-2009-11-23-000002 | en | IT |
| 6 | IT-2009-11-23-000002 | en | IT |
| 7 | IT-2009-AD-000256 | en | IT |

Data are transformed in XML

```
<?xml version="1.0" encoding="UTF-8"?>
<message xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="
http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="StandardSampleDescription.xsd">
  <header>
    <type>dcfmsg</type>
    <version>0.41</version>
    <code>1</code>
    <receiverCode>EFSA</receiverCode>
    <senderCode>EFSA</senderCode>
    <sentDate>2010-01-27T22:40:27+01:00</sentDate>
  </header>
  <dataTrx opType="01" dcCode="OCC_TR2010">
    <dataset>
      <sample>
        <labSampCode>IT-2009-11-23-000001</labSampCode>
        <lang>en</lang>
        <sampCountry>IT</sampC
        <sampArea>ITD52</samp
        <origCountry>IT</origCoun
        <origArea>ITD5</origArea>
        <procCountry>IT</procCou
        <prodCode>C03_2</prodC
        <prodText>Olive oil</prodT
        <prodProdMeth>PD08A</p
        <prodTreat>T106A</prodTr
```

**XML schema is published with the guidance on data exchange:**
**http://www.efsa.europa.eu/en/scdocs/doc/1895ax1.zip**

**StandardSampleDescription.1.0.xsd**

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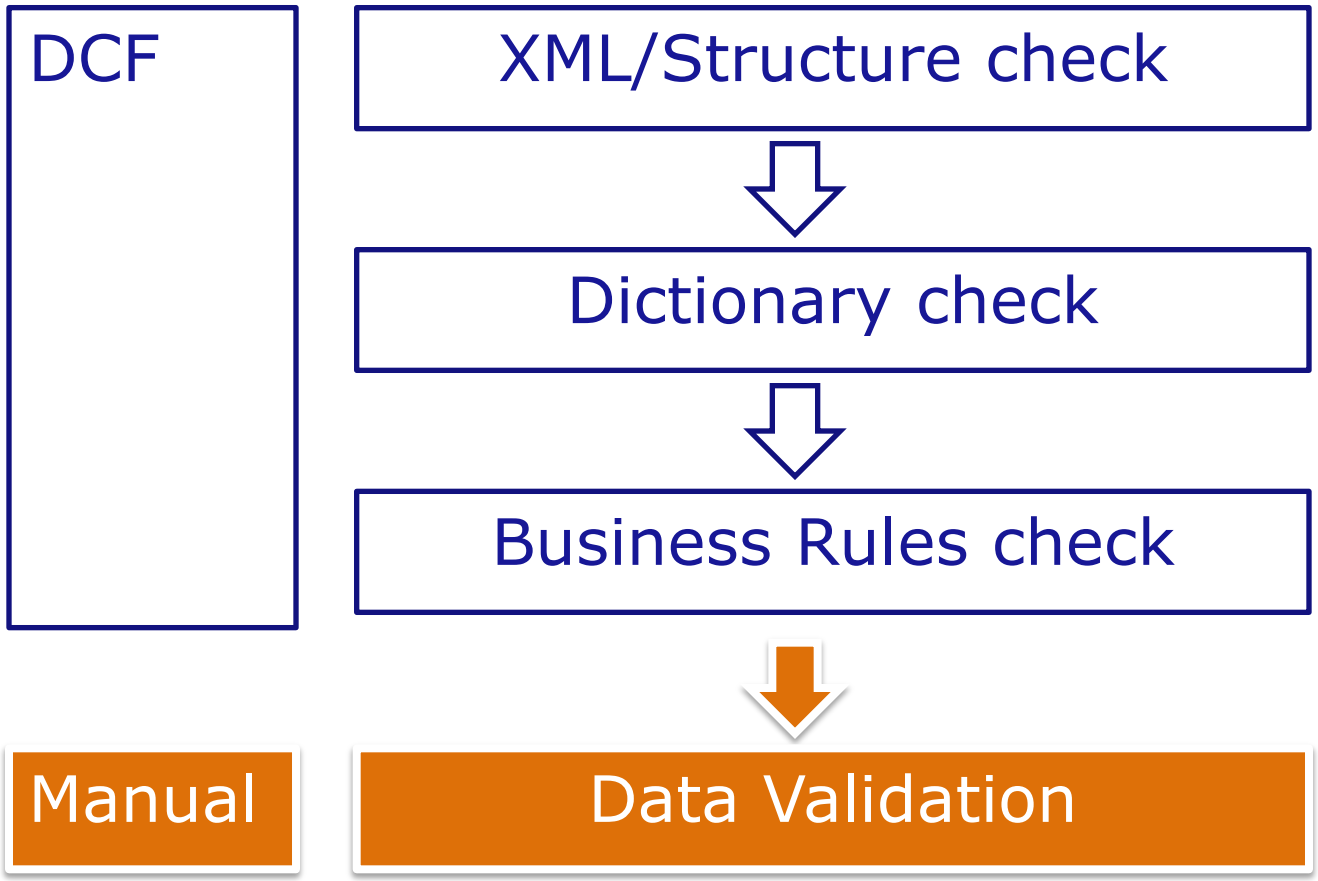
# Validation process



