

Outline of the presentation

1. The JRC: mission, vision and organisation
2. Examples of JRC's scientific support to policy making and research activities
3. The new JRC strategy (2010 – 2020)

The Mission

... is to provide customer-driven scientific and technical support for the conception, development, implementation and monitoring of EU policies.

As a service of the European Commission, the JRC functions as a reference centre of science and technology for the Union.

Close to the policy-making process, it serves the common interest of the Member States, while being independent of special interests, whether private or national.





President Barroso

27 Commission Members



Commissioner Geoghegan-Quinn
Research, Innovation and Science

Joint Research Centre (JRC)

Research DG (RTD)

New JRC Director-General from Dec. 1st: Dominique RISTORI



Board of Governors

Composed of high level representatives from each Member State and the FP7 Associated Countries (39 countries)



Board of Governors, Commissioner Máire Geoghegan-Quinn and DG Roland Schenkel, Geel, 25 February 2010

- Provides advice on strategic / management issues
- Its opinion is required on all EC decisions about JRC
- Members ensure a strategic link with their countries

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 and Ispra, Italy*

Institute for Energy

IPSC – *Ispra, Italy*

Institute for the Protection and Security of the Citizen

IES – *Ispra, Italy*

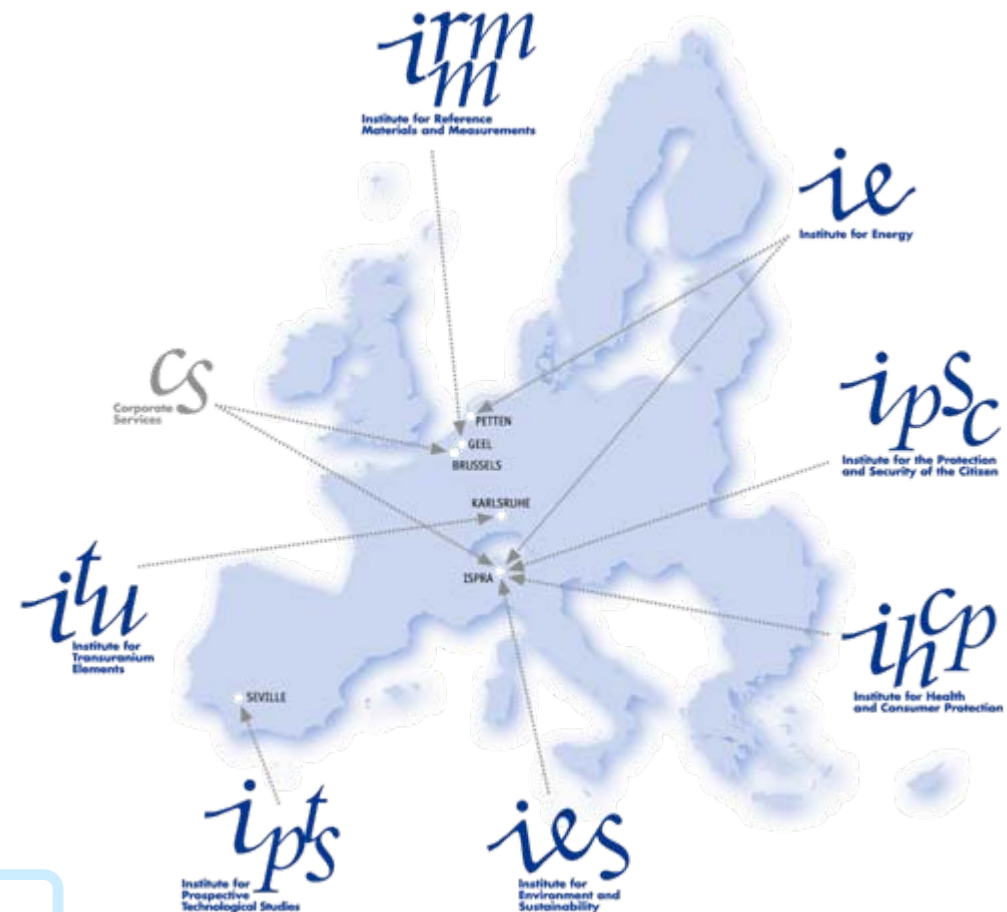
Institute for Environment and Sustainability

