

DEMETER

Determination and Metrics of Emerging Risks

Introduction

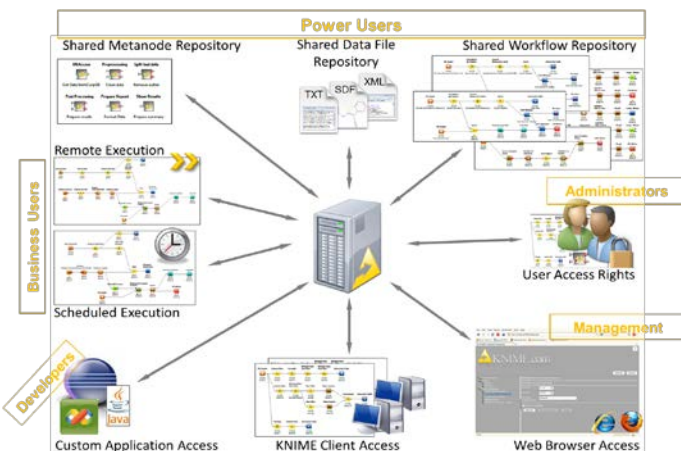
The early identification of emerging risks in the food (and feed) chain is of paramount importance if the European consumer is to be protected through timely and effective preventive measures. Increased global trade is making food chains more complex, both in terms of geographical spread and the rapid distribution of goods. The increasing complexity of the chain makes it more difficult to oversee and assess all drivers of change for food safety risks in a particular chain.

Yesterday's emerging issue may be tomorrow's crisis

As such, yesterday's emerging issue in one area may be tomorrow's crisis in a different place. Dealing with this complexity requires a high degree of scientific and technical expertise.

Advantages of digital / data-driven solutions

The use of new data mining and data science solutions (digital technologies) can help to overcome current constraints to enable identification of emerging food safety issues at an early stage so that timely measures can be taken to prevent these becoming a food safety risk. The advantages of digital / data-driven solutions are numerous. The process of emerging risks detection in the European Union must therefore utilize digital technologies and the application of "big data" analysis to identify emerging food safety risks across an increasingly complex and geographically dispersed food webs.

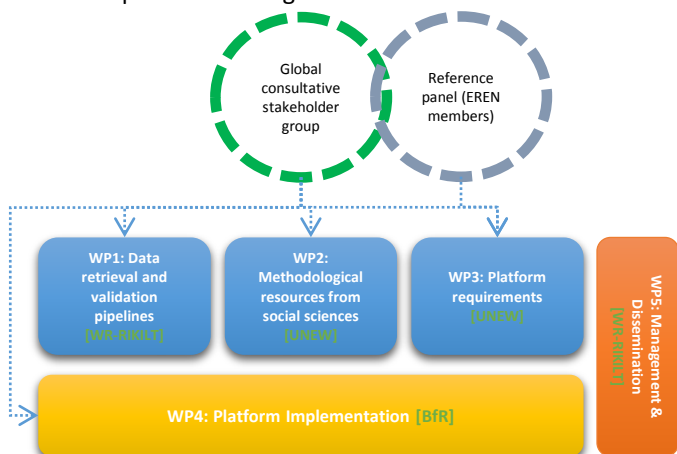


Objectives

The objectives and research proposed in this project are specifically designed to support current (and future) EFSA procedures for emerging risks identification.

Integrated, open-source solutions

We want to do this by providing a set of integrated, open-source solutions that will allow EFSA and EU Member State authorities to share data, knowledge and methods in a rapid and effective manner. This main objective will be achieved by activities carried out in five integrated work packages (see Figure 1), which are presented in more detail below. The Consortium's work will be supported by two groups: a global consultative stakeholder group consisting of global organizations working in the area of emerging risks, and a reference panel consisting of EREN members.



Main envisioned output

The major deliverables of the project is the development of:

1. "Concept Note" describing the DEMETER vision of a Collaborative Emerging Risk Knowledge Exchange Framework
2. New resources for automatic data retrieval and validation;
3. Methodologies to integrate information and data from social science;
4. A prototype of a collaborative Emerging Risk Knowledge Exchange Platform (ERKEP).

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