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# Maintenance of the Standards (I)

- Standard Sample Description→ live standard for transmitting data

- Challenge:
  - A standard should be **stable** so that Member States can implement it once and then use it for several years
  - A standard **has to change** to reflect a changing environment e.g new analytical methods

# Maintenance of the Standards (II)

- Standard Sample Description data structure should change very little
- Standard terminologies may change and improve at defined time to allow the implementation in local system
- Maintenance window:
  - ✓ Oct – Nov each year where amendments should be proposed,
  - ✓ **Jan - New version published**

| A | B | I | J | K |
|---|---|---|---|---|
| Terminology Name | Parameter | | | |
| Existent standard | Combined EFSA internal lists and FASFC - Belgium | | | |

Browse

| code | name | validFrom | validTo | lastUpdate |
|---|---|---|---|---|
| RF-00000130-CHE | Trimethylarsine | 01/01/2010 | | 24/11/2011 |
| RF-00000131-CHE | Trimethylarsine oxide | 01/01/2010 | | 24/11/2011 |
| RF-00000133-CHE | Methylarsonate (MA) | 01/01/2010 | | 24/11/2011 |
| RF-00000134-CHE | Methylarsonite (MA(III)) | 01/01/2010 | | 24/11/2011 |
| RF-00000136-CHE | Dimethylarsinate (DMA)) | 01/01/2010 | | 24/11/2011 |
| RF-00000137-CHE | Dimethylarsinite (DMA(III)) | 01/01/2010 | | 24/11/2011 |
| RF-00000140-CHE | Arsenobetaine | 01/01/2010 | | 24/11/2011 |
| RF-00000141-CHE | Arsenocholine | 01/01/2010 | | 24/11/2011 |
| RF-00000138-CHE | Arsenate - As(V) | 01/01/2010 | | 24/11/2011 |
| RF-00000139-CHE | Arsenite - As(III) | 01/01/2010 | | 24/11/2011 |
| RF-00000170-CHE | Total mercury | 01/01/2010 | | 22/07/2011 |
| RF-00000193-CHE | Tin (Sn) (Total) | 01/01/2010 | | 04/08/2011 |
| RF-00000148-TOX | Ochratoxin A | 01/01/2010 | | 24/11/2011 |
| RF-00000161-TOX | T-2 toxin | 01/01/2010 | | 24/11/2011 |
| RF-00000162-TOX | HT-2 toxin | 01/01/2010 | | 24/11/2011 |
| RF-00000165-TOX | Deoxynivalenol | 01/01/2010 | | 24/11/2011 |
| RF-00000166-TOX | Nivalenol | 01/01/2010 | | 28/11/2011 |
| RF-00000167-TOX | 3- and 15-acetyldeoxynivalenol | 01/01/2010 | | 24/11/2011 |
| RF-00000168-TOX | 3-acetildeoxynivalenol | 01/01/2010 | | 24/11/2011 |
| RF-00000169-TOX | 15-acetyldeoxynivalenol | 01/01/2010 | | 24/11/2011 |
| RF-00000170-TOX | Zearalenone | 01/01/2010 | | 28/11/2011 |
| RF-00000171-TOX | Zearalenol | 01/01/2010 | | 28/11/2011 |
| RF-00000172-TOX | Zearalenol alpha | 01/01/2010 | | 28/11/2011 |
| RF-00000173-TOX | Zearalenol beta | 01/01/2010 | | 28/11/2011 |
| RF-00000182-TOX | Zearalanone | 01/01/2010 | | 28/11/2011 |
| RF-00000183-TOX | Zearalanol | 01/01/2010 | | 28/11/2011 |
| RF-00000184-TOX | Zearalanol alpha | 01/01/2010 | | 28/11/2011 |
| RF-00000185-TOX | Zearalanol beta (Taleranol) | 01/01/2010 | 01/12/2010 | 28/11/2011 |
| RF-00000206-TOX | Alternaria alternata f. sp. lycopersici toxins | 14/10/2010 | | 08/06/2011 |
| RF-00000210-TOX | Phomopsins | 14/10/2010 | | 24/11/2011 |