IHCP – *Ispra, Italy*

Institute for Health and Consumer Protection

IPTS – *Seville, Spain*

Institute for Prospective Technological Studies



~ 2750 staff

~ 345 M€y institutional budget (+ 60 M€y earned income)



Better deposit guarantee schemes

The JRC contributed to the development of the directive proposal which amends existing European rules on deposit protection. Scientists at the JRC conducted an impact assessment of the proposed changes and of possible criteria to determine individual banks' contributions to the guarantee funds based on their risk profiles.



Testing 80% of the solar modules worldwide

The JRC's European Solar Test Installation (ESTI) is a unique facility for testing solar cells and panels supporting the research and development of new solar cells by European industries. Around 80% of the solar modules produced worldwide are tested and/or certified at ESTI



VELA - Contributing to greener transport

The JRC has played a key role in underpinning EU legislation on air pollution from road transport by developing emission norms and standards for the industry. The Vehicle Emissions Laboratory (VELA) provides scientific support to the development or revision of Directives and develop and assess new measurement techniques and procedures



Biofuels – Facts and uncertainties

The JRC Biofuels Task Force has produced independent analyses that dealt with greenhouse gas issues of biofuel cultivation and production, the contribution to the security of energy supply, and the potential impact on agricultural commodity markets and employment. Using models, it compared models predicting the indirect land use effects of an expansion of biofuel production for Europe and in several cases, analyses have shown that the impacts of biofuel policies are not those expected by the policy makers.



Sustaining European soil

The JRC has developed robust databases supporting the European Soil Thematic Strategy and as a result created three soil atlases, unique collections of maps illustrating the varying patterns of different soil types occurring across Europe.



Alternatives to testing on animals

ECVAM (European Centre for the Validation of Alternative Methods), managed by the JRC, supports the development, validation and acceptance of methods which could reduce, refine or replace the use of laboratory animals, as required in the Directive 86/609/EEC



Detecting GMOs

The JRC's European Union Reference Laboratory for GM Food and Feed (EURL-GMFF) validates detection, identification and quantification methods for GMOs as part of the official European authorisation procedure, in close collaboration with the European Food Safety Authority (EFSA).



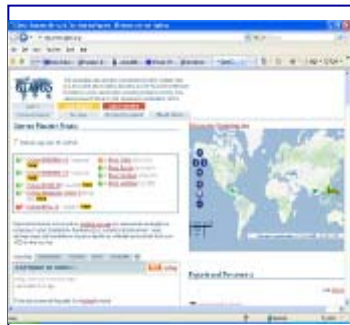
Verification of declared/detection of undeclared nuclear activities

The JRC supports safeguard authorities by providing environmental sampling and measurements techniques that are essential in the detection of non-declared nuclear activities. The JRC 'clean lab' is used daily for the measurement of uranium enrichment in particles founded in 'swipes' taken by IAEA or Euratom inspectors across the globe.



ELSA - Safer buildings

The JRC carried out pre-normative research at its European Laboratory for Structural Assessment (ELSA), contributing significantly to the development of Eurocodes, which provide similar levels of structural safety for buildings.



Responding to crises - Haiti earthquake

GDCAS (the Global Disaster Alert and Coordination System) issued an alert only 18 mins after the first shock, which helped coordination of humanitarian aid. In addition, the JRC provided support to rescue operations by carrying out a rapid damage assessment based on the analysis of very high resolution satellite imagery.



European Flood Alert System

It provides essential information to prepare for floods in Europe by complementing the information of national hydrological services with novel probabilistic flood forecasting information up to 10 days in advance.



