



JRC – Estonia Round Table

19th October 2007 Tallinn

Dr. Anneli Pauli, Deputy Director General

The Joint Research Centre (JRC)

Directorate General of the European Commission

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



European Commission
President Barroso



Commissioner Potočnik
Science and Research

(26 other Commissioners)

**Joint Research
Centre (JRC)**

**Research DG
(RTD)**

**Customer DGs:
Agriculture, Environment,
Enterprise, Safety
& Consumer Protection, etc**

"The mission of the JRC 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.**"



7 Institutes in 5 Member States \cong 2650 staff (+ 250 competitive)
 \cong 300 M€/y budget (+ 50 M€/y competitive)
124 scientific projects (called actions)



IE - Petten The Netherlands
- Institute for Energy



IRMM - Geel Belgium
- Institute for Reference Materials and Measurements



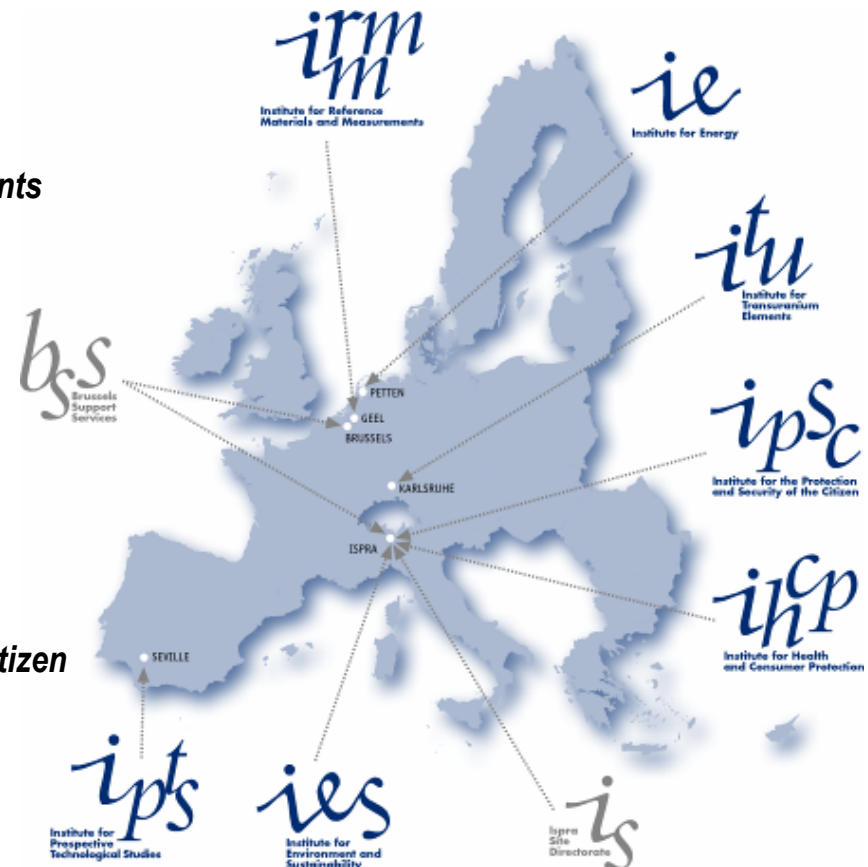
ITU - Karlsruhe Germany
- Institute for Transuranium Elements



