

The European Commission's science and knowledge service

Joint Research Centre

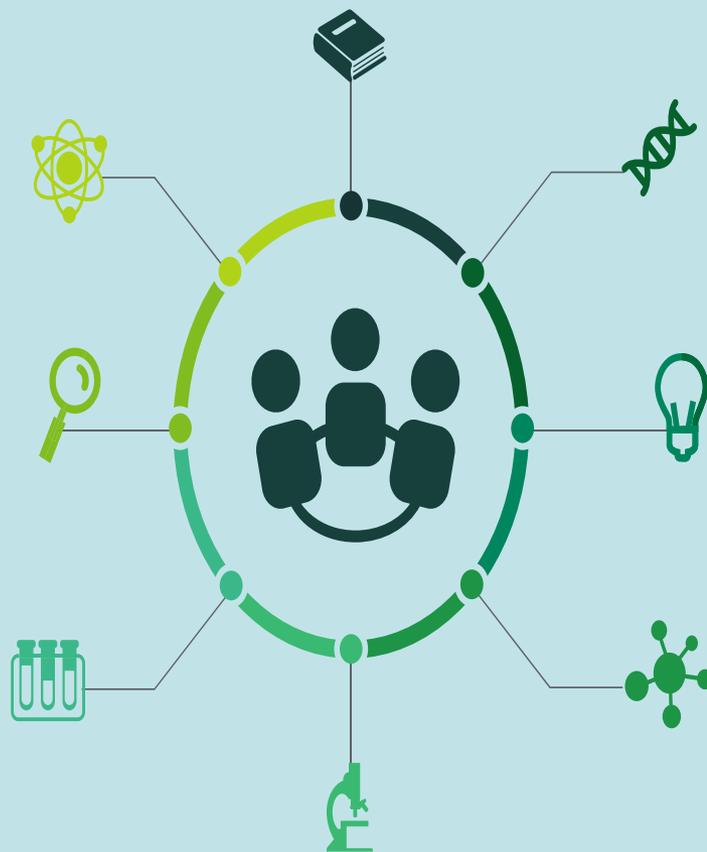
Collaborative Doctoral Partnership (CDP)

Jerica Zupan, MSC, MBA
Scientific Project Officer

Ljubljana, June 2018



The need for evidence to support EU policies



JRC's Mission

“As the science and knowledge service of the Commission our mission is to support EU policies with independent evidence throughout the whole policy cycle”

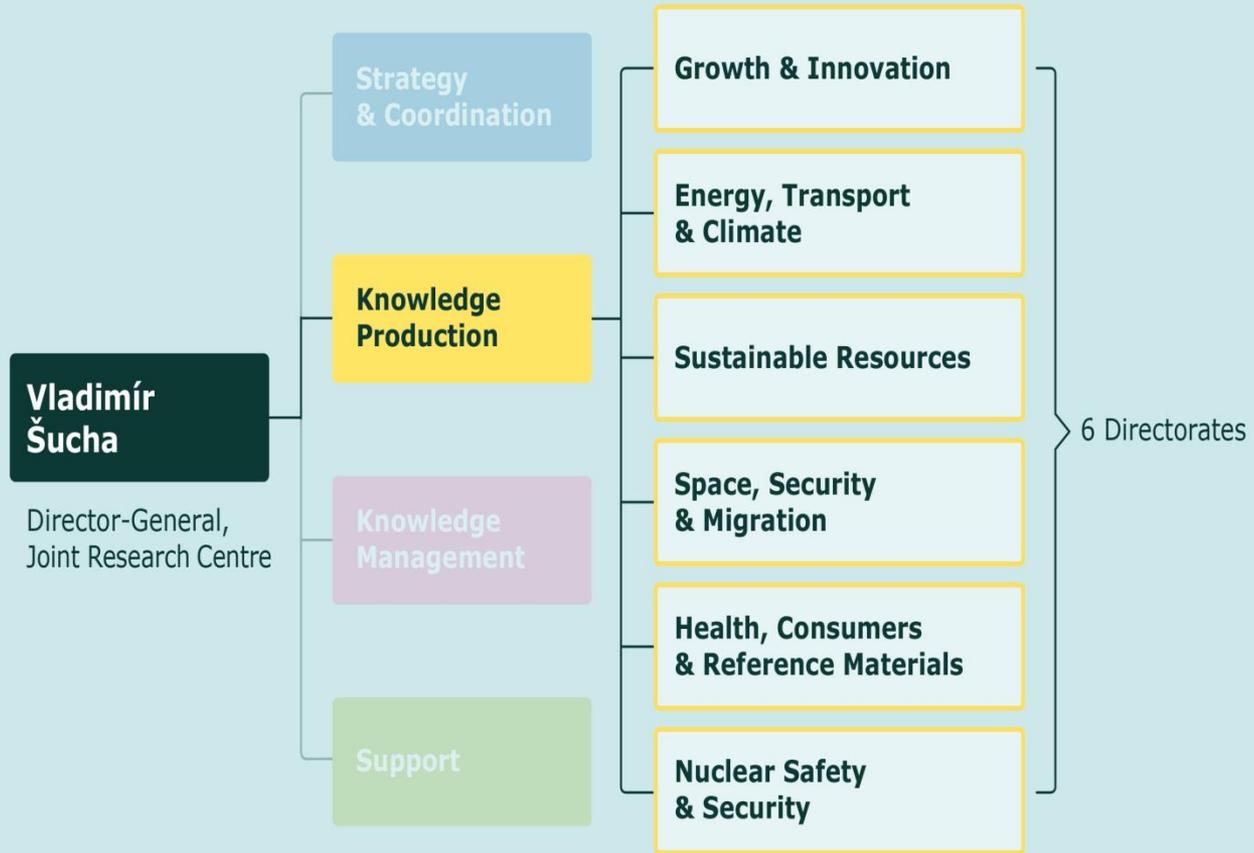
”



