



EFSA VISIONS ON THE FUTURE OF TRACING IN EUROPE

Oeiras, 23rd February 2023

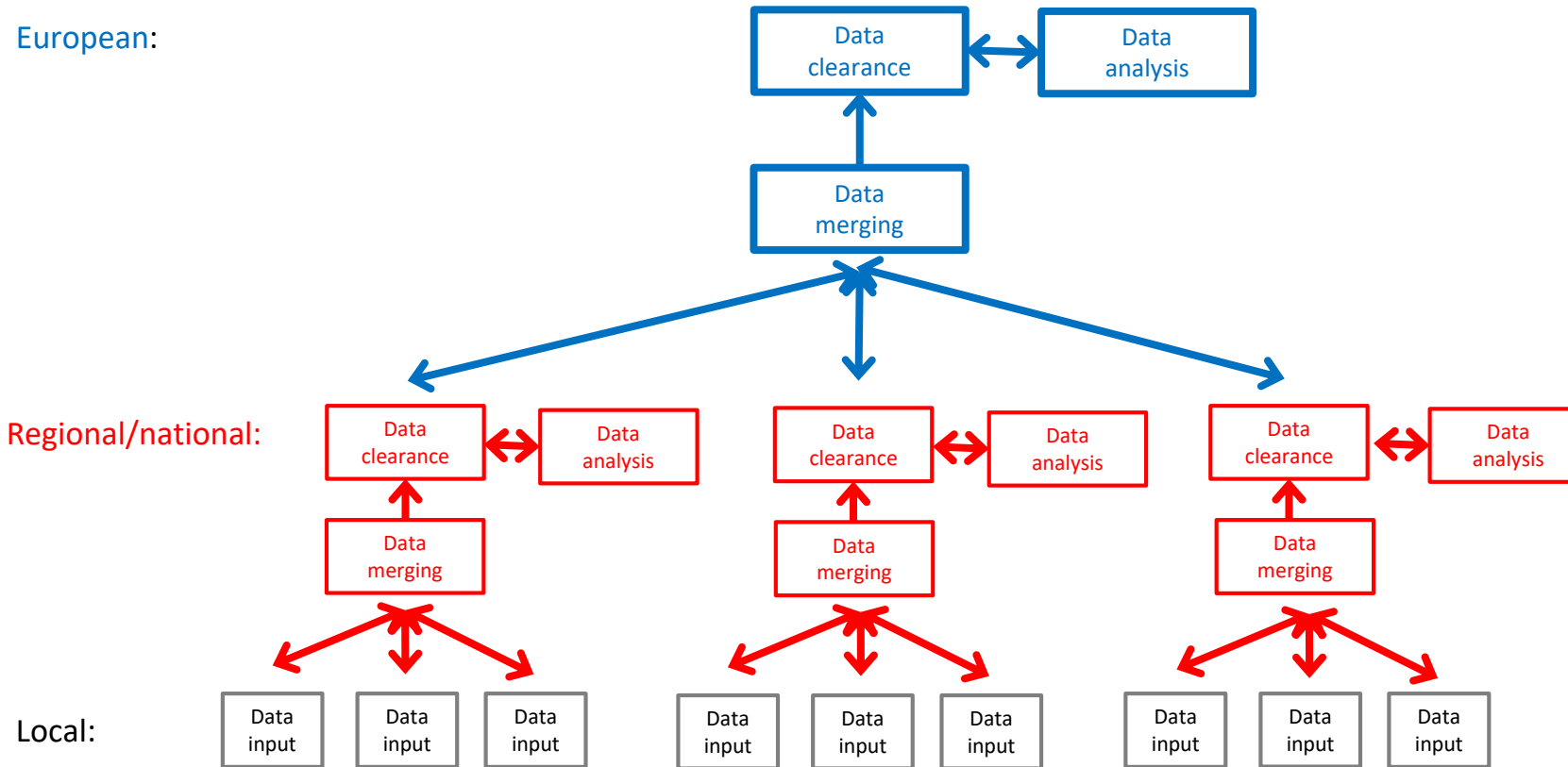
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The positions and opinions presented are those of the author alone and are not intended to represent the views of EFSA.



