



# The Institute for Environment and Sustainability

*Prof. Dr. Leen Hordijk*

*Director*

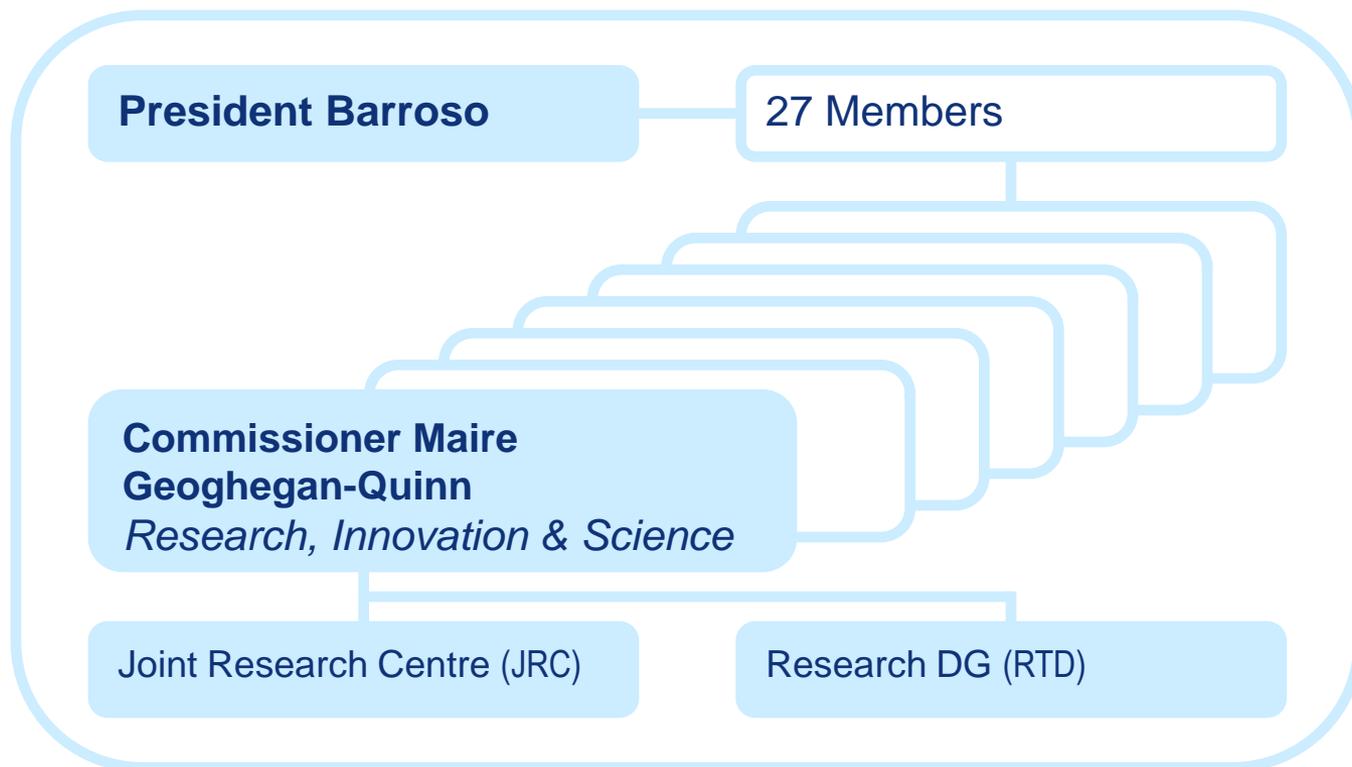
## IES Mission Statement

The mission of the Institute for Environment and Sustainability is to provide scientific-technical support to the European Union's Policies for the protection and sustainable development of the European and global environment.