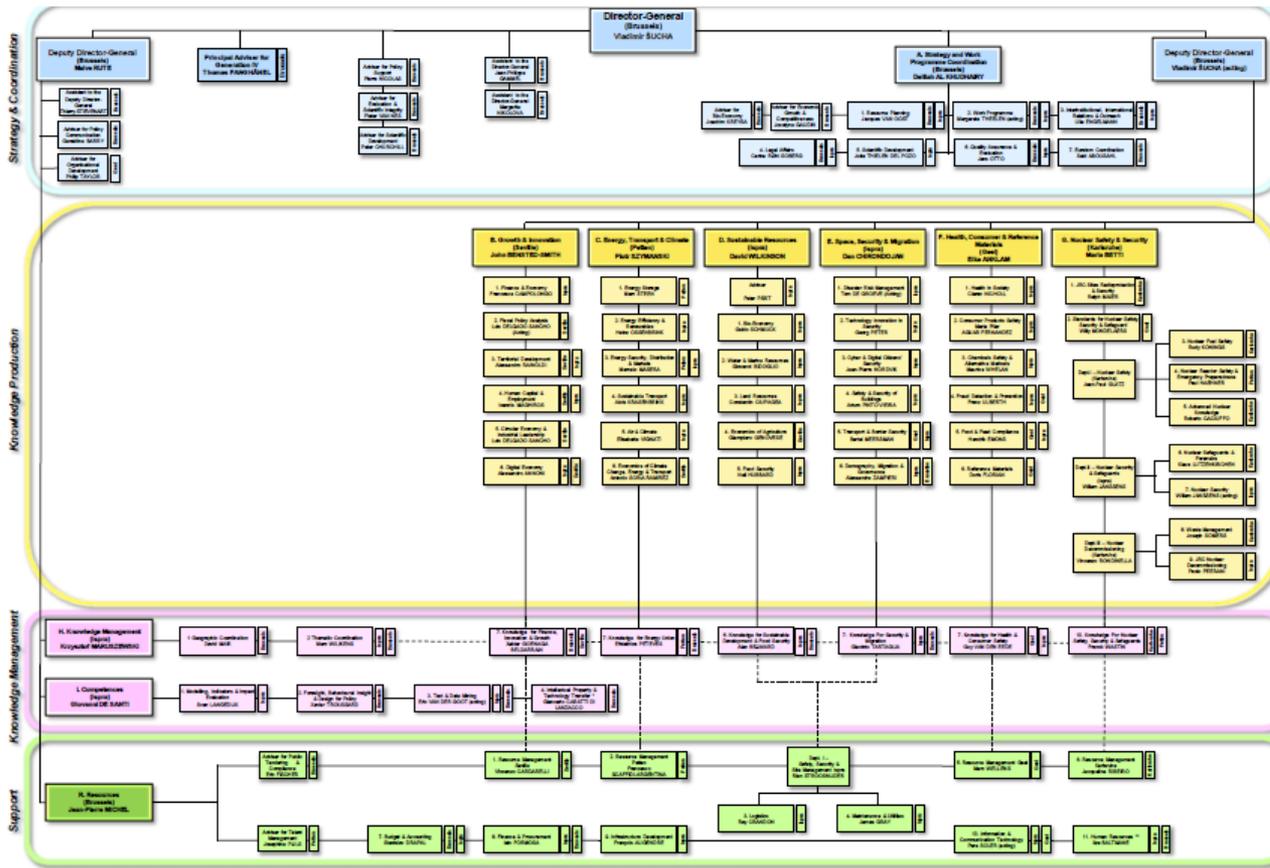
The JRC within the Commission



The JRC within the Commission



JRC Organigramme



Strategy and Coordination

Knowledge Production

Knowledge Management & Competences

Support

* Includes the Central Intellectual Property Service of the European Commission. ** This unit will evolve in line with the wider Horizon research management reform process in the European Commission and the creation of Account Management Centres.

JRC sites

Headquarters in Brussels
and research facilities located
in **5 Member States:**

- Belgium (Geel)
- Germany (Karlsruhe)
- Italy (Ispra)
- The Netherlands (Petten)
- Spain (Seville)



JRC Role: facts & figures (1)



- 6 locations in 5 Member States: Italy, Belgium, Germany, The Netherlands, Spain
- Policy neutral: has no policy agenda of its own
- 42 large scale research facilities, more than 110 online databases
- 1500 core research staff, 3000 total staff
- 83% of core research staff with PhD's
- Over 1,400 scientific publications per year
- Work for more than 20 EC policy departments

JRC Role: facts & figures (2)

- € 386 million Budget annually, plus € 62 million earned income
- Independent of private, commercial or national interests
- 30% of activities in policy preparation, 70% in implementation
- 125 instances of support to EU policy-maker annually
- More than 100 economic, bio-physical and nuclear models developed
- Focus on the priorities of the Commission (80% of activities co-designed with partner DG's)

