

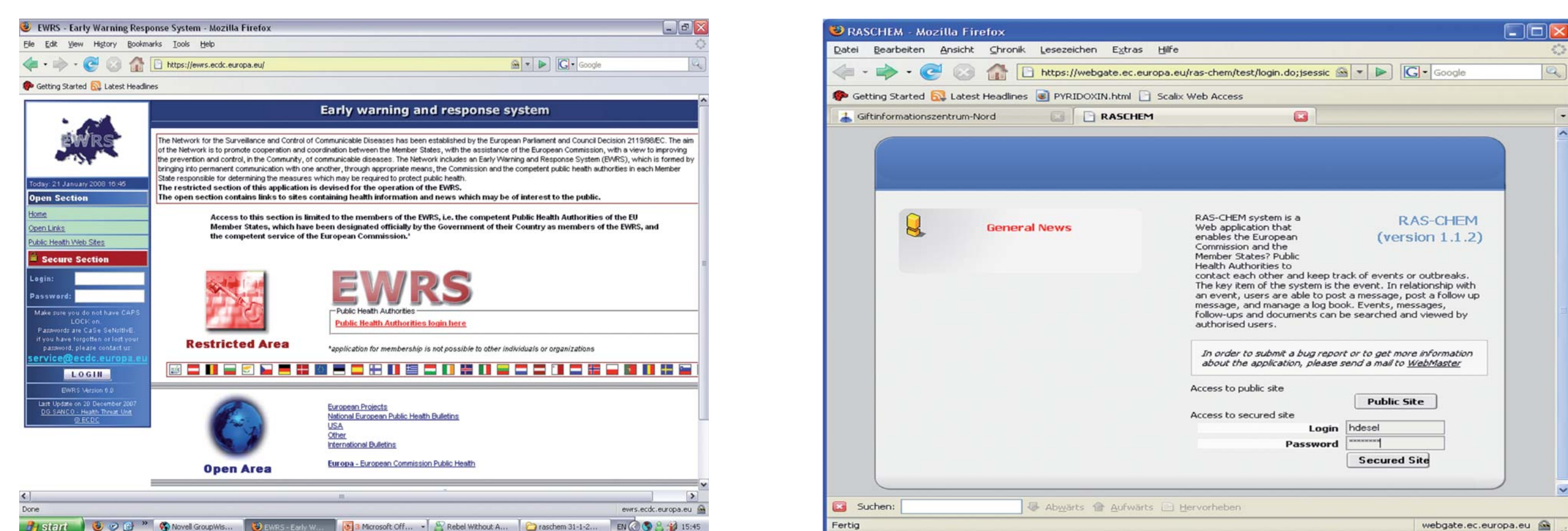
Development of an Alerting System and the Criteria for Development of a Health Surveillance System for the Deliberate Release of Chemicals by Terrorists

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Introduction

Poisons Centres (PC) in Europe play an important role in detecting epidemics of poisoning. This project aims to use this resource to determine the feasibility of developing an alerting system and criteria for a health surveillance system which aims to detect the deliberate release of chemicals by terrorists. The alerting system will be known as the European Union (EU) Rapid Alert System for Chemicals (RAS-CHEM).