**Customers: EC, EEA, EP, Member States, Global Organisations**

## The JRC is one of the Directorate Generals of the European Commission



# Our Structure: 7 Institutes in 5 Member States

**IRMM** - *Geel, Belgium*

Institute for Reference Materials and Measurements

**ITU** - *Karlsruhe, Germany*

Institute for Transuranium Elements

**IE** - *Petten, The Netherlands – Ispra, Italy*

Institute for Energy

**IPSC** - *Ispra, Italy*

Institute for the Protection and Security of the Citizen

**IES** - *Ispra, Italy*

Institute for Environment and Sustainability

**IHCP** - *Ispra, Italy*

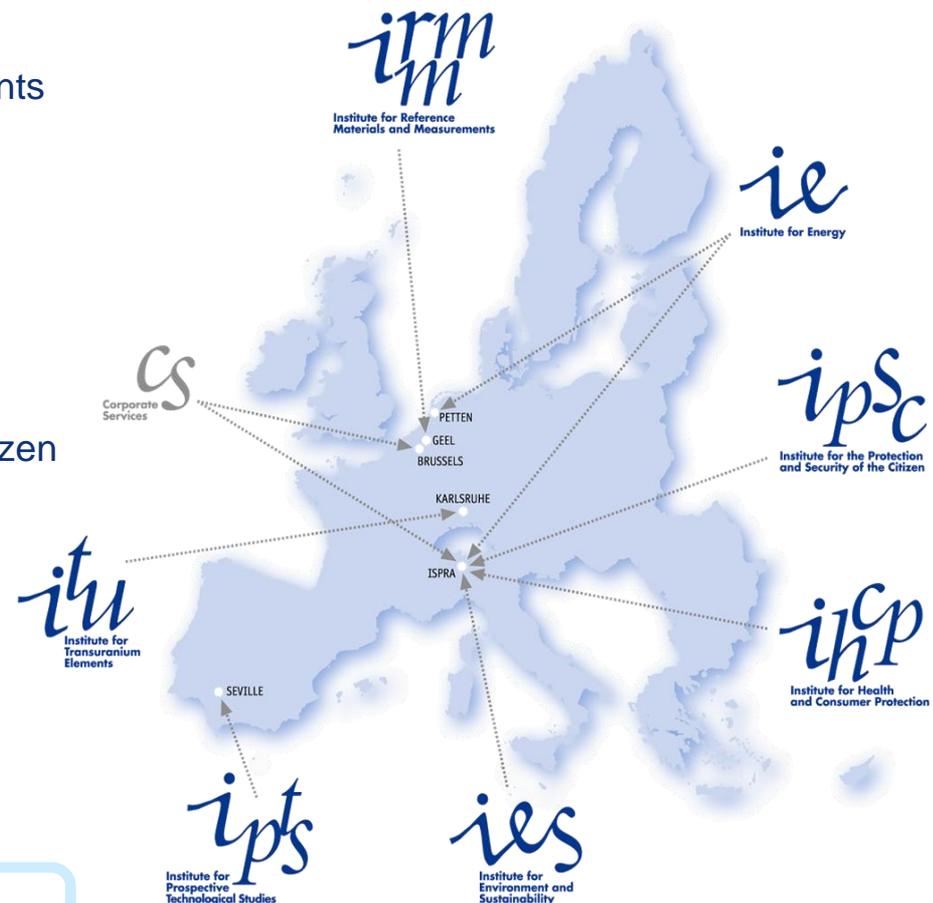
Institute for Health and Consumer Protection