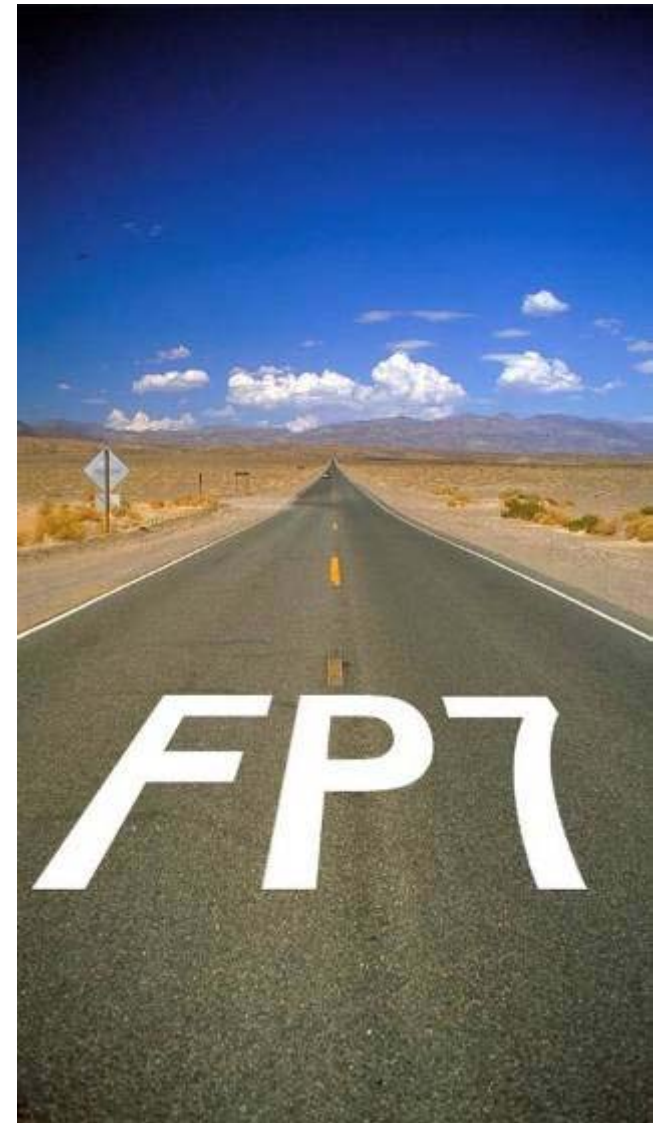
IPSC - IHCP - IES - Ispra Italy
- Institute for Environment and Sustainability
- Institute for Health and Consumer Protection
- Institute for the Protection and Security of the Citizen



IPTS - Seville Spain
- Institute for Prospective Technological Studies



- Prosperity in a knowledge-intensive society
- The sustainable management of resources
- Security and freedom
- Europe as a world partner
- The EURATOM programme

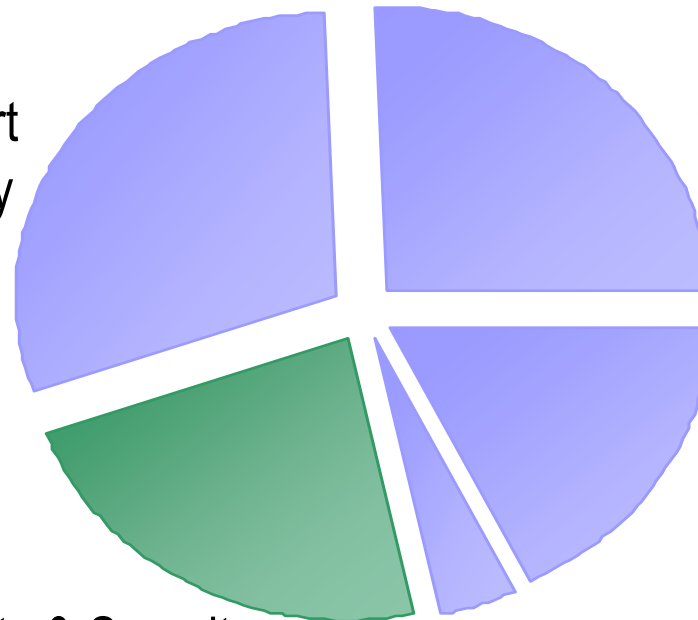


683M€ ('Prosperity')

- Chemicals
- Biotechnology
- Energy & Transport
- Information Society
- ERA

578M€ ('Solidarity')

- Environment
- Health
- Climate Change
- Rural Development
- Agriculture



517M€* ('Nuclear')