INFORMATION WORKFLOW OF TRACING

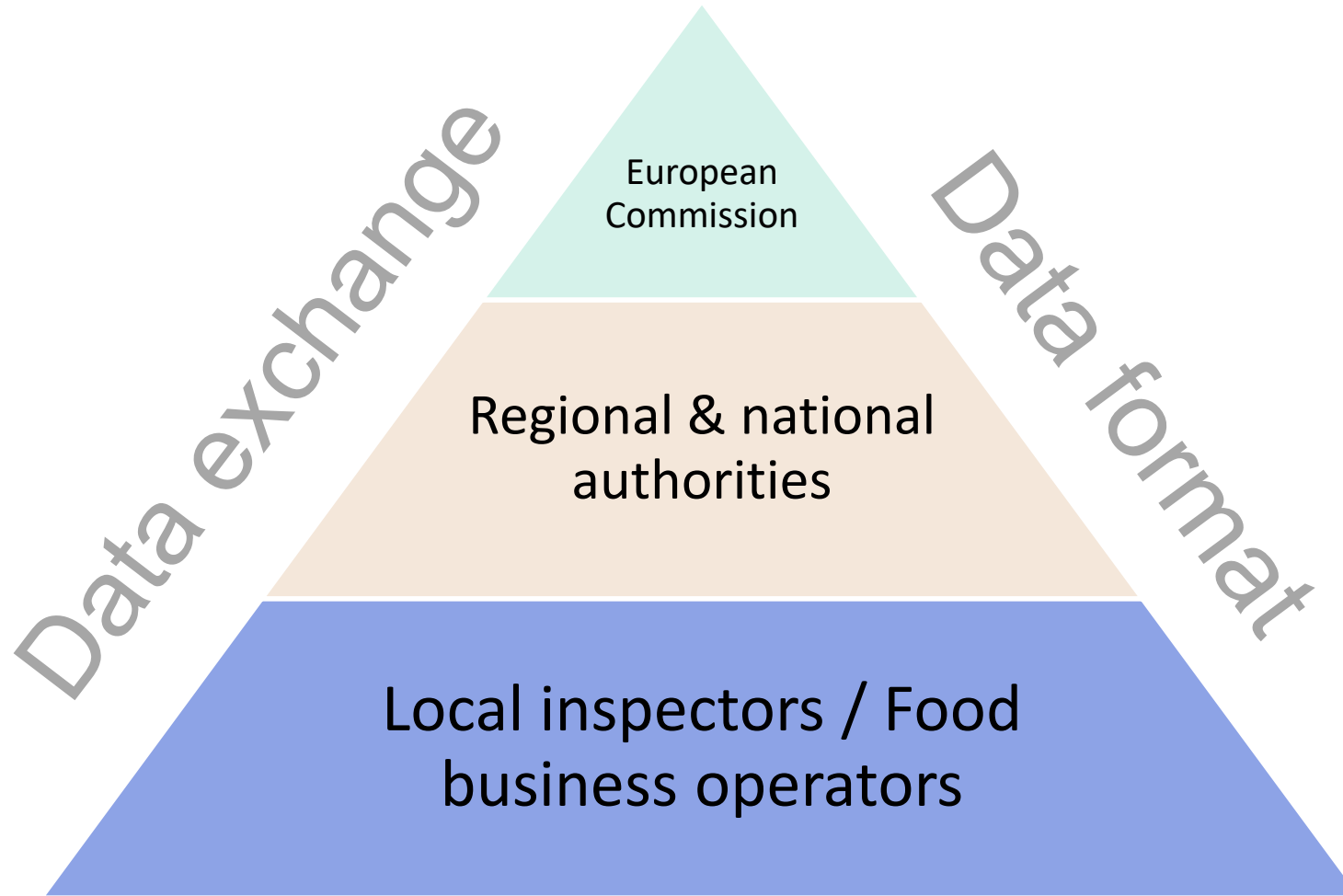


Similar tasks on regional, national, and European level



ACTORS

Communication



Standardisation



INFORMATION WORKFLOW OF TRACING

**Similar tasks
on regional, national, and European level:**

- Similar standards:
 - For data collection (WHAT?)
 - For data classification (HOW?)
 - For data exchange (WHICH FORMAT?)
- Similar tools:
 - For data input, e.g. consistency check
 - For data clearance, e.g. conflict solving
 - For data analysis, e.g. reporting, FCL

