FOOTPRINT

Evaluating and validating the FOOT tools

Kick-off meeting
Friday 24 February 2006

www.eu-footprint.org

The success of the FOOT tools depends on both their reliability and usability

www.eu-footprint.org

The success of the FOOT tools depends on both their reliability and usability

> **Reliability:** Confidence in what it is produced by the tools

> **Usability:** user-friendliness, logical structure, meeting the expectations of end-users

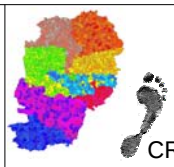
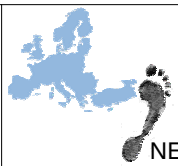
Objectives of Work Package 6

> Evaluate the usability of the tools

> Perform model evaluation exercises to:

- Identify conditions in which the tools are applicable
- Optimise the interpretation of the results

The three FOOT tools

	 FS	 CRS	 NES
End-users	Farmers Extension advisers	Water managers	Policy & decision makers
Scale	Local (farm)	Catchment	National / EU

The FOOT-FS tool

> FOOT-FS will be evaluated in 6 countries

Usability: Piloting workshops in Sweden, UK, Poland, France & Italy

- Structure of the user interface
- Ability of the user to interpret model output
- Ability of the user to formulate improved management plans

Reliability: Model outputs will be compared with extensive field leaching data from Denmark

The MACRO/PRZM models have previously been validated at the field scale

The FOOT-CRS tool

> FOOT-CRS will be evaluated in a maximum of 8 catchments

Measured data from
- Sweden *(Vemmenhog - 2 km²)*
- Denmark *(Odense - 530 km²)*
- Switzerland *(Greifense - 2 km²)*
- France *(Brévilles - 2 km²)*
- Slovenia *(Apace - 53 km²)*

Vulnerability maps from
- Poland *(Ciesielska Woda - 33 km²)*
- Italy *(Lombardy plain – 13,000 km²)*
- France *(Gironde - 10,000 km²)*

The FOOT-CRS tool

> The usability of the tool will be evaluated at the beta version stage

> A standard evaluation protocol will be defined

> The validation exercises will evaluate the ability of the tools to:
- Identify areas contributing most to contamination of ground and surface waters
- Predict the range of pesticide to be detected in water resources
- Predict the relative ranking of pesticides with respect to frequency and magnitude of occurrence

> The FOOT-CRS maps will be compared with vulnerability maps obtained using other pesticide risk assessment methodologies

The FOOT-NES tool

> FOOT-NES will be evaluated using data from national monitoring programmes

Datasets considered at this stage

- United Kingdom
- Germany
- Denmark
- France

The FOOT-NES tool

> The usability of the tool will be evaluated at the beta version stage

> A standard evaluation protocol will be defined

> The model evaluation exercises will assess the ability of the tools to:

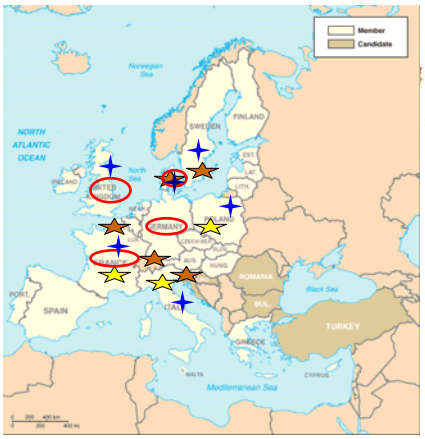
- Predict the probability of groundwater contamination
- Predict the probability of surface water contamination
- Identify areas vulnerable to surface and/or ground water contamination

Piloting and evaluating the tools
Summary

FOOT-FS
- Piloting worshop
- Measured data

FOOT-CRS
- Measured data
- Vulnerability maps

FOOT-NES
- Measured data



www.eu-footprint.org