**IPTS** - *Seville, Spain*

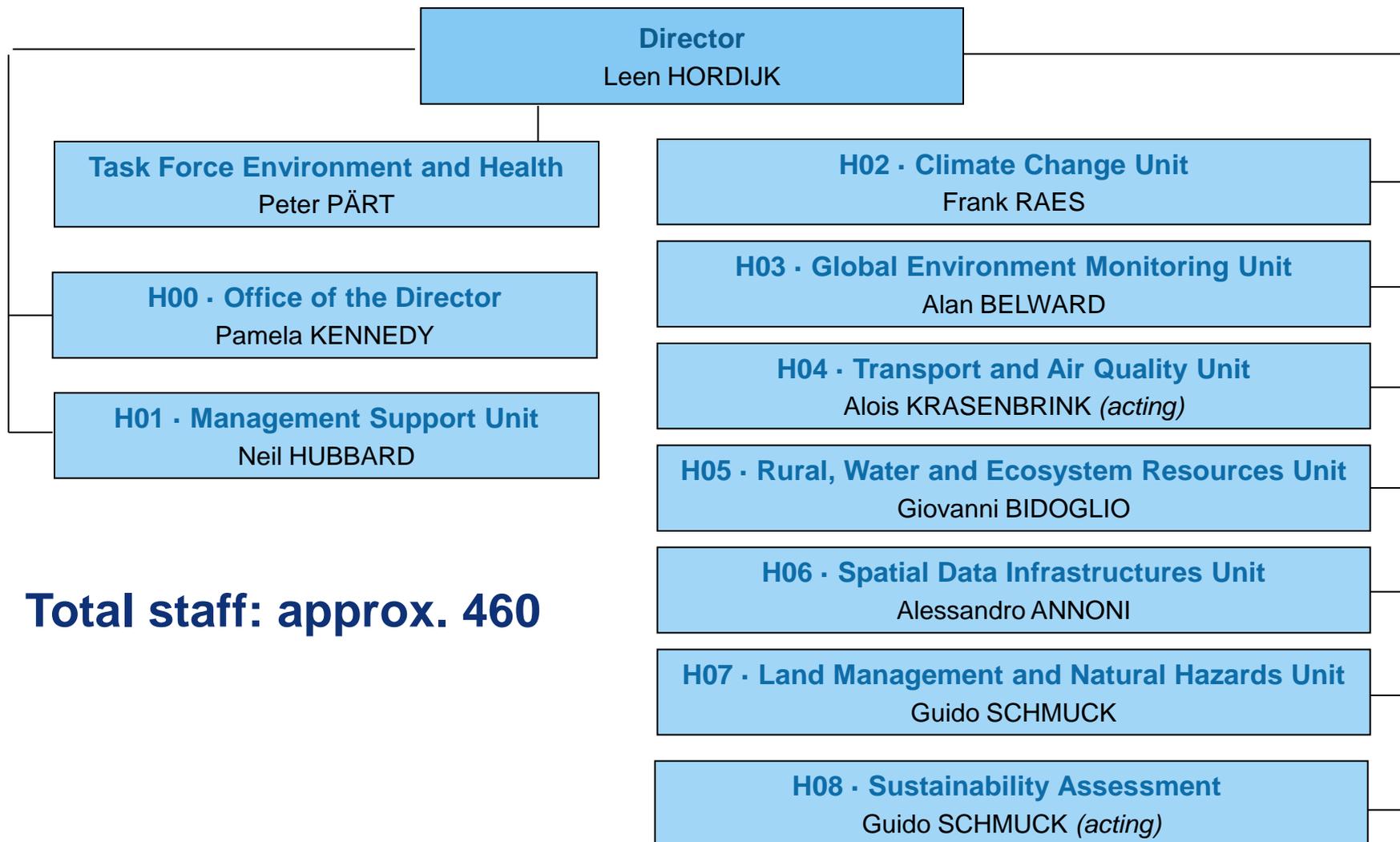
Institute for Prospective Technological Studies

~ 2750 staff

~ 330 M€/y budget (+ 40 M€/y competitive income)