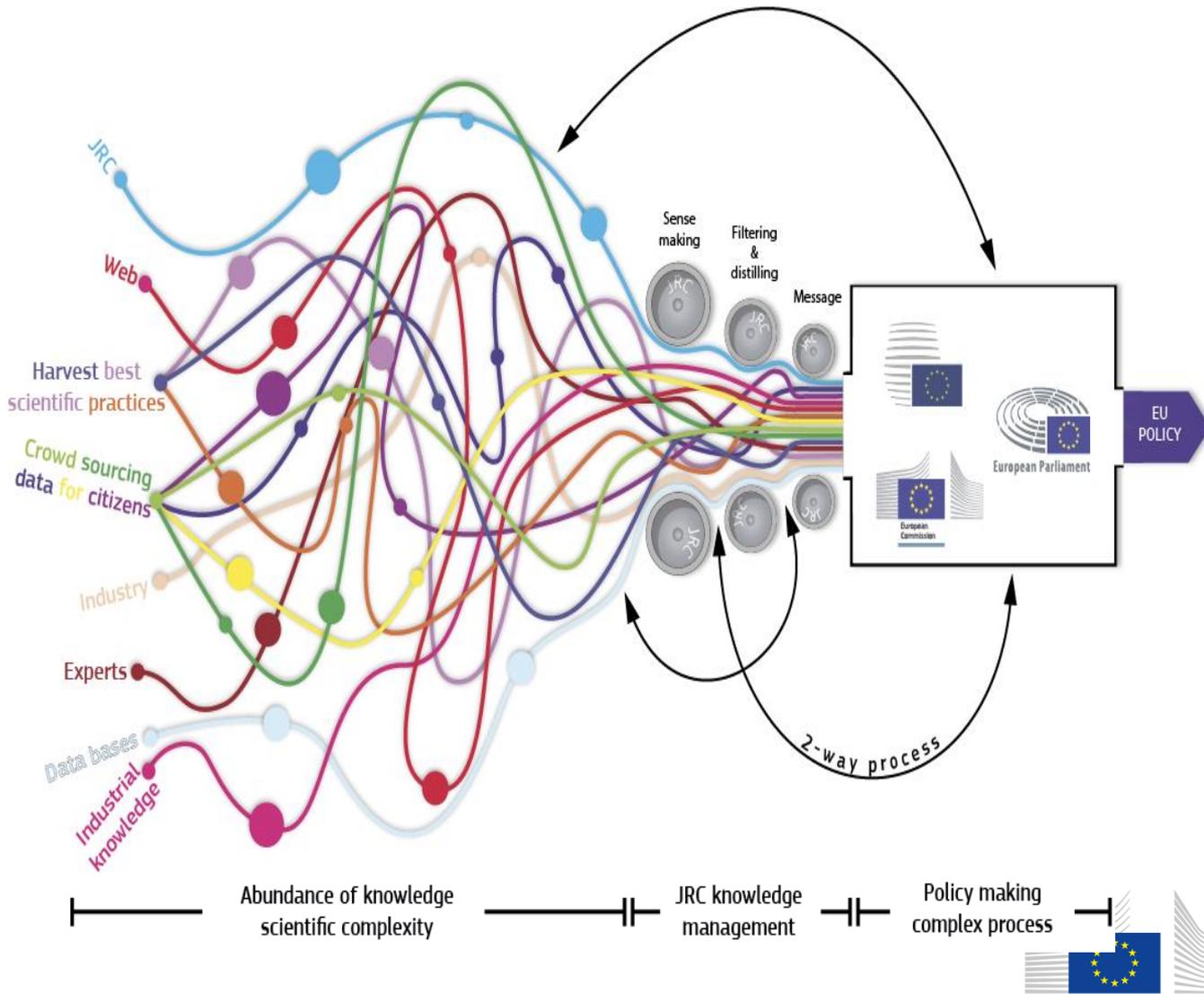


JRC Scientific Excellence



- 40-50% of JRC publications belong to the top 25% most cited publications
- Up to 23% belong to the top 10% most cited publications
- Up to 3% belong to the top 1% most cited publications