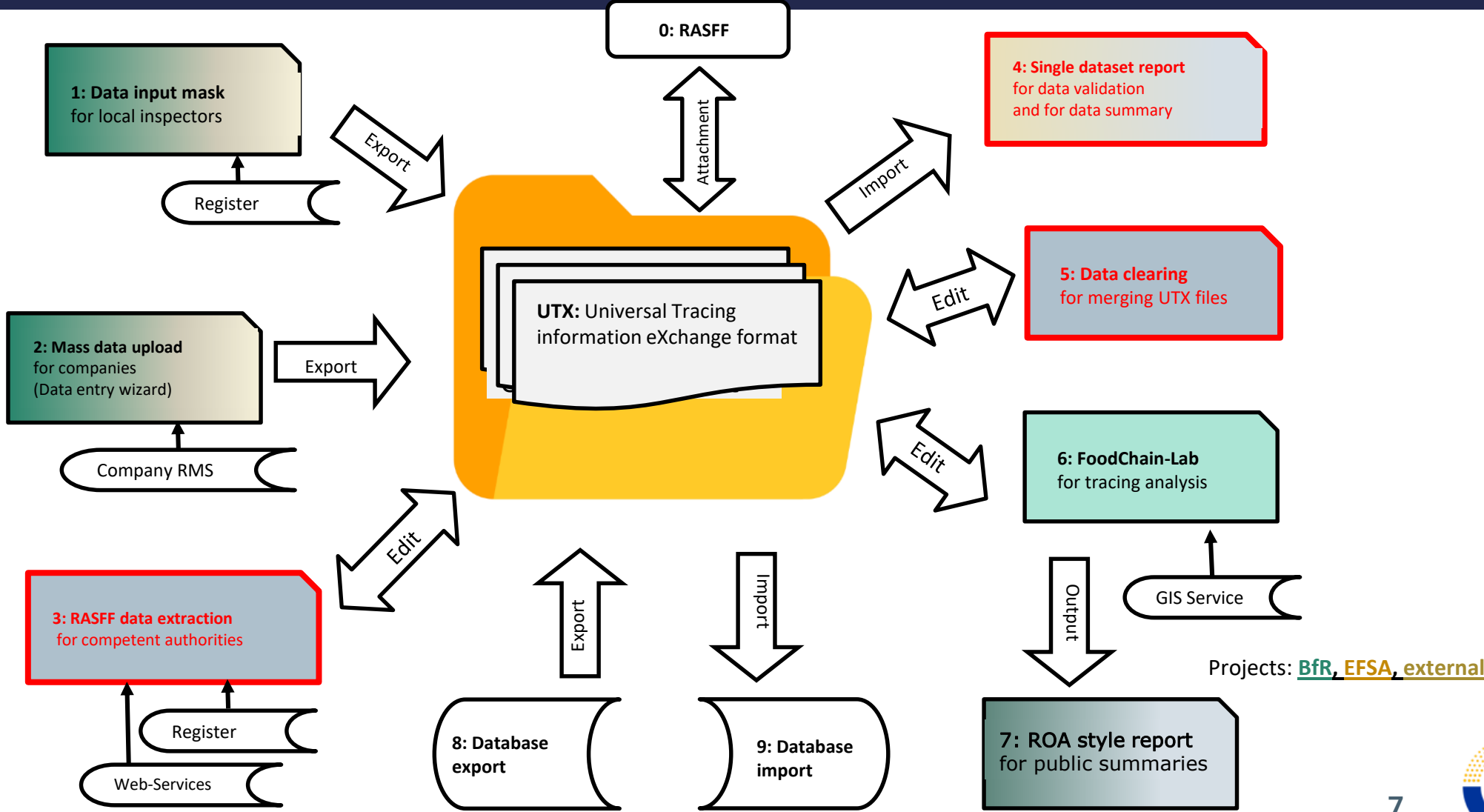


TASK

- Improve the data structure within the RASFF system, esp. for tracing data
- Enable the use of reporting and analytical tools, e.g. FoodChain-Lab
- Distribute workload from central to decentral
- Avoid double work via data exchange between EFSA and MS



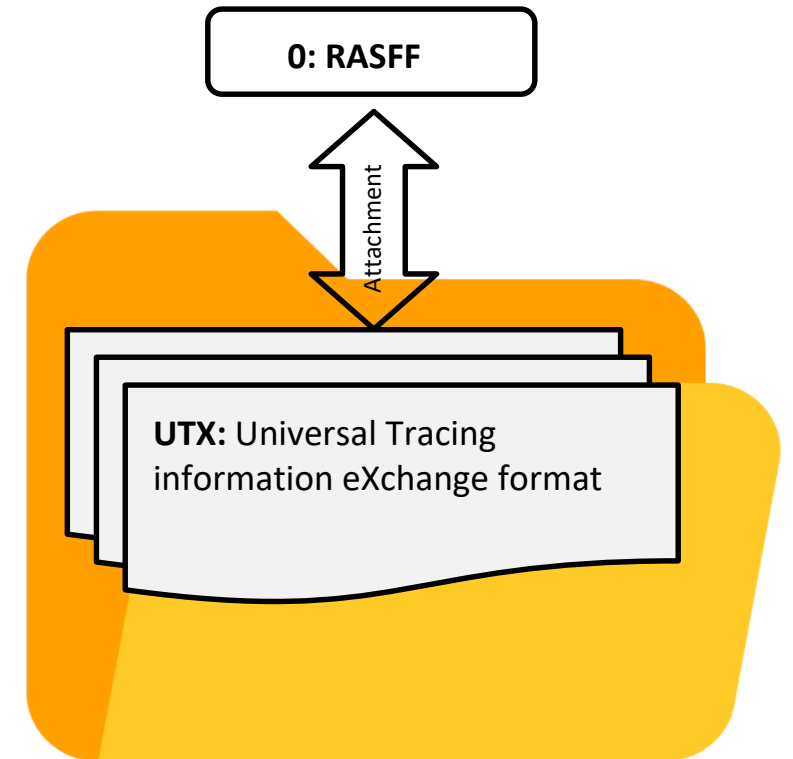
SIMILAR STANDARDS: UTX



DATA EXCHANGE

All exchange of tracing data will be made via attachments within the RASFF system:

- Structured data in json format (UTX file)
- Initial, additional and summary files
- Versioning of information
- Possibility to combine several RASFF notifications, e.g. outbreaks of similar genotype of the past



UTX MAIN PRINCIPLES

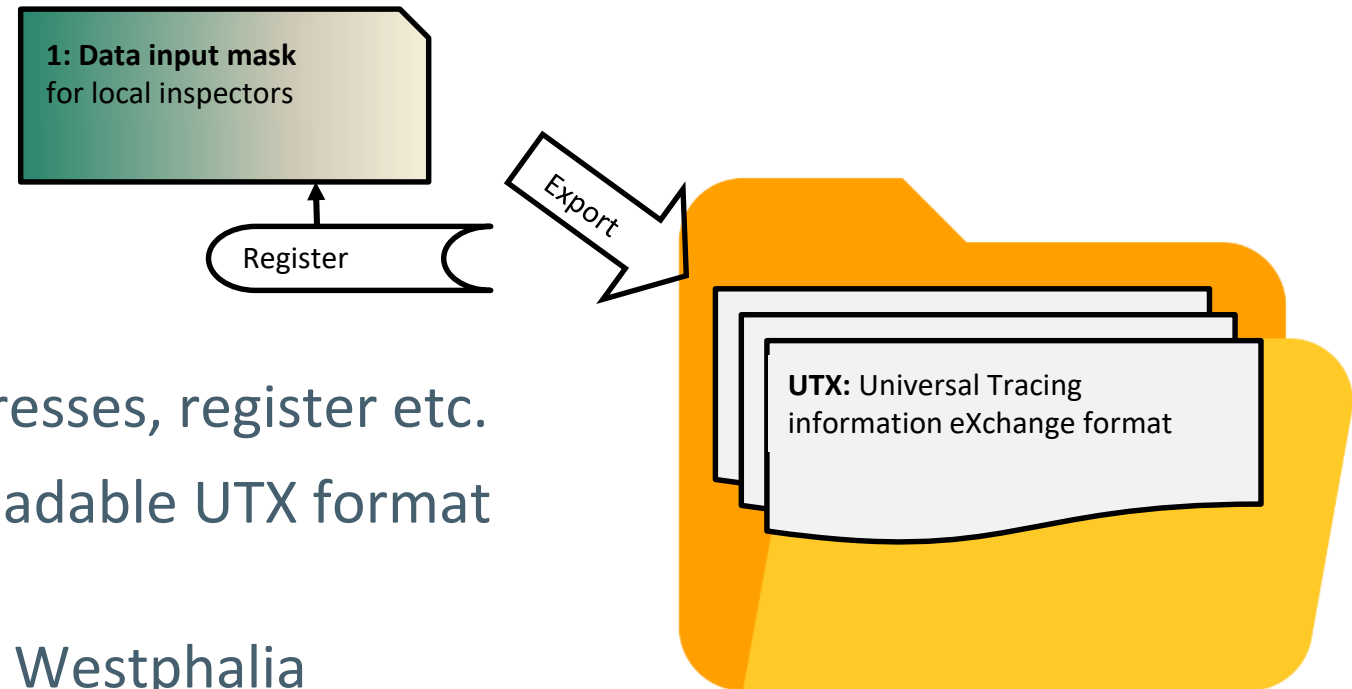
- Shareable
- Structured
- Lightweight
- Open
- Transparent



