Introduction and background

In recent years, a number of transnational foodborne disease outbreaks (e.g. EHEC in 2011) and food/feed chemical contamination incidents (e.g. several dioxin crises) have occurred. These incidents were characterised by their large-scale and cross-border distribution patterns. Such events pose an increasing challenge to veterinary and public health authorities. The investigation of these outbreaks is increasingly complex due to changing patterns in the global food production and supply chain networks. This results in more and more complex delivery networks that can only be described and analysed adequately using state of the art software tools. A common understanding of the data needs and the requirements of data formats is needed for using these tools, also across different countries. To enable a rapid and improved investigation of such outbreaks and incidents, expertise should therefore be developed in all Member States and views on data needs and experience with food chain analysis and tracing tools should be exchanged. This could foster a faster and closer collaboration between authorities in affected member states in case of outbreaks and incidents through established contacts and routines.

Different tools for analysis, simulation, visualization and reporting of outbreaks are currently available. They differ in their functionalities, scope, targeted user group and user-friendliness. While some are offered commercially, others are freely available.

For example, *FoodChain-Lab* is a free expert system software designed to support the collection, handling and analysis of food delivery data. It was originally developed during the Pan-European EHEC outbreak caused by sprouts in 2011. Since then it has been applied successfully in numerous national and some cross-border EU-wide outbreaks, e.g. the Hepatitis A virus outbreak that was associated with berries. It has been used in training workshops held in different MS. On the one hand, this helped to further improve the tool by adapting it to situations in different MS. On the other hand, there is now a number of people in different MS able to use the tool. Other MS may use other tools for similar purposes. One key issue, however, is the availability and structure of food chain data and the interoperability of systems used in different MS.

Legal basis

Article 18 of Regulation (EC) No 178/2002[1] requires that food items can be traced one step forward and one step backward.

Objectives

The ultimate goal of the network is to support capacity building in European agencies to

a. rapidly trace backward to sources of foodborne disease outbreaks and chemical contamination incidents
b. trace forward to already delivered contaminated food and feed items to allow their withdrawal from the food chain
c. collaborate seamlessly in transnational outbreaks and incidents

[1] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02002R0178-20190726

Timeframe

The network builds on previous and ongoing activities of individual MS and EU-institutions, which will be expanded continuously. The work in the network starts immediately and members for the network should be nominated by the MS and EU authorities until the next HoA meeting (February 2021). The network will meet at least once a year.

Tasks

In order to achieve the outlined objectives the network will focus on the following activities in cooperation with EFSA:

1. Provide a platform for users of food chain analysis tools across Europe
2. Organize and support training courses for food chain analysis using the available IT-tools
3. Organise regular expert meetings and workshops
4. Support authorities in outbreak/incident situations in the use of food chain analysis tools

In the expert workshops, various aspects will be addressed to improve the availability, performance and interoperability of food chain tools. These may include:

- Compilation of the specific requirements of MS agencies with view to tracing
- Creation of an overview on procedures/tools for forward and backward tracing already in use in the different MS
- Identification and realisation of needed improvements of existing tools (e.g. FoodChain-Lab) during their implementation. This includes an adaption to specific data formats in the MS
- Exchange views on the implementation of common food chain tools in EU context
- Support the harmonisation of data formats for tracing analysis (in the different MS)
- Establish contacts with the industry to agree on data formats to facilitate close cooperation between industry and authorities in outbreak investigations
- Develop scenarios for implementation of food chain tools in EU context

Deliverables

The network will meet on a regular basis to progress the proficiency in the use of food chain tools across Europe. It will report regularly to the HoA on its activities and will announce events of the network.

Linkages/co-operation

The cooperation with COM and ECDC should be envisaged. Close cooperation with EFSA with respect to FoodChain-Lab is already established. In addition, links should be sought with agencies in third countries with a high relevance for the European supply chain.

Composition of the Network

A delegated expert from each Member State, including chair and a secretary:

Organisation	representative	email	position
DE: BfR (German Federal Institute for Risk Assessment)			Chair
DE: BVL (Federal Office of Consumer Protection and Food Safety)			Member
HU: NEBIH (National Food Chain Safety Office)			Member
SK:MPRV-SR (Ministry of Agriculture and Rural Development)			Member
AT: AGES (Austrian Agency for Health and Food Safety)			Member
NO: Mattilsynet (Norwegian Food Safety Authority)			Member
SE: Livsmedelsverket (Swedish Food Agency)			Member
DK			Member
BE			Member