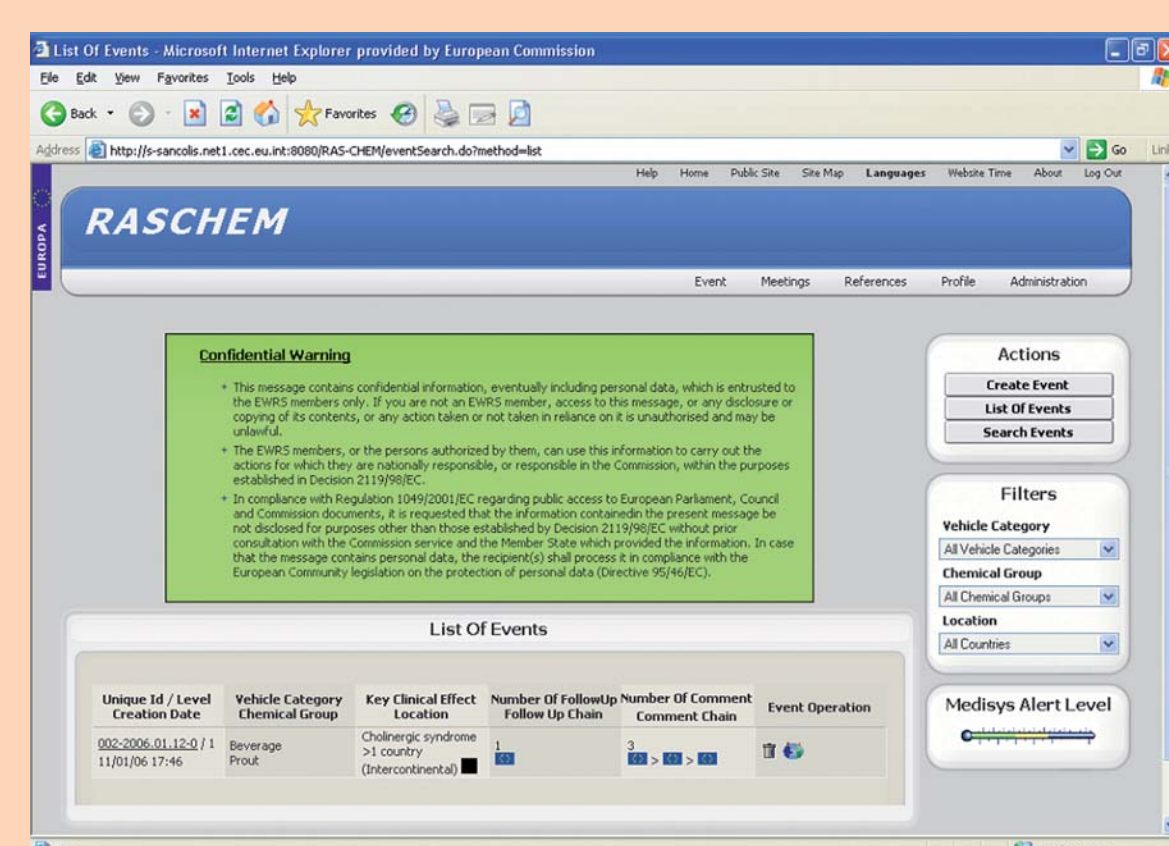


Project Objectives

- Define a set of syndromes that may signal possible chemical releases.
- Define the structure and membership of the alert system and develop protocols and procedures for its operation.
- Provide guidance by specifying the requirements of the system for the information to be transmitted, mechanisms of communication and performance standards for the development of software for effective communication amongst poisons centres.
- Moderate and manage a test period of operation of the alert system.
- Develop a minimum data set for collection of case data concerning exposure to chemicals for the purposes of surveillance and signal generation.
- Determine the feasibility of an EU-wide surveillance system based on poisons centres case data by analysing the requirements that must be met to enable a real time data collection.
- Raise awareness about the alert network and promote participation of poisons centres and other relevant agencies in the network.

The EU Rapid Alert System for Chemicals (RAS-CHEM)

An important objective of this project is to design and test a web-based rapid alert system for communication between poisons centres and European Public Health Institutions, the so called Rapid Alert System for Chemicals (RAS-CHEM).



Progress to Date

- A technical description of a Poisons Centre Alert System has been developed.
- RAS-CHEM was made available online to project partners to allow for the test phase which has two components - a technical and a real data test - to begin.
- Initial testing revealed that further work is required on the structure and the control programme of RAS-CHEM, which is currently ongoing.
- The project is to be completed later this year (2008) and is likely to be rolled over into a second phase (ASHT phase II) that will lead to a fully activated system in due course.

Syndromes and Clinical Effects Clusters

A list of 20 priority chemicals has been derived and literature searches have been performed regarding human toxicology and mass exposure for each chemical.

A list of clinical effects expected to occur after exposure to each of the chemicals has been created to develop syndromes and clinical effects clusters for these.

Protocol

A review of existing Poison Centre Communication Networks has been undertaken to identify current protocols and operating procedures for the communication of information relating to chemical incidents between poisons centres and other relevant authorities.

This information, alongside the protocols and procedures previously developed for the EC Early Warning and Response System for communicable diseases (EWRS) is being used to develop a membership structure and protocols for the use of the RAS-CHEM system.