DATA INPUT OF LOCAL INSPECTORS

Local inspectors will collect the data directly in the standardized format:

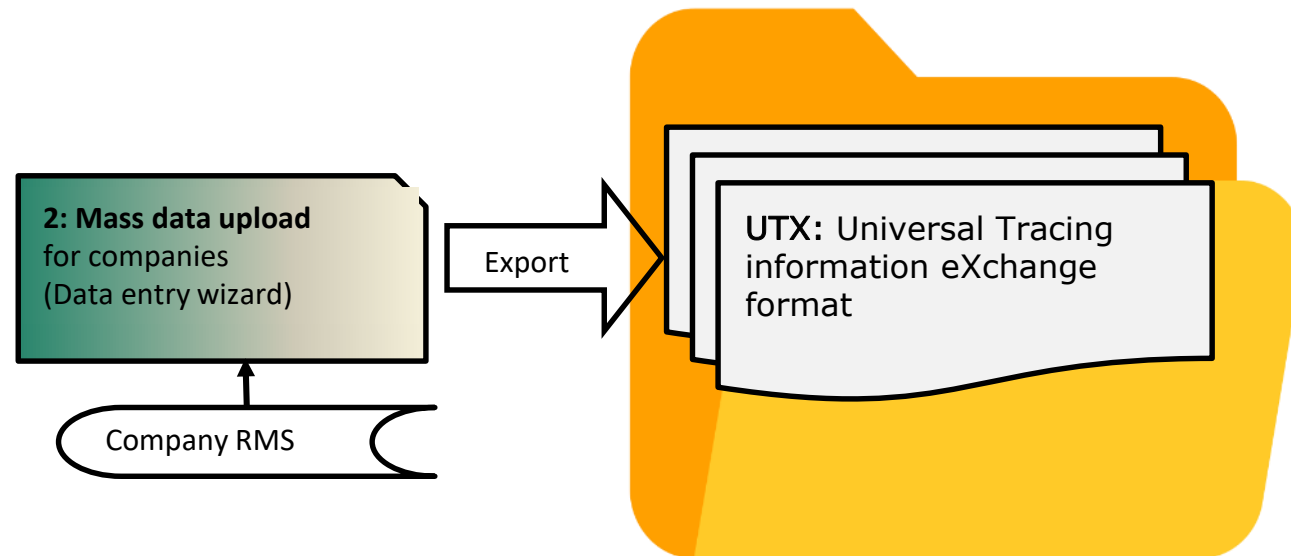
- Web-based guided input mask with supporting functions, e.g. addresses, register etc.
- Output in standardized, machine readable UTX format
- Pilot project with German region of North Rhine Westphalia



CONVERSION OF “EXCEL”-FILES ETC.

If the company provides listed information (e.g. EXCEL), a web-based wizard will convert the information into the standardized UTX format:

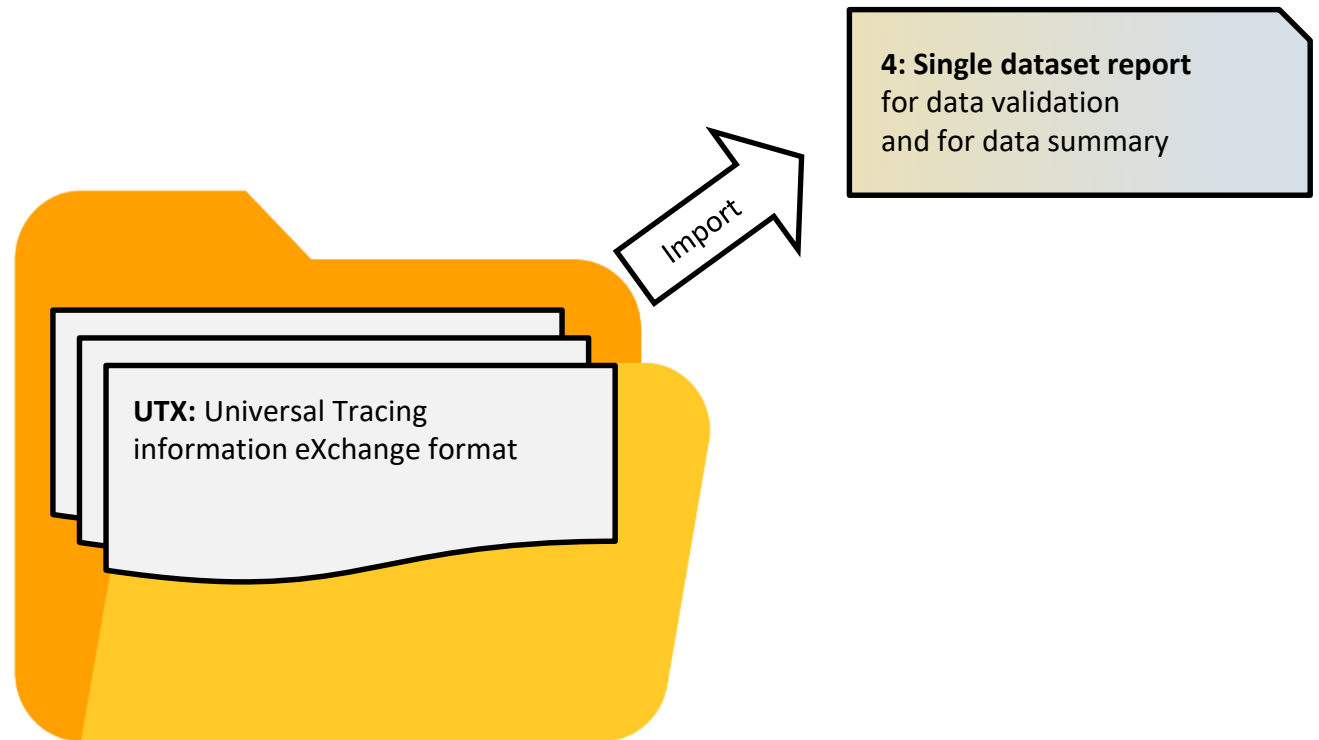
- Guided interpretation of the listed information



SIMPLE STANDARDISED REPORTING

All information of a standardized UTX file will be reported in pdf format:

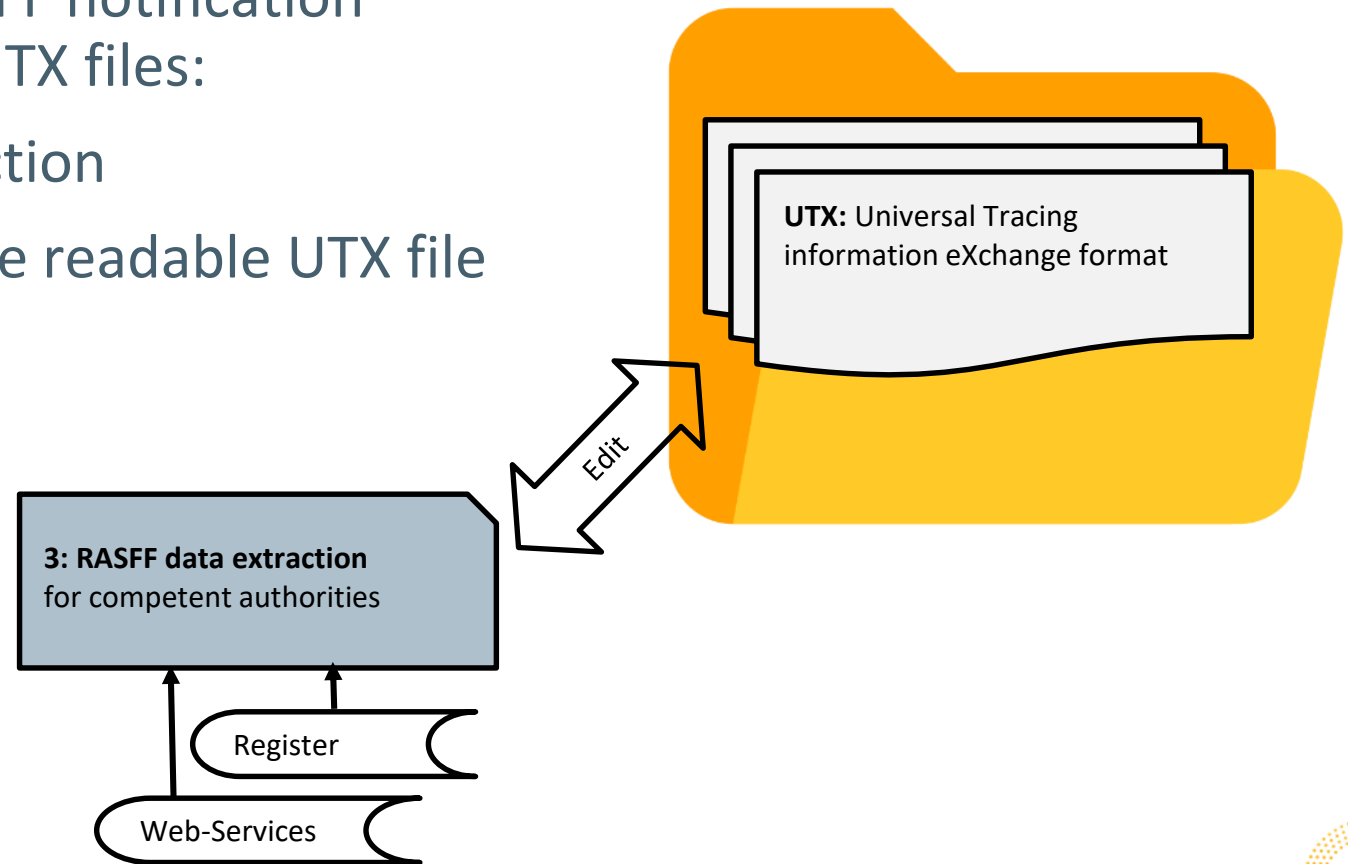
- Data check of collected information
- Summary of merged files
- Possibility of specialized reporting of measurements, mass balancing etc.