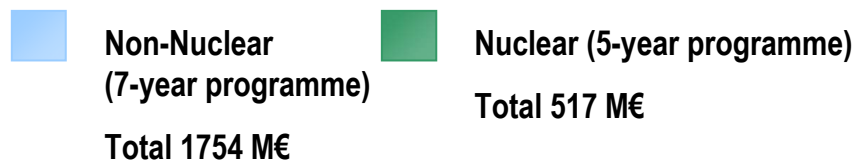
- Nuclear Energy, Safety & Security

403M€ ('Security')

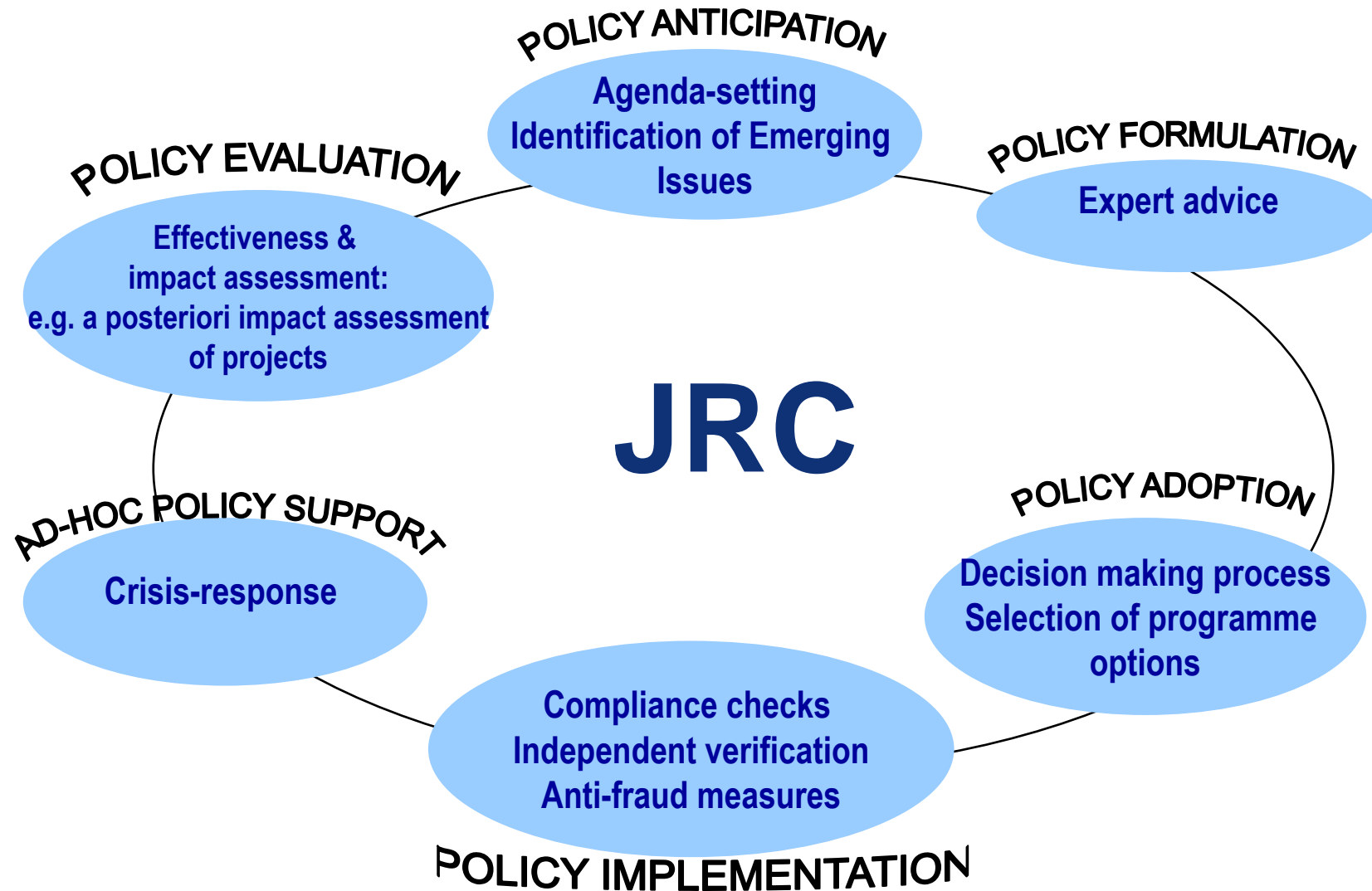
- Disasters
- Internal Security
- Food Chain