Dealing with the information overload

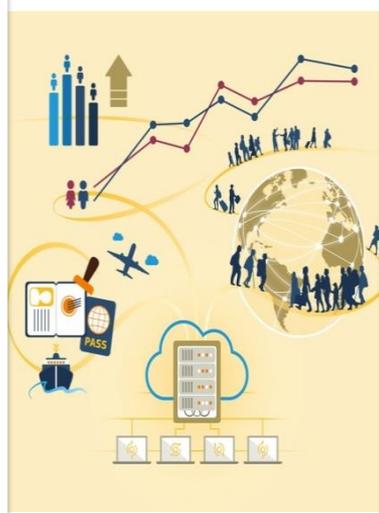


Knowledge Centres

**Disaster Risk
Management
Knowledge
Centre**



**Knowledge
Centre on
Migration and
Demography**



**Knowledge
Centre for
Territorial
Policies**



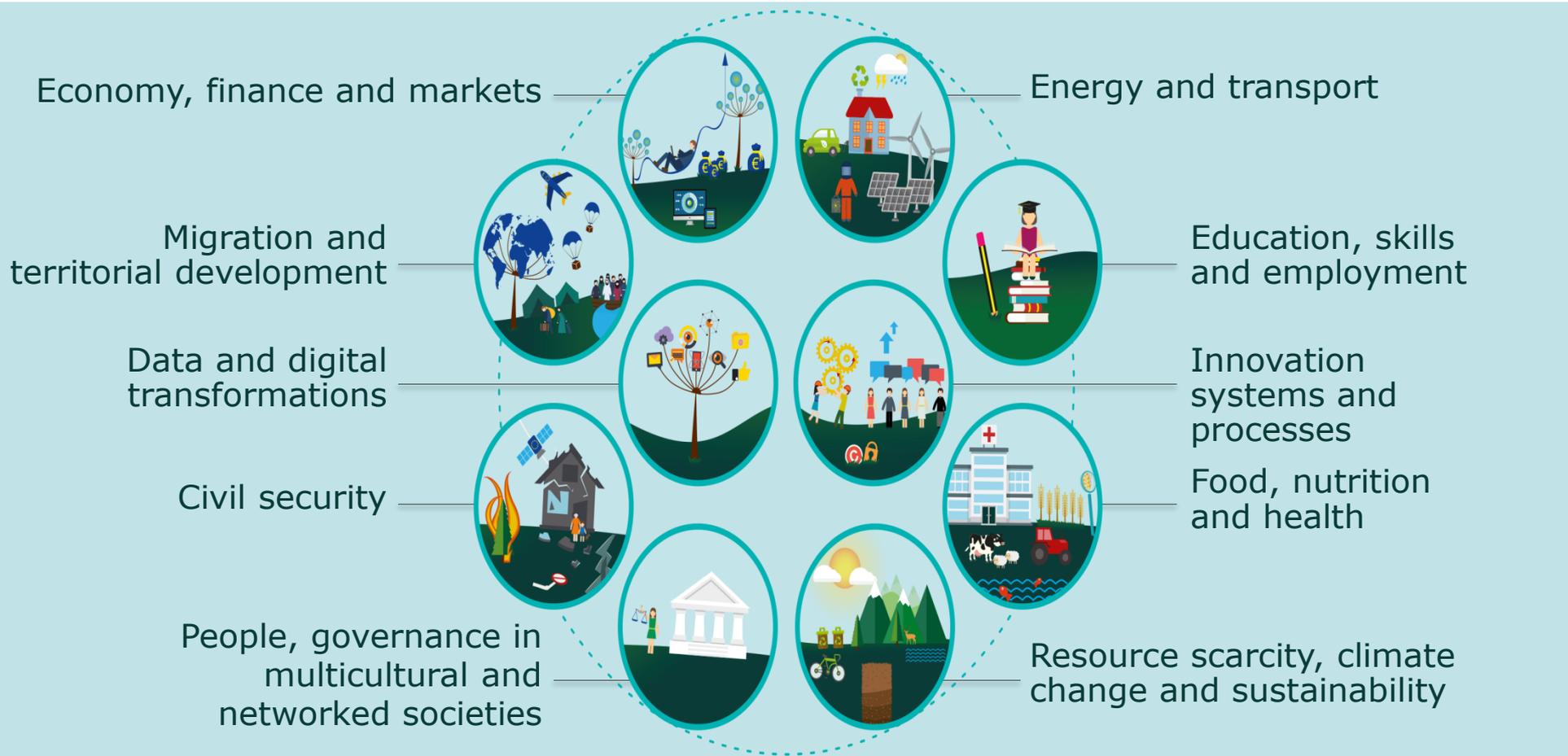
**Knowledge
Centre on
Bioeconomy**



**Knowledge
Centre for
Food Fraud
and Quality**



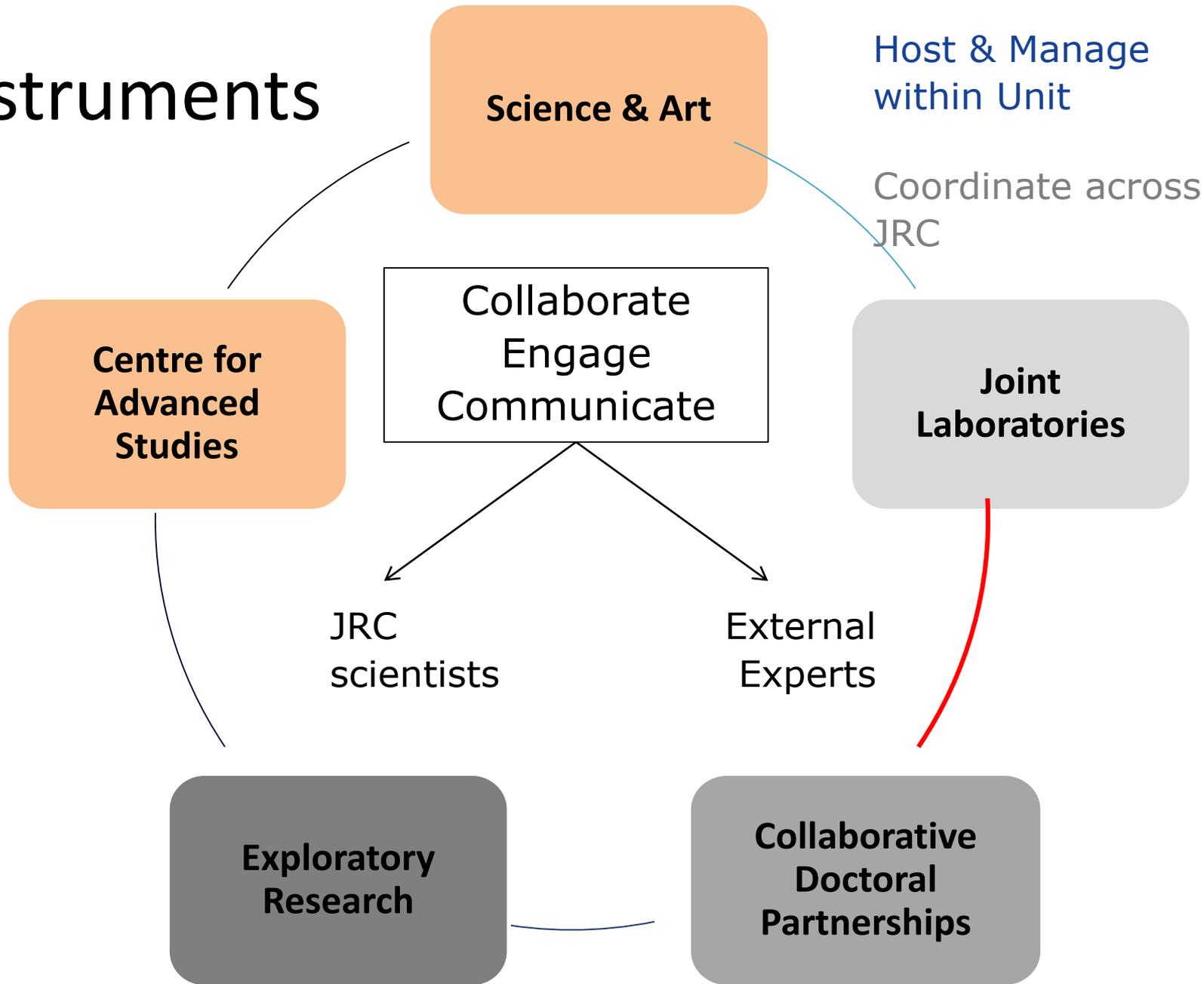
JRC Priority fields



Scientific Development

- **Vision:** To become an incubator for novel research not yet part of JRC's portfolio, to play a role in stimulating out of the box and trans-disciplinary thinking and to contribute to the visibility of the JRC within the scientific community