# Additions in the SSD catalogues

- Possible addition of new elements in the terminologies to support new data collections (new substances, analytical methods, sampling methods..)

- EFSA can provide you with a new code of missing elements but urgent inclusions cannot be of entire branches e.g. All additives

# Extension of SSD

- An ad-hoc WG is looking to extending SSD to:
  - Zoonoses
  - Additive
  - FoodEx2 food classification: Common food classification to all risk assessment areas
- Draft expected in November 2012 for kick off meeting of the new article 36 project GP/EFSA/DCM/2012/01
- Draft will be submitted to relevant EFSA networks for comments

# Standard Sample Description for food and feed

efsa
European Food Safety Authority

1. Introduction
2. Description
3. Guidance documents
4. Formats and requirements
5. How to submit data
6. Validation and SSD elements
7. Maintenance of the SSD
8. *FoodEx2*
9. Conclusions

# Preamble

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## Food classification:

Organisation of terms identifying different food items into groups . The groups are defined based on commonalities or similarities identified from the point of view of the users.

Food classification is needed in two contexts:

1. Data analysis – presentation
2. Browsing (providing a structured way to find the best term to identify a food, during coding)

Data analysis is the dominant driver

# Preamble

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## Food description:

Collection of terms recording all relevant characteristics of a food item. The information may be concatenated in the name or structured in different ways.

Food description is used while coding, in order to keep as much as possible of the useful information available on the food being considered.

Food description is also used while analysing data, to discriminate based on specific criteria