88M€ ('Global Partner')

- Global Security
- Development
- Co-operation



- **EU Policy support:** interaction with policy DG's and relevant stakeholders: direct scientific/technical input into legislative process; operational support: alert/anticipation, quick response functions and monitoring of compliance (e.g., crop declarations under Common Agricultural Policy)
- **Scientific-technical reference systems:** establish standardised methodologies and measurement protocols (GMO, food safety, environmental quality, nuclear safety etc)
- **Research partnerships:** European Research Area, access to laboratories and large facilities, networks, training and mobility
- **Specific actions** towards New Member States and Candidate Countries



- **Research** having a direct impact on the **life** of the citizen
- **Provision of quality expertise** and support to other Commission services, EU Institutions, Member States and in-country research stakeholders (working with over **1,000 public & private** organisations, institutions and expert groups in more than **250 major networks**)
- **Interdisciplinary research**: food safety, chemical products and health, environment and sustainability, security and antifraud, nuclear safety and security, technology foresight, reference materials and measurements
- **Flexibility in responding** to emerging and changing needs
- **Strength through tradition** - over 50 years JRC collaboration with customers and users



The JRC is participating in the **CarboEurope** project to combat **climate change**. The aim of the project is to understand and quantify the terrestrial carbon balance of Europe and at local, regional and continental scale.

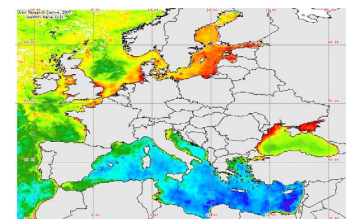


The JRC is managing **6 Community Reference Laboratories** in areas concerning the safety and quality of feed and food:

(1) Feed additives, (2) GMOs, (3) Food contact materials, (4) heavy metals in feed and food, (5) mycotoxins and (6) polycyclic aromatic hydrocarbons



The **Fraction of Absorbed Photosynthetically Active Radiation** project gives an indicator of the state of vegetation. The JRC developed mathematical algorithms to enable the documentation of spatial variability and temporal evolution of vegetation cover over large areas and over long time periods.