# Organisational Chart IES, June 2010



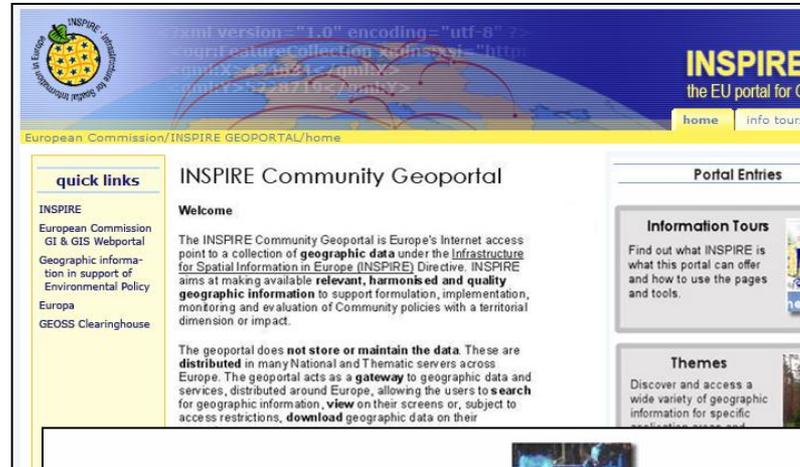
**Total staff: approx. 460**

## Environment and Prosperity

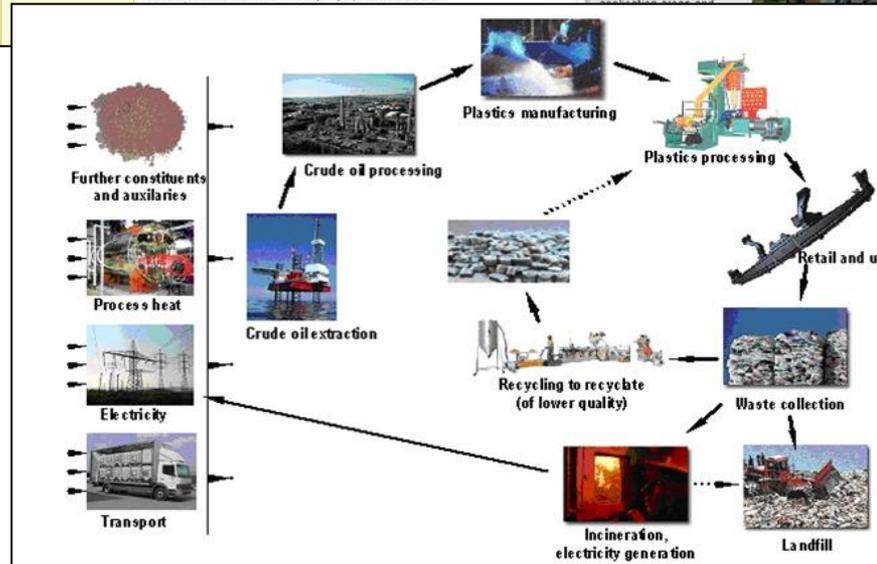
*INSPIRE*

*Sustainable  
Transport*

*Life Cycle  
Assessment*



The screenshot shows the INSPIRE Community Geoportal homepage. It features a header with the INSPIRE logo and navigation links like 'home' and 'info tours'. A 'quick links' sidebar lists 'INSPIRE', 'European Commission GI & GIS Webportal', 'Geographic information in support of Environmental Policy', 'Europa', and 'GEOSS Clearinghouse'. The main content area includes a 'Welcome' message and a description of the portal as a gateway to geographic data and services across Europe.



## Environment and Solidarity

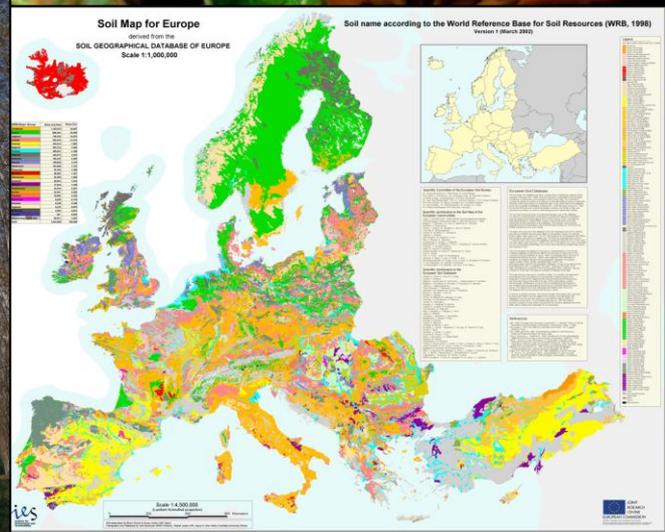
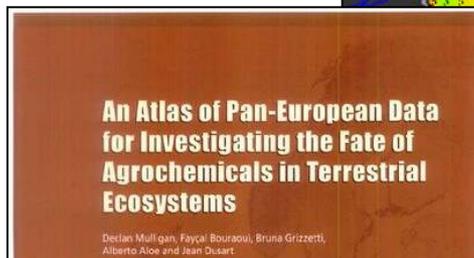
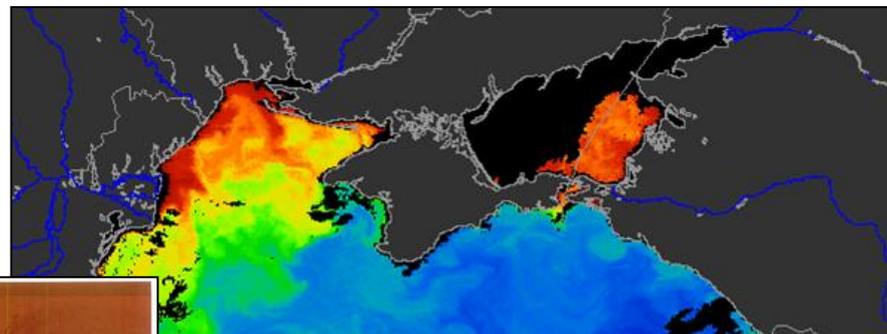
*Marine Environment*