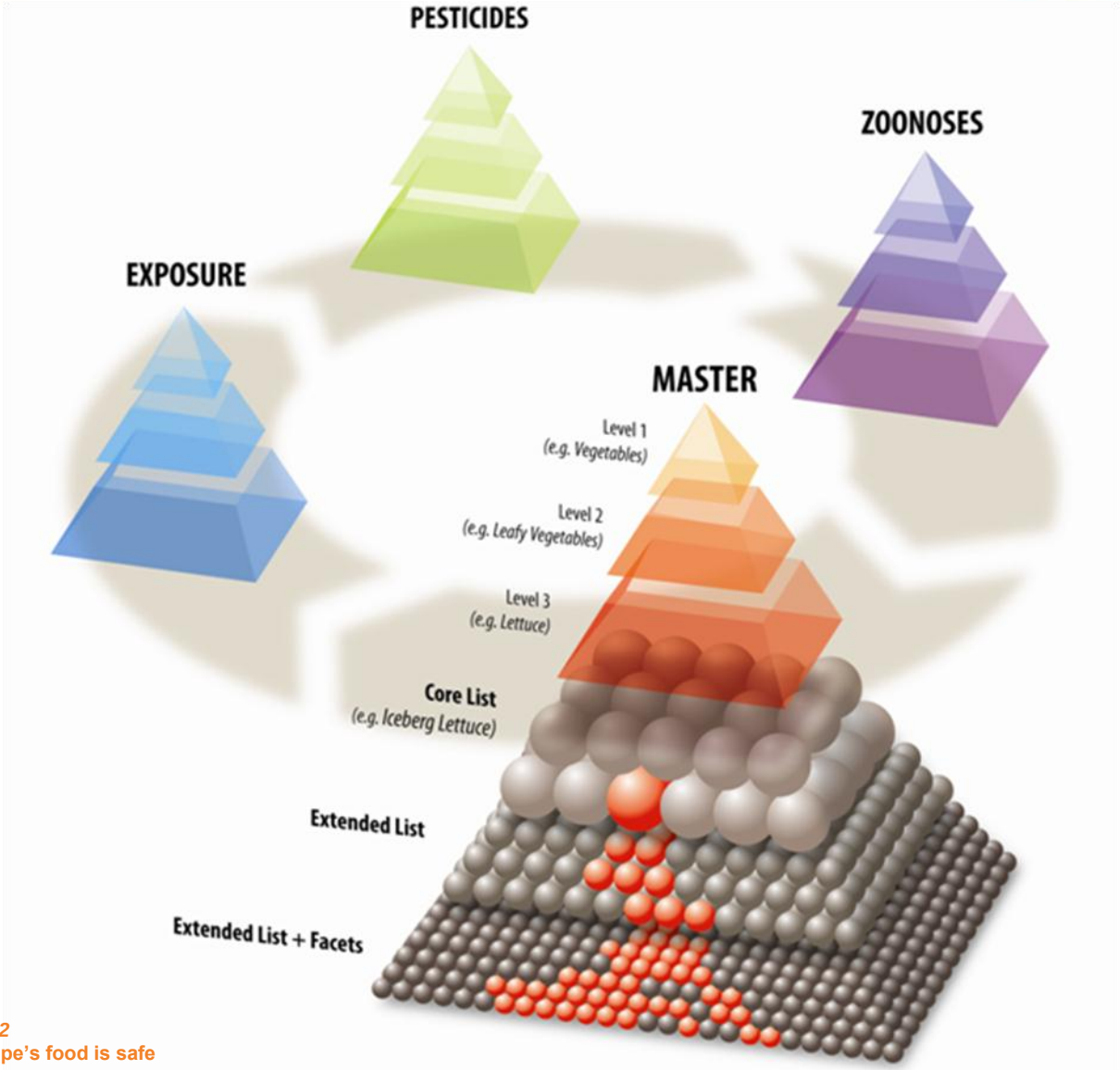
Both, data coding and data analysis may need food description