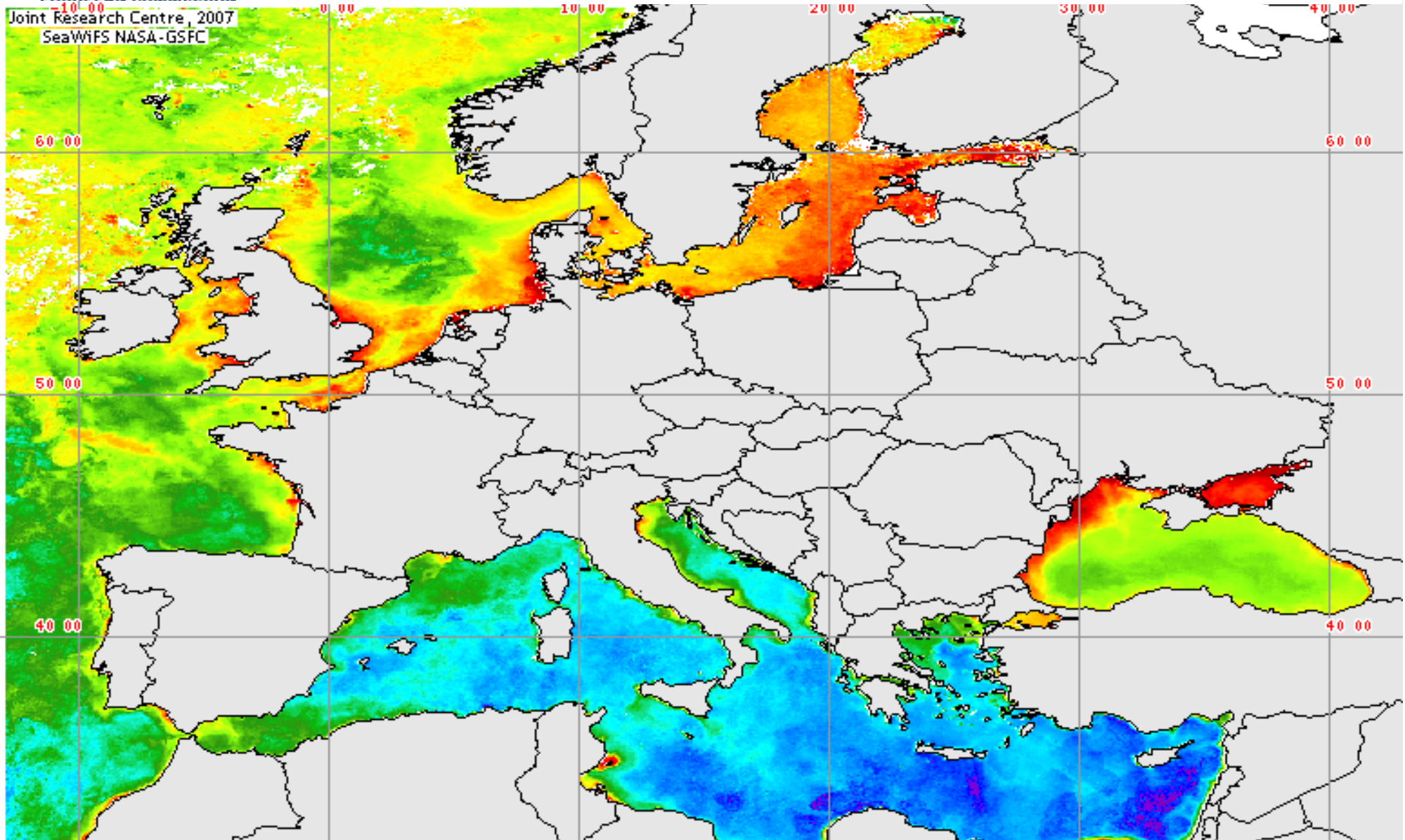


EUROPEAN COMMISSION

Joint Research Centre, 2007

SeaWiFS NASA-GSFC

MONTHLY AVERAGE CHLOROPHYLL CONCENTRATION JUNE 2005



Red indicates very high concentrations

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Petten: new test facilities for hydrogen storage and fuel cells. These provide evaluation of hydrogen storage technologies and fuel cell performance in terms of efficiency, safety, environmental friendliness and reliability, to facilitate wider market introduction



Geel: a 150 million electron volt linear accelerator for neutron data measurements. Among all the pulsed white spectrum neutron sources available in the world, this linear electron accelerator facility has the best time resolution.



Karlsruhe: an actinide laboratory for performing basic research into the fundamental chemical and physical properties of actinides. Research results serve to improve nuclear safety and security.



Ispra: the vehicle emissions laboratory which, with the most advanced facilities and instrumentation, allows the physical/chemical and toxicological characterisation of the emissions from all types of transport fleet.



JRC sites have the potential to become science parks!

- The JRC and the Estonian partners work together in:
 - **6 Collaboration Agreements** (nuclear emergency information sharing, Radiological Data Exchange Platform, radioactivity environmental monitoring, metrology in chemistry, education and training in metrology in chemistry, European Freshwater Network);
 - **20 Institutional Networks** (e.g. GMOs, food contact materials, chemicals, infrastructure for spatial information in Europe, air, water and soil quality);
 - **9 Competitive Actions** (e.g. ecological and chemical status of surface waters, ocean & marine data management, metrology in chemistry).

- Main objective of today's Round Table is to promote strategic collaboration between the JRC and the Estonian S&T institutions within common priority areas
- Several new and interesting ideas will be discussed (from questionnaires) in the following areas:
 - Information Society, IT security
 - Environment
 - Energy
 - Food and Chemicals
- Conclusions of today's discussions will be followed up

**Many thanks for your
attention!**

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