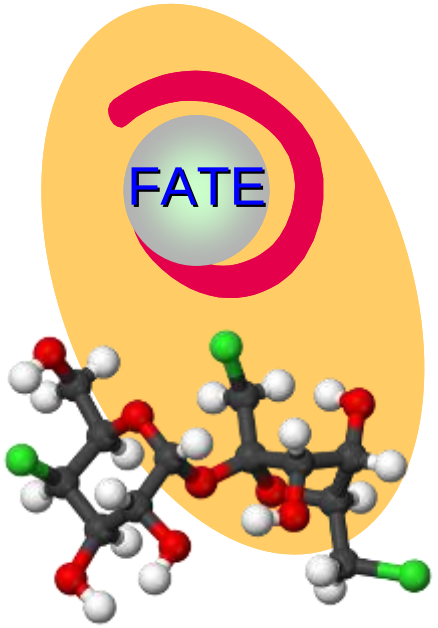
Pan-European and Pan-Regional Monitoring Exercises

Bridging the gaps by working together



Restrictions for an EU-wide monitoring approach

Addressing issues of “contamination” and “pollution” from a local to a regional to a European level.

- Approach 1 – Modelling based on existing information
  - Emerging or less investigated compounds may require quick and fast reactions!
  - Information gaps: Emerging – not monitored – no data – not emerged

- Approach 2 – Fresh monitoring data of known quality
  - For monitoring a 16 x 16 km^2 grid of soil (LUCAS) we need to analyse 20000 – 30000 samples!
  - Lengthy standardisation procedures for analytical methods;
  - Need to duplicate measurement capacities in labs;
  - Data in a European context are NATIONAL data;
  - Why the JRC?

The concept

Objective:

To produce representative, evidence-based and independent data on the occurrence and fate of less-investigated and new chemical substances in the environmental media following a non-probabilistic approach.

Work plan (2008 – 2011)

- Surface Water ✓
- Groundwater ✓
- Effluents and sewage sludge ✗
- Compost and biowaste ✗
- Coastal waters ☐
- Refuse-derived fuels (RDF) ☐

Characteristics:

- Concern-driven approach
- Integrative assessment
- Synchronisation and coordination of existing capacities
- Pan-regional assessments
- Non-probabilistic approach
- Multi-methods and -parameter
- Spatial (and temporal context)

Substance classes

- Pesticides
- Candidate priority substances
- Pharmaceuticals
- Personal care products
- Engineered nano-materials
- Trace elements
- …

The tool for pan-European assessments

Next on the agenda

- International Workshops:
  - *Integrated spatial assessment*
  - *Emerging pollutants under the Water Framework Directive*
- Increase measurement capabilities and link to existing Centres of Excellence → CA NORMAN
- Integrative assessment, chemometrics
- Strategy for emerging environmental risks *(engineered nanomaterials, siloxanes, etc.)*
- REACH: Assess effectiveness of measures
- Logistics to go beyond Europe – Pan-regional? *(Mediterranean, emerging economies, etc)*
- Role within the CIS WFD

Why MAPLE ?

MAPLE primary objective is to support Commission activities invoking the use of environmental monitoring data regarding the occurrence and levels of pollutants in all media and natural resources with the aim to:

- Provide policy options when environmental measurements are needed
- Explore the feasibility of a monitoring concept
- Ensure comparability of monitoring data in space and time
- Anticipate upcoming issues by horizon scanning pan-regional monitoring activities

To this end, MAPLE maintains a series of cutting-edge analytical and bio-analytical measurement and monitoring capabilities. Striving for integrated approach based on monitoring and modeling, MAPLE actively supports other JRC Actions and activities.