# Preamble

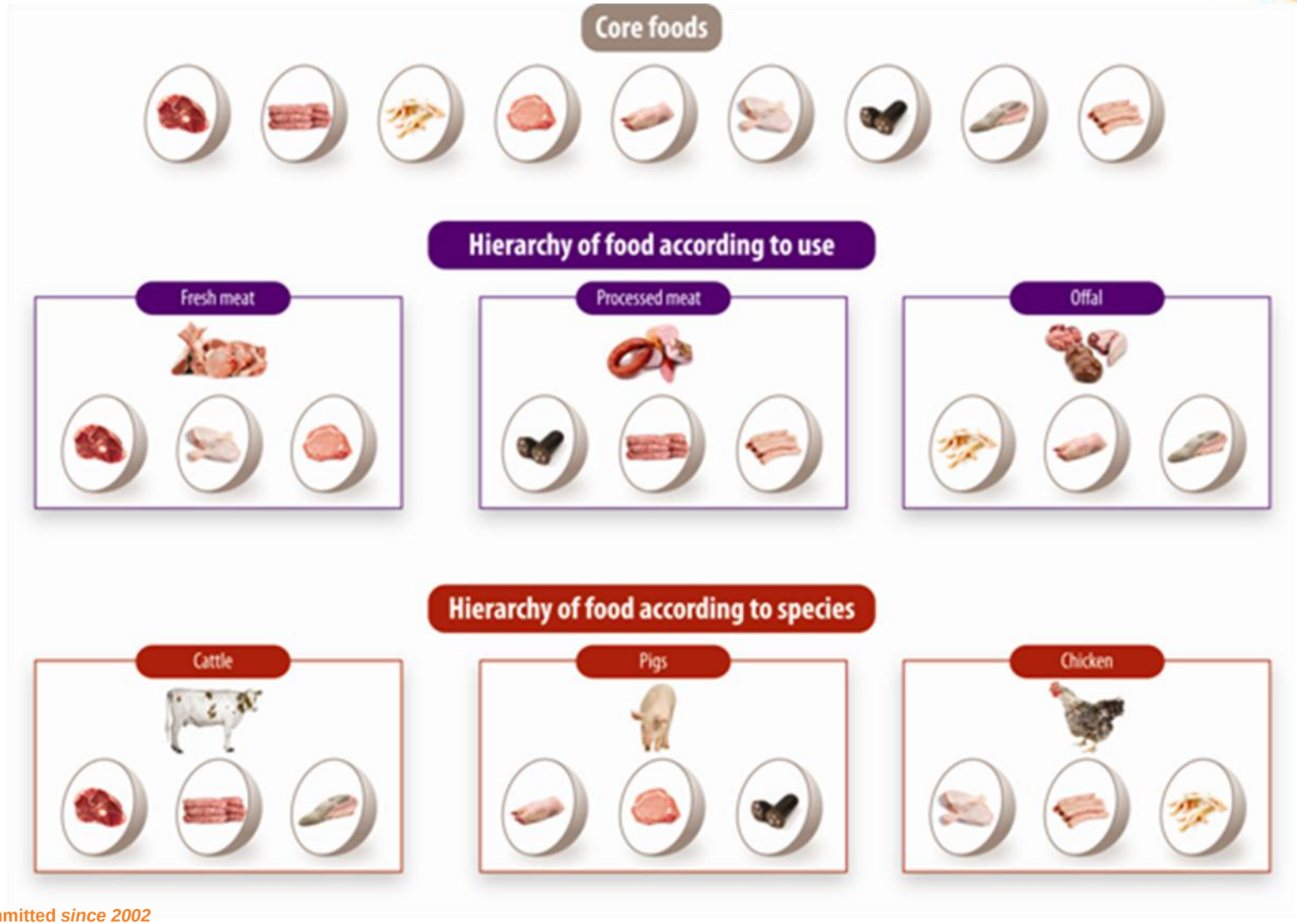
A system to classify/describe food in a perfect way for all needs does not exist

A pragmatic compromise addressing many different needs in a satisfactory way is a reasonable target. This system is necessarily a combination of classification and description

# Description of the proposal



# Description of the proposal



# Pillars of the system

I. The higher the level of detail, the better the food description "fits" to all areas whereas broad groups tend on the contrary to be area-specific

Detailed food items are common to all areas, while each area follows the preferred hierarchical grouping

# Common vs area-specific

# Pillars of the system

II. Exposure assessment is calculated based on the Food consumption database. This database is common to all areas

A specific hierarchy, including minimum and/or preferred level of detail for coding, is proposed.
Occurrence data collected to perform exposure assessment must be compatible with this hierarchy

