EUROPEAN UNION
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SCIENCE AND TECHNOLOGY WEEK

Delivering safer food: rapid, cost efficient testing for chemical contaminants in the food chain

Dr Sara Stead

Food and Environment Research Agency
United Kingdom

sara.stead@fera.gsi.gov.uk

CONFIDENCE

fera
The Food and Environment Research Agency

EU Funded Research Project "CONffIDENCE"

CONtaminants in *f*ood and *f*eed:

Inexpensive **DE**tectio**N**

for **C**ontrol of **E**xposure

www.conffidence.eu

SEVENTH FRAMEWORK PROGRAMME




CONffIDENCE Passport

EU
- FP7 Collaborative Project; first call “Food, Agriculture & Fisheries, and Biotechnology”

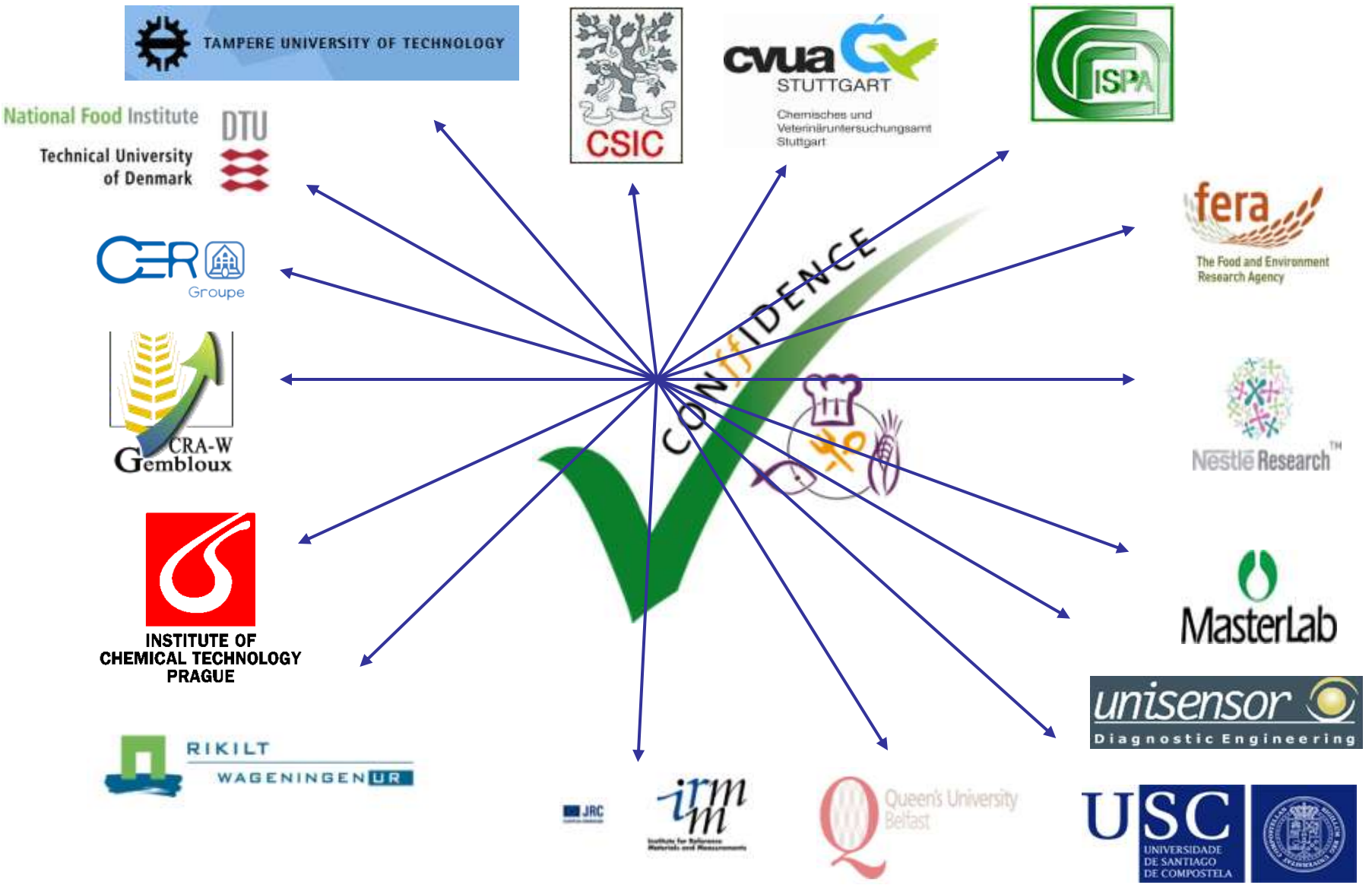
Time
- Duration; 4 years May 2008 to April 2012