Minimum Data Set

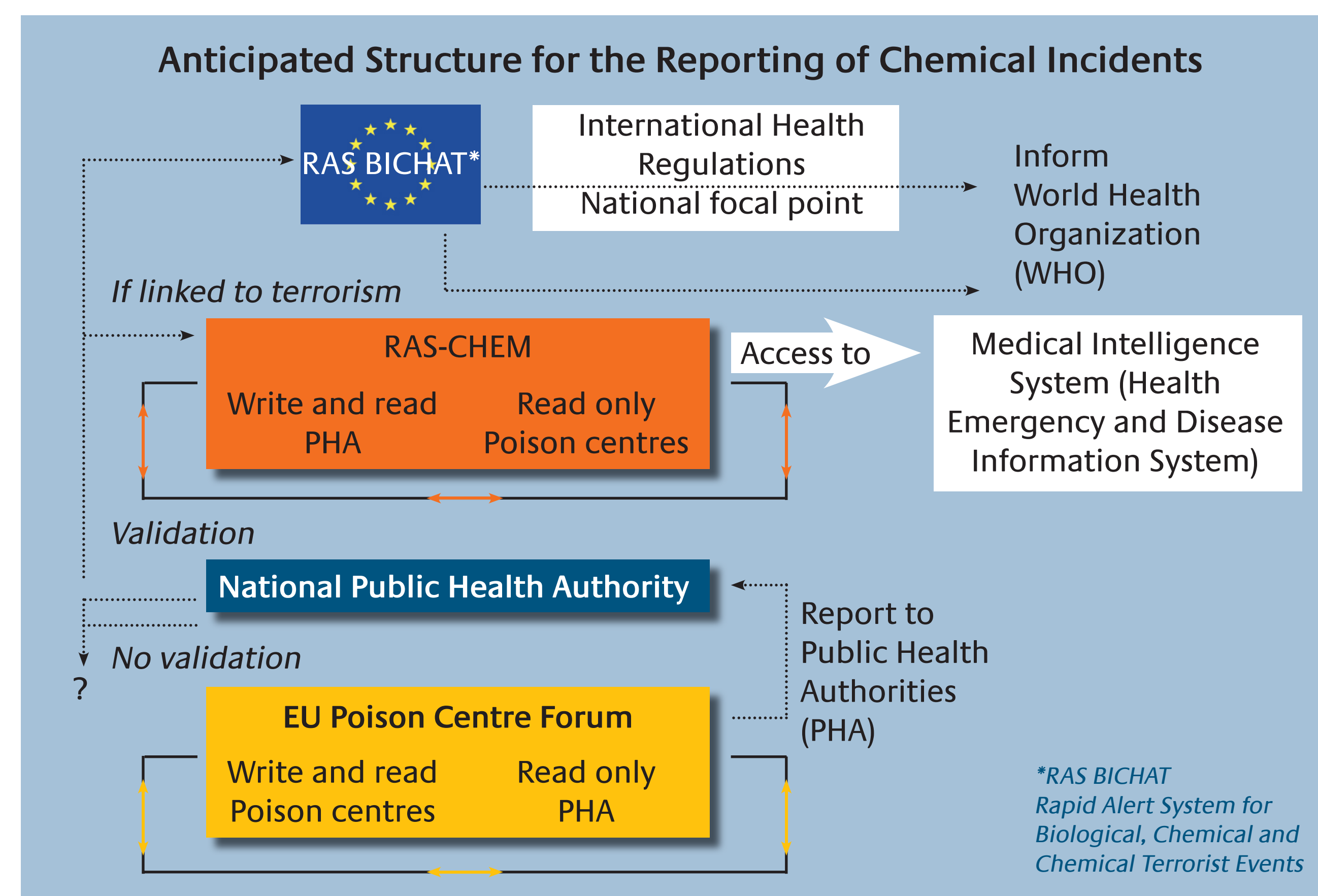
An important part of determining the feasibility of developing a single EU-wide surveillance system to provide early warning of deliberate chemical release involves the identification of a minimum dataset that all poisons centres within the EU would need to collect.

A minimum data set (with definitions) that is adequate for surveillance and signal generation purposes and that takes into account existing systems for the documentation of selected syndromes/health effects associated with chemical exposures has been developed.

Using the minimum data set, a survey of a regionally representative sample of European Poisons Centres has been conducted to determine their concordance with the minimum data set and to compare and harmonise the definitions used for data items. A guidance document has also been produced which describes the design and procedures of a surveillance system that uses PC data.

What Next?

A key conclusion of the project is that there is a need to engage public officials at different levels to ensure efficient and effective communication across the EU. To facilitate this communication it is proposed that a reporting and monitoring structure is developed in the next phase of the project.



To ensure that alerts are detected, it is important that poisons centres use the system regularly. This will be achieved by broadening the scope to include a broader range of chemical incidents. This will also be addressed in the next phase of the project.

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