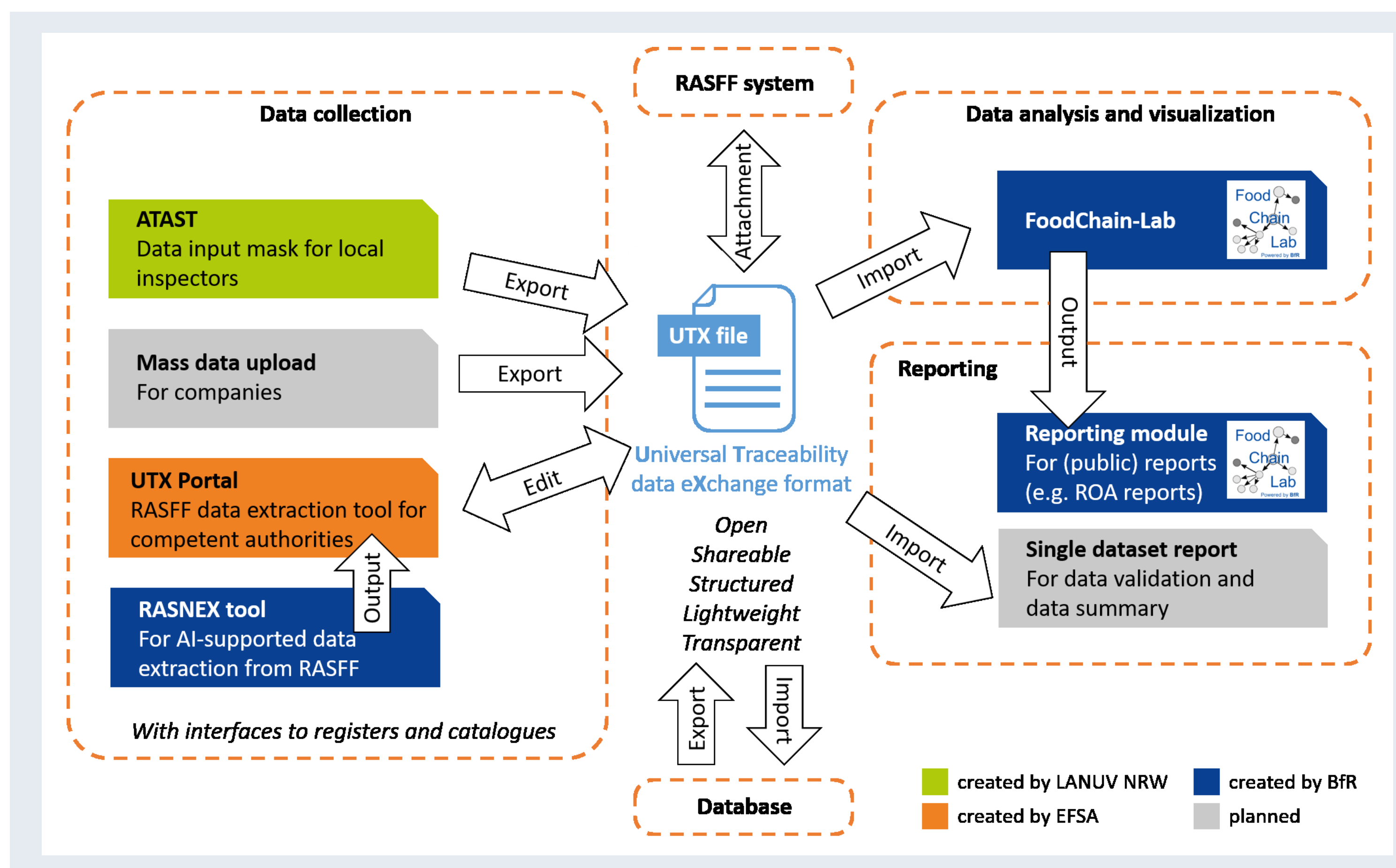


The Universal Traceability data eXchange format

Design Principles and Structure

Marco Rügen, Alexander Falenski, Marion Gottschald (BfR, Department 4: Biological Safety),
Olaf Mosbach-Schulz (EFSA, Methodology and Scientific Support Unit)



Investigations on food borne disease outbreaks revealed obstacles in past crisis. They exhibited massive work load in data extraction due to unstructured data and redundant data extraction in different tracing parties. To speed up the investigation process tracing tools and parties require a structured harmonized data exchange format (UTX). Data collectors could provide their data as UTX file. This file could be made available in tracing data stores, like e.g. RASFF. Data exploitation/assessment could use this UTX file for analysis, visualization and reporting.

The design principles of UTX

The UTX format is JSON based and is designed to facilitate tracing of food items along complex supply chains via interoperable software tools for several purposes. The UTX format adheres to the following design principles:

- Structured
- Open
- Shareable
- Distributed
- Lightweight
- Transparent

The structure of the UTX format

The UTX format stores food traceability data in several thematic data blocks with relations between the data blocks. Each data block has a clear data structure and offers as much controlled language as possible.

Core Data blocks:

- Activity: Any action changing the status of an item in the food supply chain
- FBO (Food Business Operator): Administration responsible for the activity
- Station: Establishment, where the activity is performed
- Product: Description of the kind of item in the food supply chain
- Lot: Description of the production process of the item. As special case a logistic unit is counted as logistic unit
- TRU (Traceable Resource Unit): Entity of a lot/item
- Investigation: Description of a collection of information sources
- Information source: Description of the source of information included in the UTX file
- Contact: Contact details
- RegistrationScheme: Register holding the registration information
- Measurement*

Additional software specific data blocks can also be added.

* Outside the project. Will be decided later.

UTX Core Data Block Relations