Plasma proteins in human blood testing

The JRC has developed various reference materials for the concentration of 14 plasma proteins regularly controlled in human blood testing. These measurements are used for the detection of many conditions including infection, liver or kidney disorders, iron deficiency, malnutrition and the monitoring of autoimmune diseases. The reference materials are now used worldwide as the standards for achieving comparable diagnostic data.

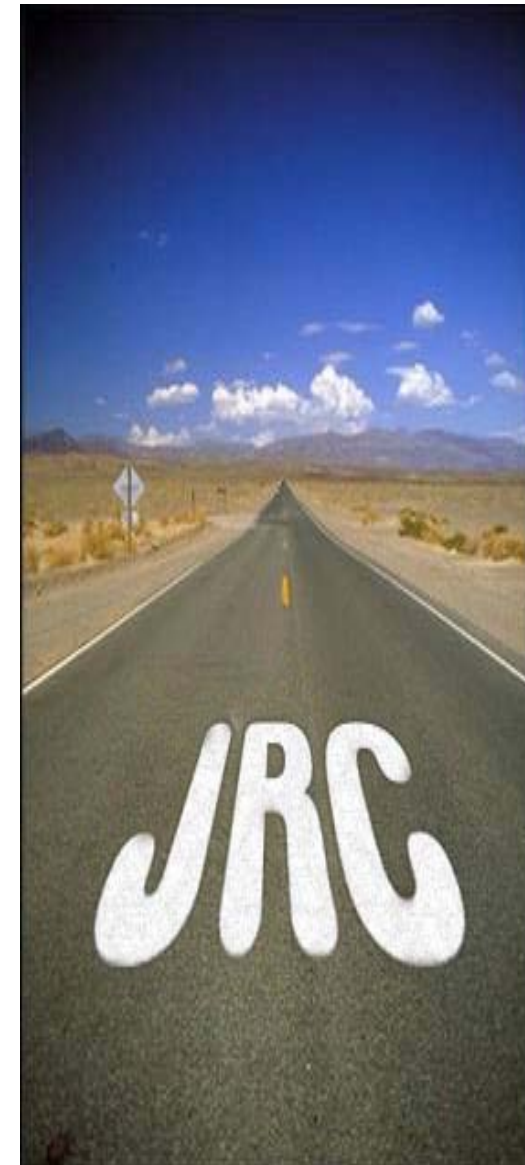
Principle Drivers:

- Evolving complexity of challenges facing the EU and world: ‘Grand Challenges’
- EU increasingly requested by Member States to tackle higher level issues
- We need to change how the JRC accomplishes its Mission

It supports the [Europe 2020](#) strategy in its aim to turn Europe into a “smart, sustainable and inclusive economy”

JRC must become more:

- Proactive and Anticipatory of customer needs
- Operational across traditional policy boundaries
- Integrated across JRC Institutes



The Vision

“to be a trusted provider of **science-based policy options** to EU policy makers to address key challenges facing our society, underpinned by internationally-recognised research”



TA1

Towards an open and competitive economy



TA7

Reference materials and measurements



TA2

Development of a low carbon society

JRC Thematic Areas



TA6

Security and crisis management



TA3

Sustainable management of natural resources



TA4

Safety of food and consumer products




TA5

Nuclear safety and security

JRC Strategy 2010-2020

Strategic Developments

- **Socio-economic research and modelling** capacity will be expanded:
 - Socio-economic: Strengthen and organise the JRC's socio-economic policy analysis competences in order to better address policy customers' needs
 - Modelling: Develop modelling competences and platforms with appropriate quality assurance procedures
- **Multi-disciplinary integrated research teams** across the JRC: Integrate the JRC's work to better address customer needs - 7 JRC Thematic Areas aligned to Europe 2020, based upon key societal challenges and other Commission priorities
- **Anticipation, foresight and horizon scanning**: Strengthen anticipation and horizon scanning activities to better prepare the JRC and its customers for future policy challenges
- **Enhanced assessment of policy options**: Provide policy options with cost benefit analysis.



2010-2020

Joint Research Centre (JRC)

*Robust Science for Policy-Making
Supporting Legislation, Serving Society*

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