- **Objective :** allow JRC to respond to (slow and rapid) changes in research, policy making and society by bringing in disciplines novel to the JRC and by developing capacity for trans-disciplinary research and approaches.

Instruments



Host & Manage within Unit

Coordinate across JRC

Collaborate
Engage
Communicate

JRC scientists

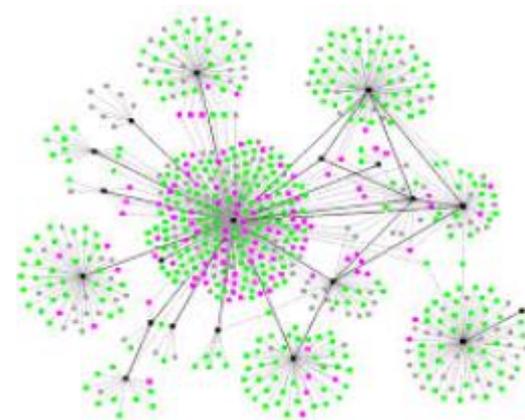
External Experts

Exploratory Research

Collaborative Doctoral Partnerships

Collaborative Doctoral Partnership

- novel scheme for more strategic collaboration with academic institutions on doctoral studies
- allows universities to gain a better understanding of research needs along the policy cycle
- providing the JRC with innovative research input and exchange of information with leading institutions in the field.
- Successfully train young academics at the science-policy interface
- Open to Higher Education Institutions (HEI) in EU and HORIZON 2020 countries.



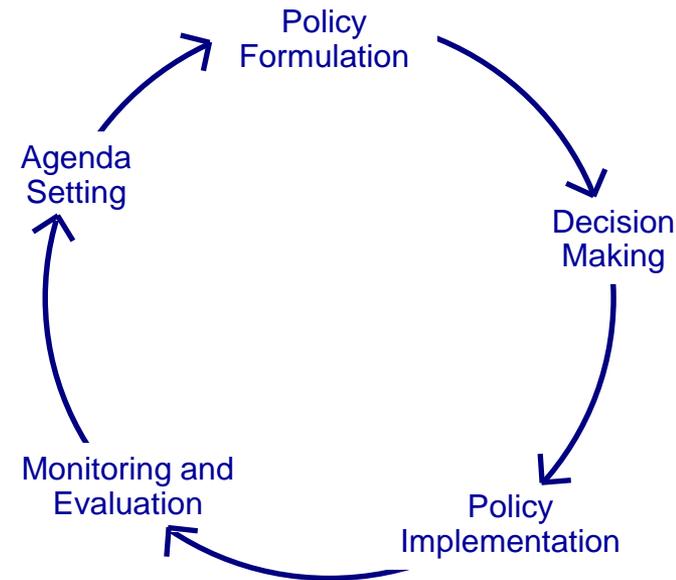
Collaborative Doctoral Partnership

– a win-win scheme

Universities gain a better understanding of research needs throughout the policy cycle

JRC obtains innovative research input and exchange of information with leading academic institutions in the field.