CONVERSION OF RASFF NOTIFICATIONS

Information of unstructured RASFF notification will be converted to structured UTX files:

- Web-based, guided data extraction
- Output in standardized machine readable UTX file

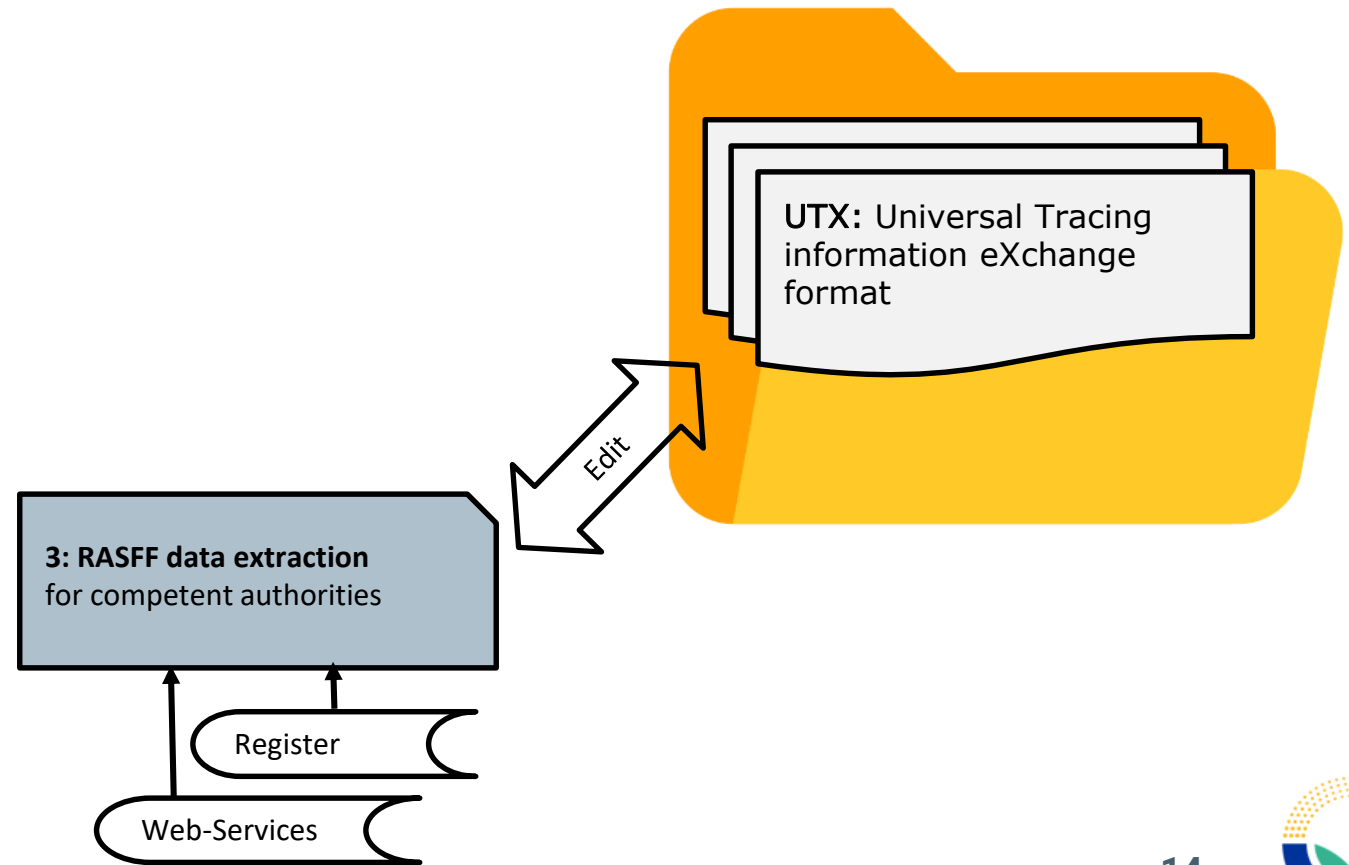


MERGING AND DATA CLEANING

Several standardized UTX files will be merged respecting:

- Consistency check
- Versioning
- Data cleaning, e.g. double entries

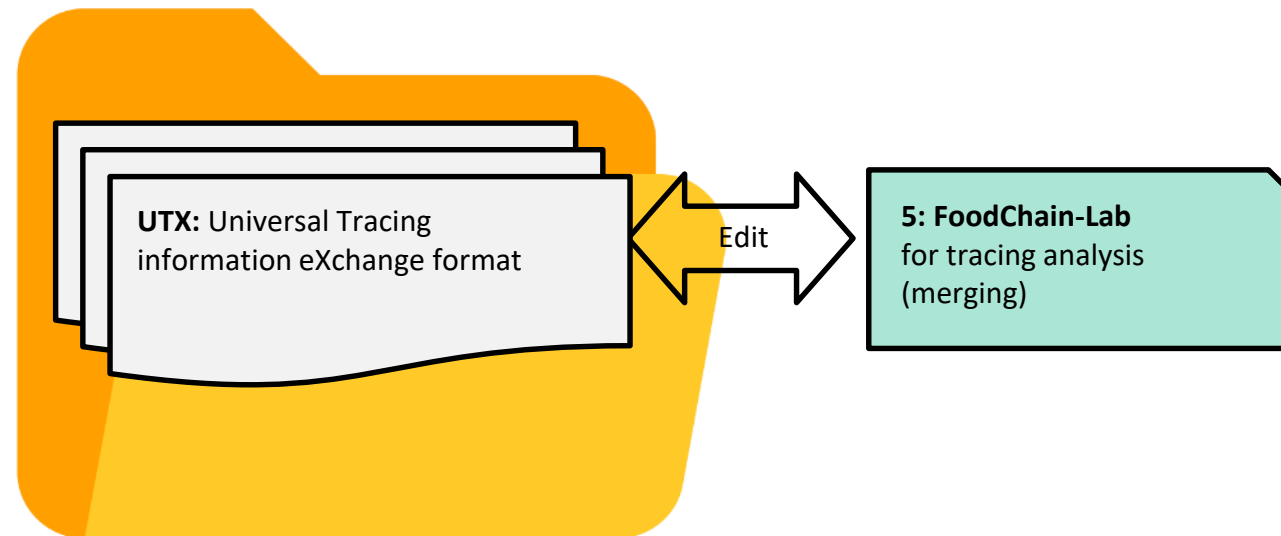
This allows distributed workload.



TRACING ANALYSIS

Several standardized UTX files can be read into FCLs web-app allowing:

- Graphical output
- Tracing analysis, e.g. scoring



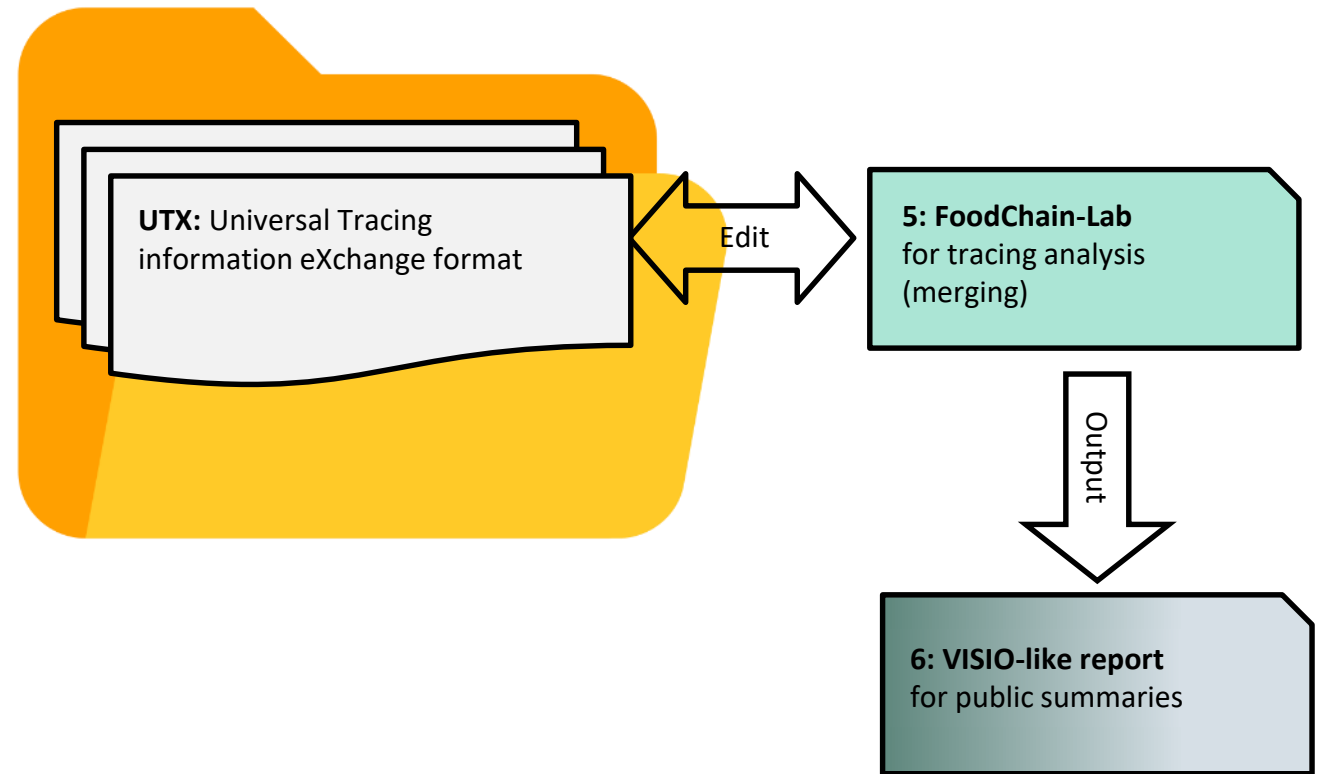
- Merging of stations, deliveries etc.