# Minimum/preferred coding level

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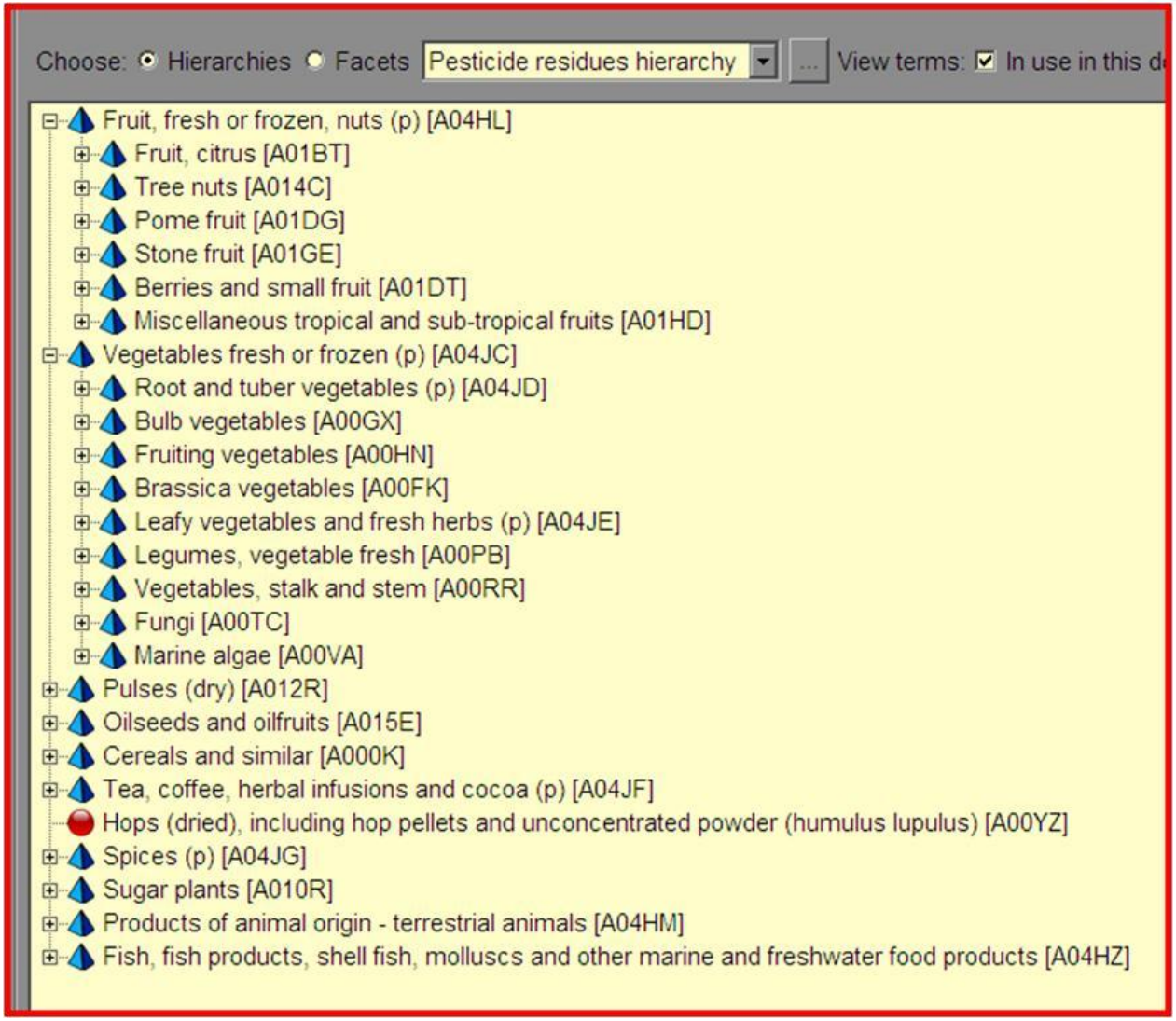
| Exposure hierarchy | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Code | Lev | Level1 | Level2 | level3 | level4 | level5 | level6 | level7 |
| A000J | 1 | Grains and grain-based products | | | | | | |
| A000K | 2 | | Cereals and similar | | | | | |
| A000L | 3 | | | Cereal and cereal-like grains | | | | |
| A000M | 4 | | | | Amaranth grain | | | |
| A000N | 4 | | | | Buckwheat grain | | | |
| A000P | 4 | | | | Barley grain | | | |
| A000S | 4 | | | | Maize grains (p) | | | |
| A000T | 5 | | | | | Maize grain | | |
| A000V | 5 | | | | | Popcorn kernels | | |
| A000X | 5 | | | | | Teosinte grain | | |
| A000Y | 4 | | | | Millet grain (p) | | | |
| A000Z | 5 | | | | | Millet grain, barnyard | | |
| A001A | 5 | | | | | Millet grain, bulrush | | |
| A001B | 5 | | | | | Millet grain, common | | |
| A000A | 5 | | | | | Teff grain | | |
| A000B | 5 | | | | | Millet grain, finger | | |
| A000C | 6 | | | | | | African millet grain | |
| A000D | 5 | | | | | Millet grain, foxtail | | |
| A000E | 5 | | | | | Millet grain, little | | |
| A000F | 4 | | | | Oat grains (p) | | | |
| A000G | 5 | | | | | Oat grain | | |
| A000H | 5 | | | | | Oat grain, red | | |
| A001C | 4 | | | | Rice grains (p) | | | |

# Pillars of the system

III. For some specific food safety areas, food descriptors and groups are defined by Legislation

The "view" of the system for regulated areas shall provide the food groups as defined in the regulatory acts. Additional detail may be provided, if needed.