PhD Students have the unique opportunity of gaining experience in higher education, research institutions and policy making



CDP – Objectives

Establish strategic collaborations with higher education institutions to:

- train doctoral graduates in science and technology with a focus on the science-policy interface, able to understand the research needs at different stages of the policy cycle, capable of providing scientific support to policy and of using transferable skills in science communication and knowledge management.
- co-develop, co-host and co-supervise doctoral studies between higher education institutions and the JRC
- strengthen collaboration between the JRC and higher education institutions by promoting mutual enhancement of related skills and competences, combining existing knowledge and capacities, and enhancing networking in key scientific areas.

Collaborative Doctoral Partnerships (CDP)

Six thematic areas

- Energy and transport modelling
- Soil and land use change
- Bioeconomy and forests
- Machine learning
- Genomics and bioinformatics
- Nuclear decommissioning and waste management

Call to Higher Education Institutions was from Dec 2016 to mid-Mar 2017

Deadline: 15 March 2017 – selection of academic institutions →

- Negotiations with the HEIs / Collaboration Agreement
- call/selection of PhD students

CDP – Pilot scheme

Applications received: 138 from 75 HEIs

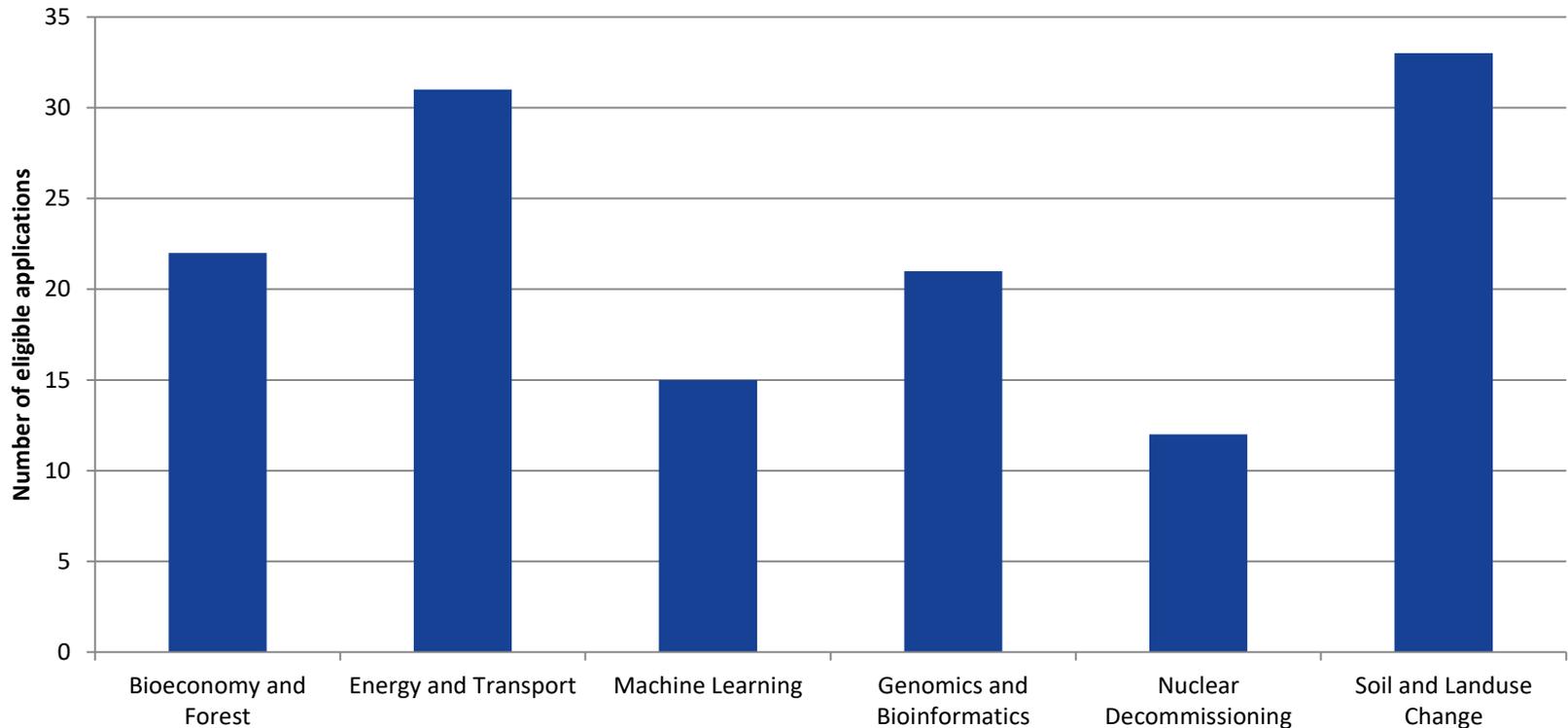
- Eligible applications : 134 (74HEIs)
- Non-eligible: 4
- No of Countries participating: 25
- EU: 22, H 2020: 3