Budget
- €7.5 Million

Who
- 16 partners from 10 countries including universities, research institutes and global food industries

Lead
- Co-ordinator: RIKILT - Institute of Food Safety, Wageningen UR (NL)

CONffIDENCE: Project Consortium



CON*ff*IDENCE
The Objectives…

- Development and validation of new simplified **inexpensive** detection methods for **chemical contaminants** from farm to fork
- Improved **exposure assessment** through monitoring of selected contaminants
- **Dissemination and training** of new **detection methods** to stakeholders to advance technology exploitation

Why CON*ff*IDENCE?

- To assure chemical safety and quality in the European food supply

- Support of EC policies and competitiveness of food and feed industries

- To improve multi-detection “multiplex capability, *e.g*. for antibiotic residues

- To improve inexpensive screening possibilities *e.g*. for metal speciation

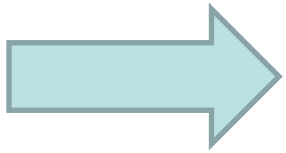
- To contribute to the generation of data for exposure assessment

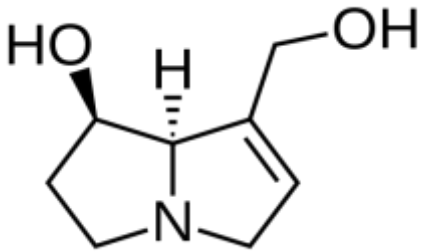
efsa
European Food Safety Authority

Why CON*ff*IDENCE(2)?