# Specific legislation

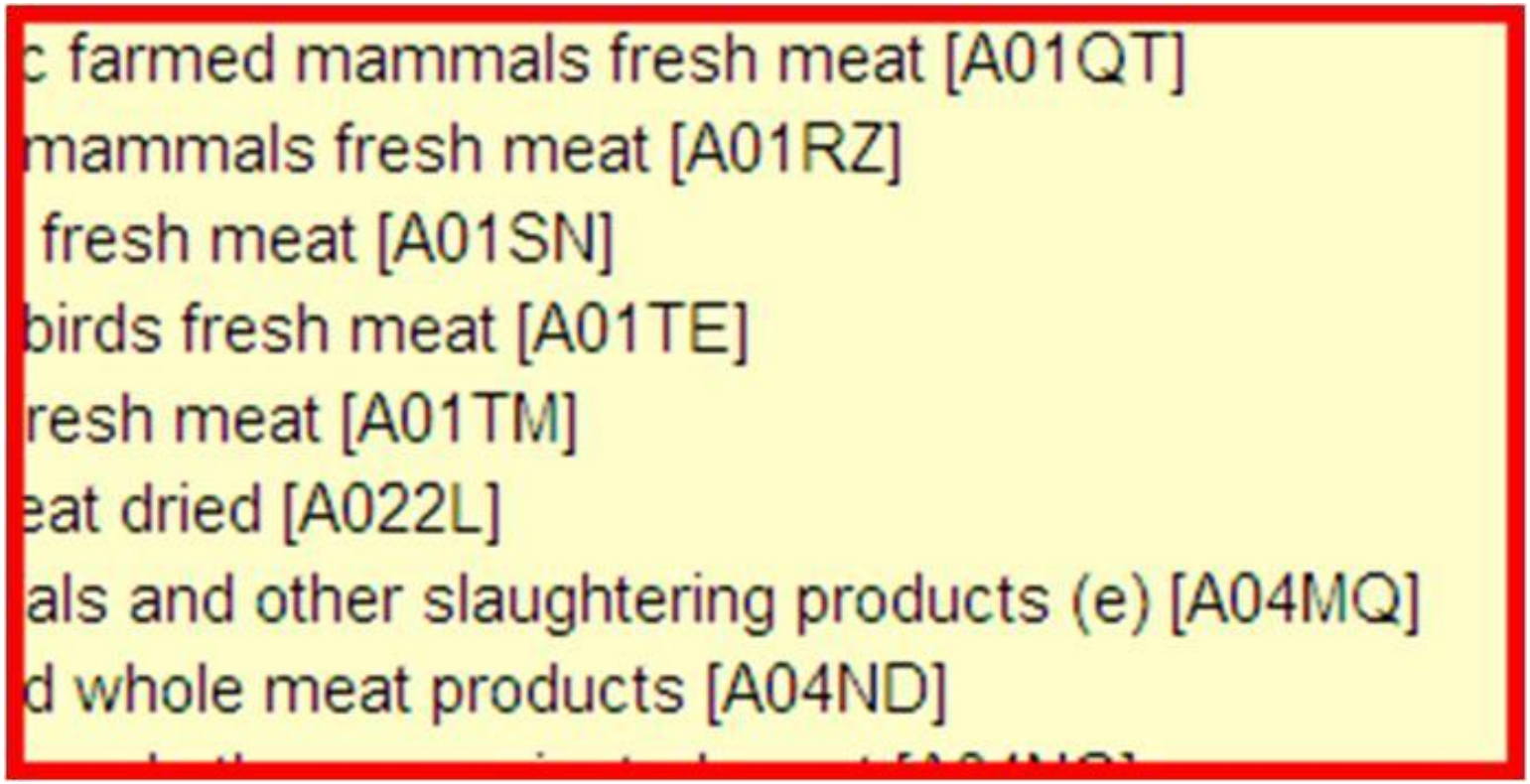


# Pillars of the system

IV. The name of any food group may be interpreted by different persons in a different way, due to the intrinsic ambiguity of language

the system is based on codes, whose scope must be accurately described. The names attributed to the codes in the different languages are tentative and may be refined, provided that the scope of the food entry remains unchanged