*Water Quality*

*Agri-environment*

*Soil and Forest  
Data Centres*

*Greenhouse Gas  
Inventories*



## Environment and Security

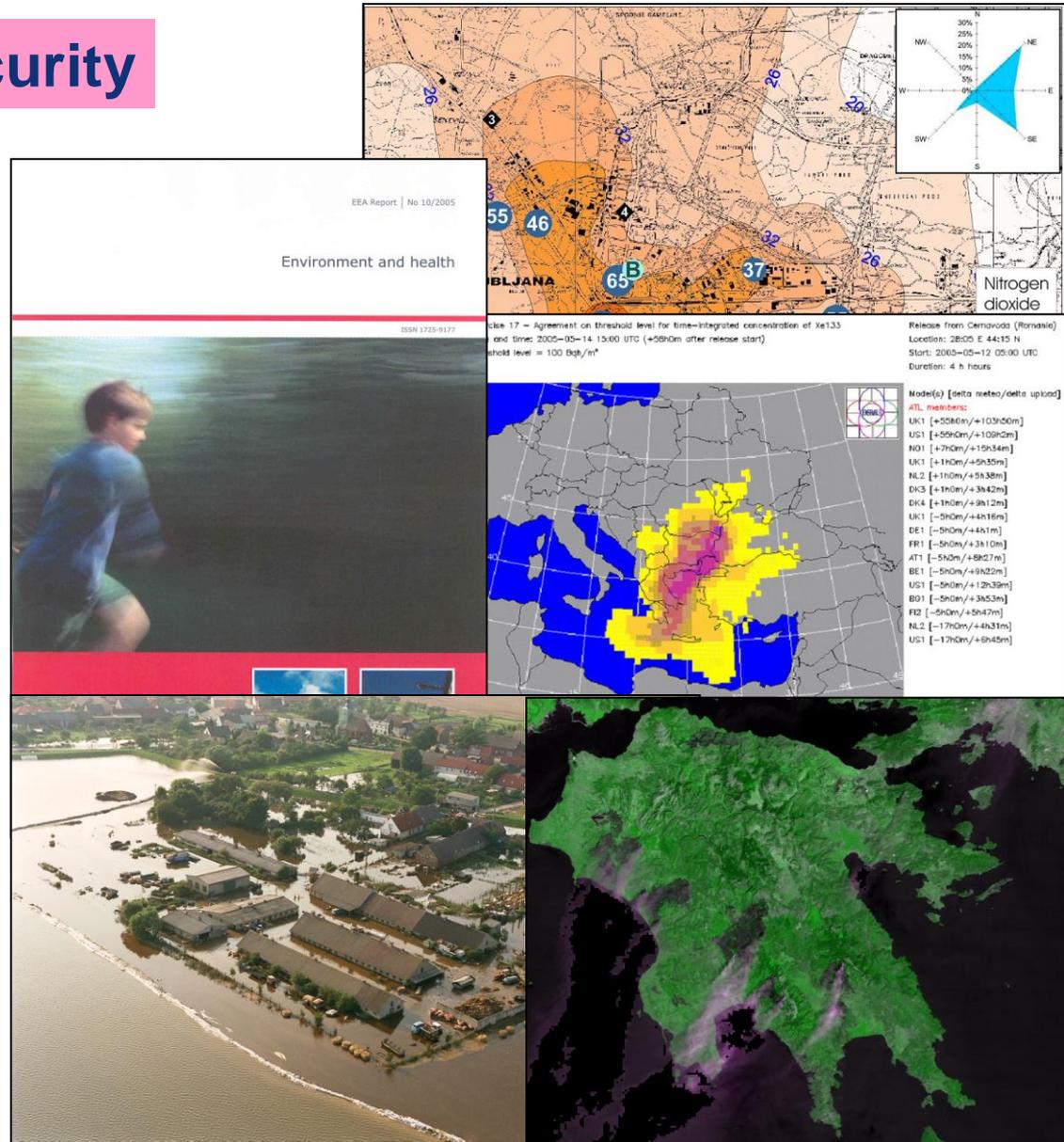
*Environmental Pollution*

*Radioactivity Monitoring*

*Environment and Health*

*Floods & Droughts*

*Forest Fires*



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Environment and health  
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Figure 17 – Agreement on threshold level for time-integrated concentration of Xe133  
and time: 2005-05-14 15:00 UTC (+5h0m after release start)  
Threshold level = 100 Bq/m<sup>3</sup>

Release from Cernovoda (Romania)  
Location: 28°05' E 44°15' N  