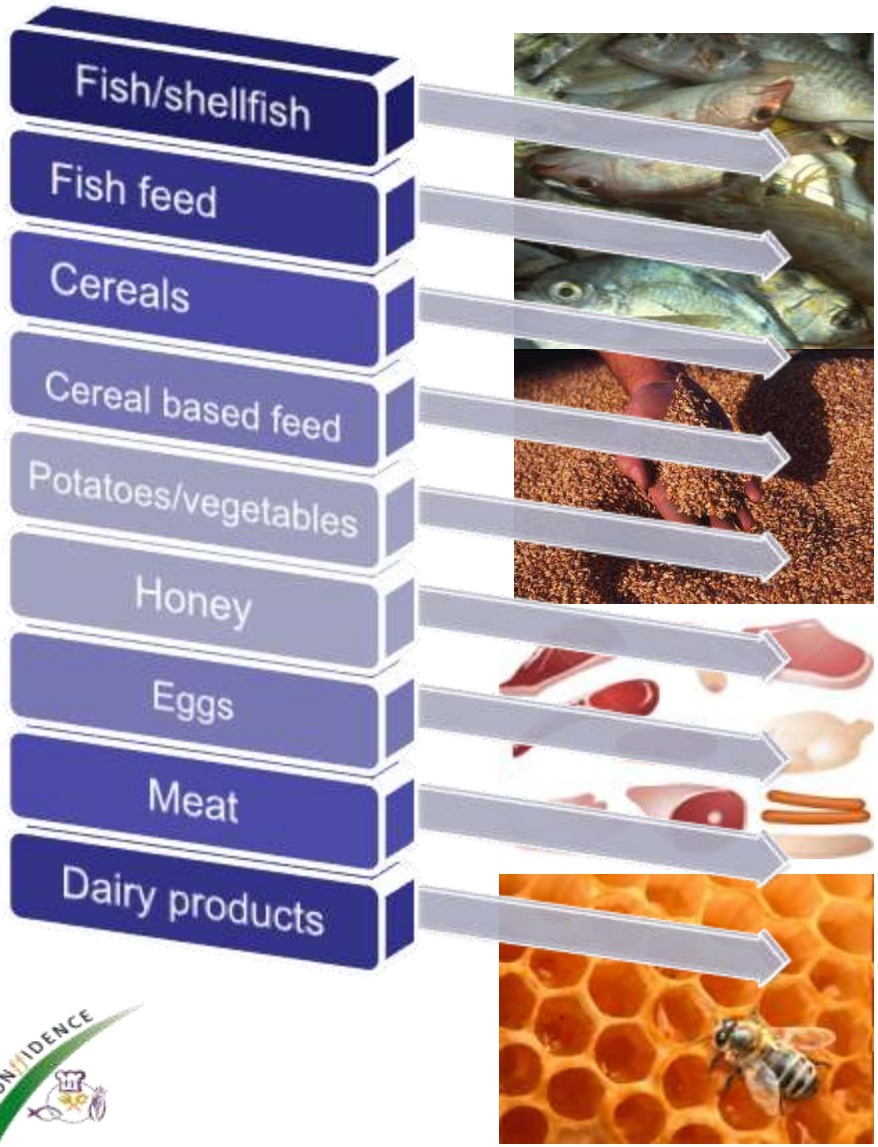
- To speed-up analysis for factory approval of lots

- To contribute to the assessment of risks of emerging contaminants
  - Plant toxins, *e.g. Senecio jacobaea containing* pyrrolizidine alkaloids





CONffIDENCE: The Targets



Persistent Organic Pollutants
(dioxin-like PCBs, brominated flame retardants, polycyclic aromatic hydrocarbons and perfluorinated compounds)

Pesticides
(paraquat,diquat and dithiocabamates)

Veterinary drugs
(antibiotics and coccidiostats)

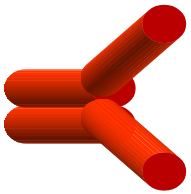
Heavy metals speciation
(inorganic arsenic, methyl mercury)

Biotoxins
(alkaloids and marine toxins)

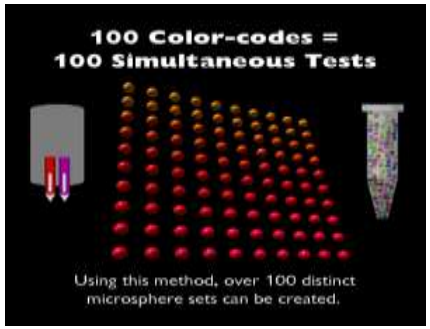
Mycotoxins

CONffIDENCE: The Technologies

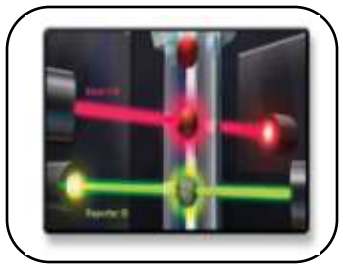
A selection of the most recent and advanced technologies are being applied



- Multiplex flow cytometry
- Multiplex Surface Plasmon Resonance (SPR) biosensor
- Magneto-immunosensor
- Near Infrared (NIR) imaging methods
- Cytosensor
- Simplified mass spectrometric (MS) methods
- Automated contaminant profiling in MS data
- **Multi-component dipstick assays**



http://www.luminexcorp.com/



CONffIDENCE: Multi-sensor dipstick for honey

Thank You for your attention

Further information

www.conffidence.eu