# Code-based FCDS

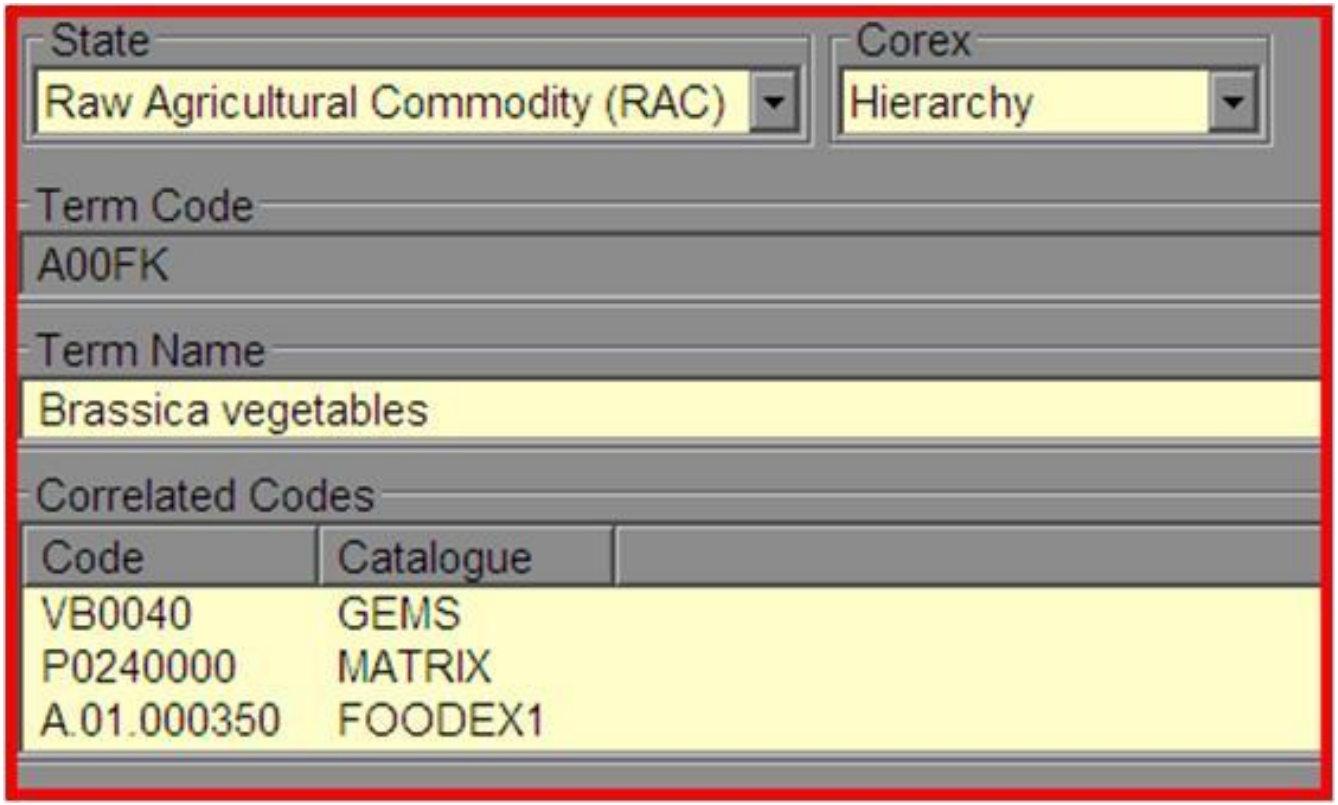


# Pillars of the system

V. Data are collected and reported by Member States since years in different food safety areas

The system aims to be compatible with as many as possible of the reporting systems, including GEMS-Food (Codex). Backwards compatibility is also a priority.

# Additional codes



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# Conclusions

- SSD **supports the collection** of risk assessment data in different areas
- Easy submit **high quality data** on contaminants and pesticide residues in food
- **Cooperation** with all organisations
- Stimulate **network approach** at national level (use of a common format for collecting data, efficiency in retrieving missing information and clarifications)

# Acknowledgement


- Elena Scaravelli
- Ruth Roldan
- Eniko Varga

# *Questions*

*contaminants@efsa.europa.eu*