Start: 2005-05-12 05:00 UTC  
Duration: 4 h hours

Model(s) [delta x/msec/delta upload]  
ATL members:  
UK1 [+55h0m/+103h00m]  
US1 [+55h0m/+103h00m]  
NO1 [+7h0m/+15h34m]  
UK1 [+7h0m/+15h34m]  
NL2 [+1h0m/+5h38m]  
DK3 [+1h0m/+3h42m]  
DK4 [+1h0m/+3h12m]  
UK1 [-5h0m/+4h18m]  
DE1 [-5h0m/+4h18m]  
FR1 [-5h0m/+3h10m]  
AT1 [-5h0m/+8h27m]  
BE1 [-5h0m/+9h22m]  
US1 [-5h0m/+12h39m]  
BO1 [-5h0m/+3h53m]  
FI2 [-5h0m/+5h47m]  
NL2 [-17h0m/+4h31m]  
US1 [-17h0m/+6h45m]

## The Global perspective, including support to Africa

RESEARCH AT JRC  
in support of EU  
CLIMATE CHANGE  
policy making

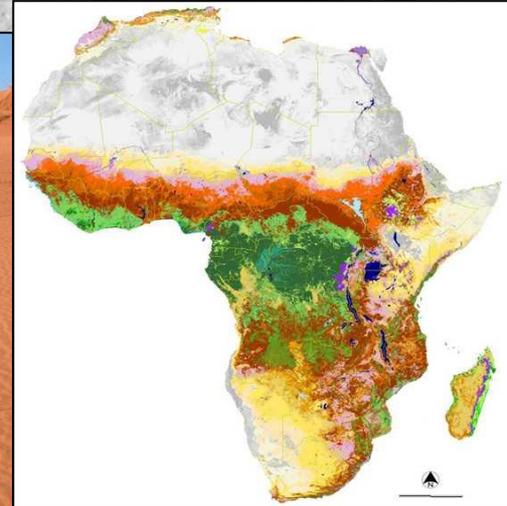
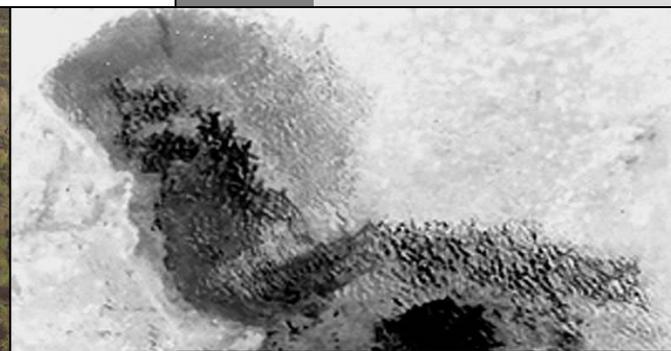
*Climate Change*