Results will be stored in the UTX format

GRAPHICAL REPORTING

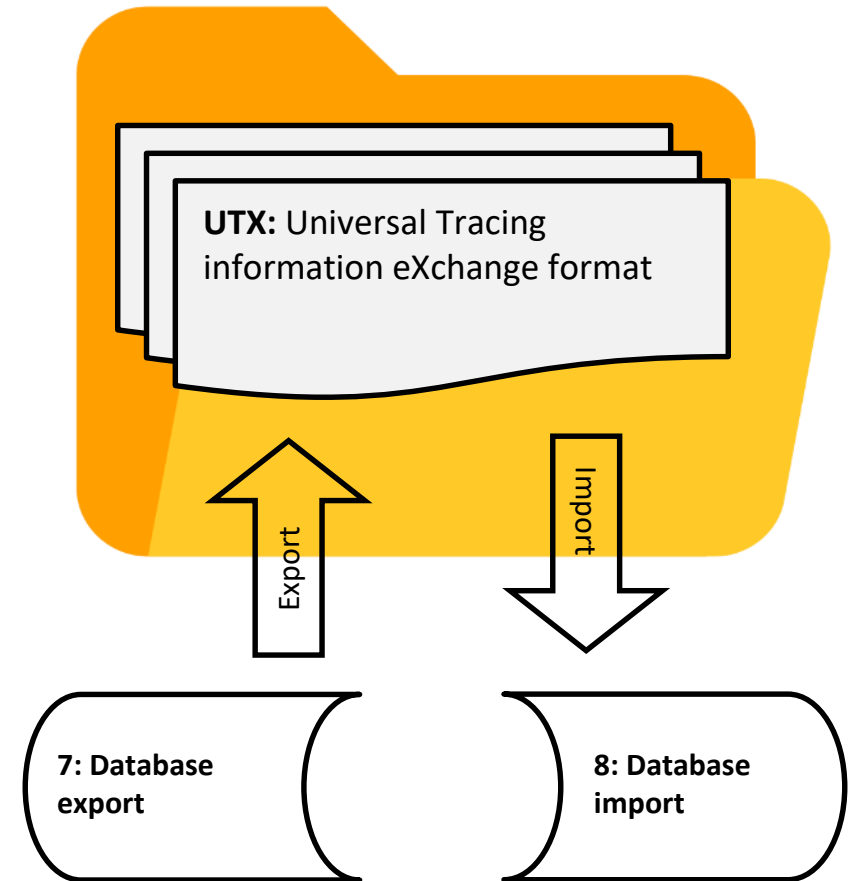
FoodChain-Lab analysis can be printed for publications:

- In complete version
- In anonymized version
- In graphical and pdf format



USE IN STRUCTURED DATABASES

- File in the UTX format may be directly produced from RME systems of FBOs
- Databases of MS or regions may be read directly UTX files for their workflows



MAIN PRINCIPLE: SHAREABLE

- UTX serves tracing of items in the food and feed supply chain
- UTX allows co-working with several tools
- UTX parameters and their formats are interoperable to existing tracing systems on European, national, commercial, or food area specific level.
- UTX uses existing standards for tracing
- UTX contains clear-text, as xml or json
- UTX has no data protection



MAIN PRINCIPLE: STRUCTURED

- UTX is organised in core tables
- UTX core tables are:
 - **Investigation** to collect information
 - **Product** under investigation
 - **Station** in the supply chain
 - **Activity** in the supply chain
- UTX core tables are interoperable
- UTX core tables have hierarchical sub-tables (1:n relations):
e.g. Product → Lot → Tracing unit (TRU)



MAIN PRINCIPLE: LIGHTWEIGHT

- UTX stores information on highest level:
 - e.g. Product: “Band name=Coca Cola”
 - e.g. Lot: “Expiry date=31/01/2023”
 - e.g. TRU: “Package unit=1 litre(bottle)”
- UTX uses relations between tables
- UTX stores all necessary information to perform a tracing exercise (minimal requirement of information)
- UTX can store all available information, which is collected during an investigation (maximal extent of information)



MAIN PRINCIPLE: OPEN

- UTX specifications are freely accessible
 - requires information on different levels:
 - mandatory → rejection when missing
 - recommended → warning when missing
 - optional → no action when missing
- UTX allows tool specific extensions
 - UTX can contain extra-core tables
 - managed only by specific applications
 - non standardised
- UTX supports different languages
 - uses codes, if possible



MAIN PRINCIPLE: TRANSPARENT

- UTX table entries are linked to an information source
- UTX allows merging of files
 - double entries will be cleaned
 - additional information will be merged
 - conflicting information will be solved
- UTX records all actions on entry
 - data input, merging, changes
 - includes versioning of entries



DATA COLLECTION TOOL

- UTX will be provided with a specific editor for the end user
- (The UTX editor supports multi-languages)
- The UTX editor has two access modes:
 - Read-only → free access
 - Editing → information source needed
 - Open a specific entry for editing
 - Submit changes
- (The UTX editor recognizes manipulations and enables warnings, e.g. include a hash that ensures data integrity)



THE ONGOING TASKS

- UTX editor: data collection & extraction
- UTX merging & clearing tool
- UTX reporting tool



REVIEW PHASE

Review of the UTX format and tools:

- Compatibility with national / industry formats
- Integration of national / industry into the workflow
- Support functions to increase acceptance
- Possible disadvantages



THE FOCUS INTERVIEWS

Focus interviews in spring 2023

- Small discussion groups
 - Primary producer, e.g. meat, diary
 - Fresh products / fast food chain, e.g. auctions
 - Processed products, e.g. convenience products
 - Distribution and retail, incl. logistic
- Virtual (2-3x1h sessions each) [OR physical]
- Different views: Multi-national vs. SME
 - Southern/Central/Eastern/Northern

Results will be documented
and presented at a MS workshop in Summer 2023



THANK YOU FOR YOUR ATTENTION



(Thanks to an unknown lady who permitted this photograph of her tattoo, 2016, photograph by Olaf Mosbach-Schulz)

European Food Safety Authority (EFSA)

Olaf Mosbach-Schulz
Methodological & Scientific Support Unit (MESE)

olaf.mosbach-schulz@efsa.europa.eu