*GMES*

*Deforestation*

*Desertification*

*Biodiversity*



MAPLE means Monitoring across policies and environmental media

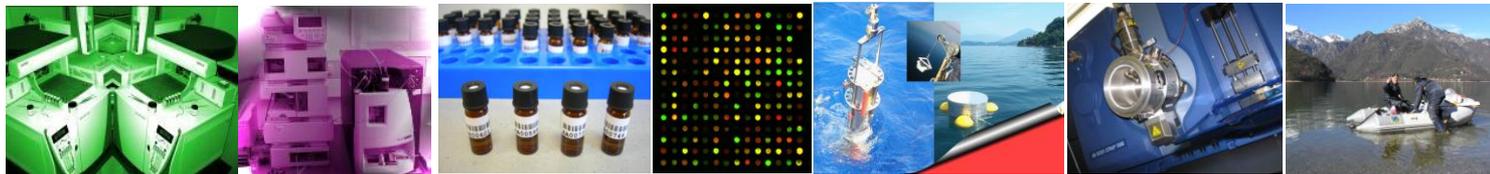
Primary objective:

- support Commission activities through the use of environmental monitoring data on the occurrence and levels of pollutants in all media and natural resources

*Aims:*

- 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

*MAPLE maintains a series of cutting-edge analytical and bio-analytical measurement and monitoring capabilities. Striving for integrated approach based on monitoring and modelling, MAPLE supports other JRC Action-teams and activities.*



- **National Institutes**

**PEER Group (ALTERRA, CEH, CEMAGREF, NERI, SYKE, UFZ, JRC-IES), European Soil Bureau Network, Air Quality Reference Laboratories**

- **European Institutions**

**EEA, ESA, ECMWF**

- **African Institutions**

**AUC, Regional Economical Centres (REC), RCMRD, ...**

- **Global Organisations**

**FAO, WHO, WMO, GEO / GEOSS, UNEP, UNFCCC, UNCCD, UN CBD, IIASA**



- Vehicle Emission Laboratories (VELA 1-7)
- European Reference Laboratory for Air Pollution (ERLAP)
- High Performance Analytical Laboratories, incl. 3 Mobile Labs
- EMEP/GAW Super Site (Climate Monitoring) at the JRC Ispra
- Greenhouse Gas Flux Measurement Towers San Rossore and Parco del Ticino
- Marine measurement stations in the Adriatic and Baltic Sea



# Key Information Systems and Databases

- Technical Secretariat of INSPIRE / European Geoportal
- **Water Information System for Europe (WISE)**
- European Forest Fire Information System (EFFIS)
- **European Flood Alert System (EFAS)**
- WMO World Data Centre for Aerosols
- Radioactivity Environmental Monitoring Database (REM)
- European and Africa and Northern Circumpolar Soil Database
- Global Land Cover 2000 Database
- Assessing protected areas in Africa – Tool (APAAT)
- **EU Water Initiative Communication and Information System (EUWI-CIS) & AquaKnow project**
- Database on burnt areas in Africa

## Broad Customer Base

- DG Environment & DG Climate Action
- DG Agriculture and Rural Development
- DG MOVE
- DG External Relations,  
DG Development, DG EuropeAid
- DG Regional Policy
- DG Eurostat
- DG Research
- DG Enterprise and Industry
- DG Health and Consumer Protection
- European Environment Agency
- African Organisations (AUC, RCMRD, RECs, etc.)
- UN Organisations (UNEP, WMO, FAO etc.)



# Thank you!



[Leendert.Hordijk@ec.europa.eu](mailto:Leendert.Hordijk@ec.europa.eu)

<http://ies.jrc.ec.europa.eu>