Thematic areas (and number of eligible applications)

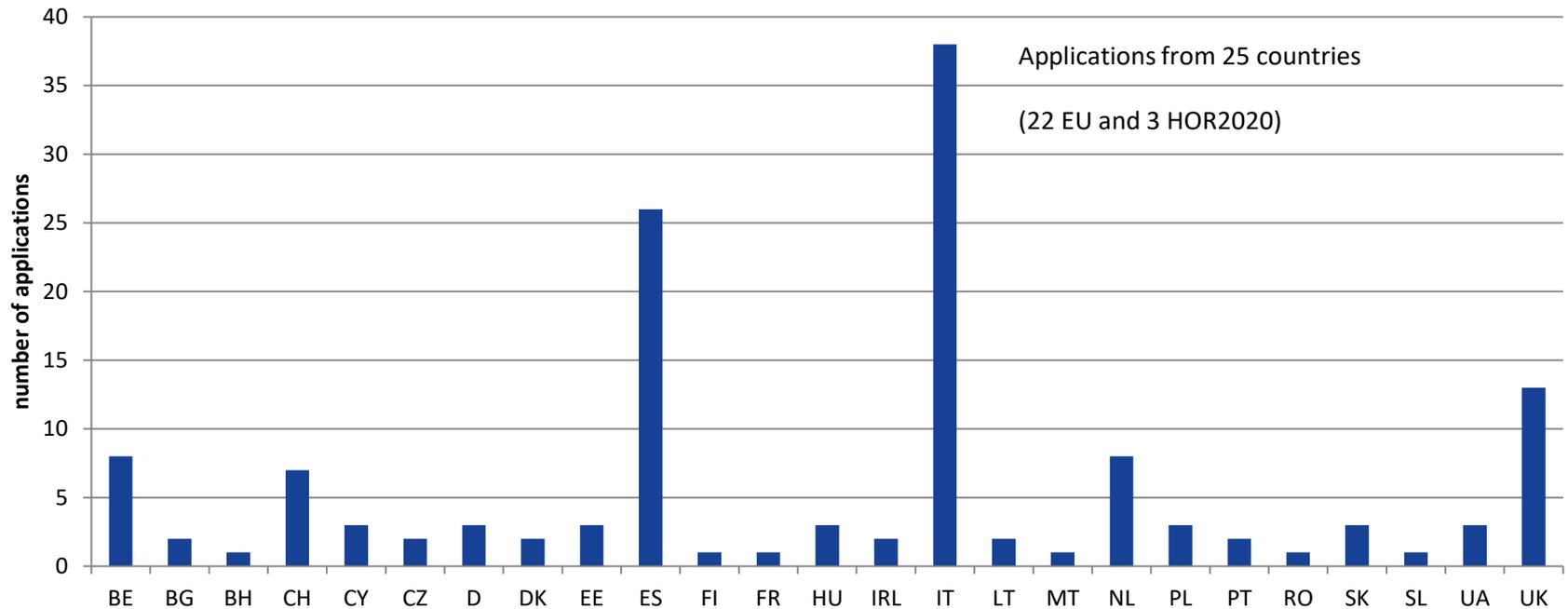
- Energy and transport modelling (31)
- Soil and land use change (33)
- Bio-economy and forests (22)
- Machine learning (15)
- Genomics and bioinformatics (21)
- Nuclear decommissioning & waste management (12)

Applications per thematic area

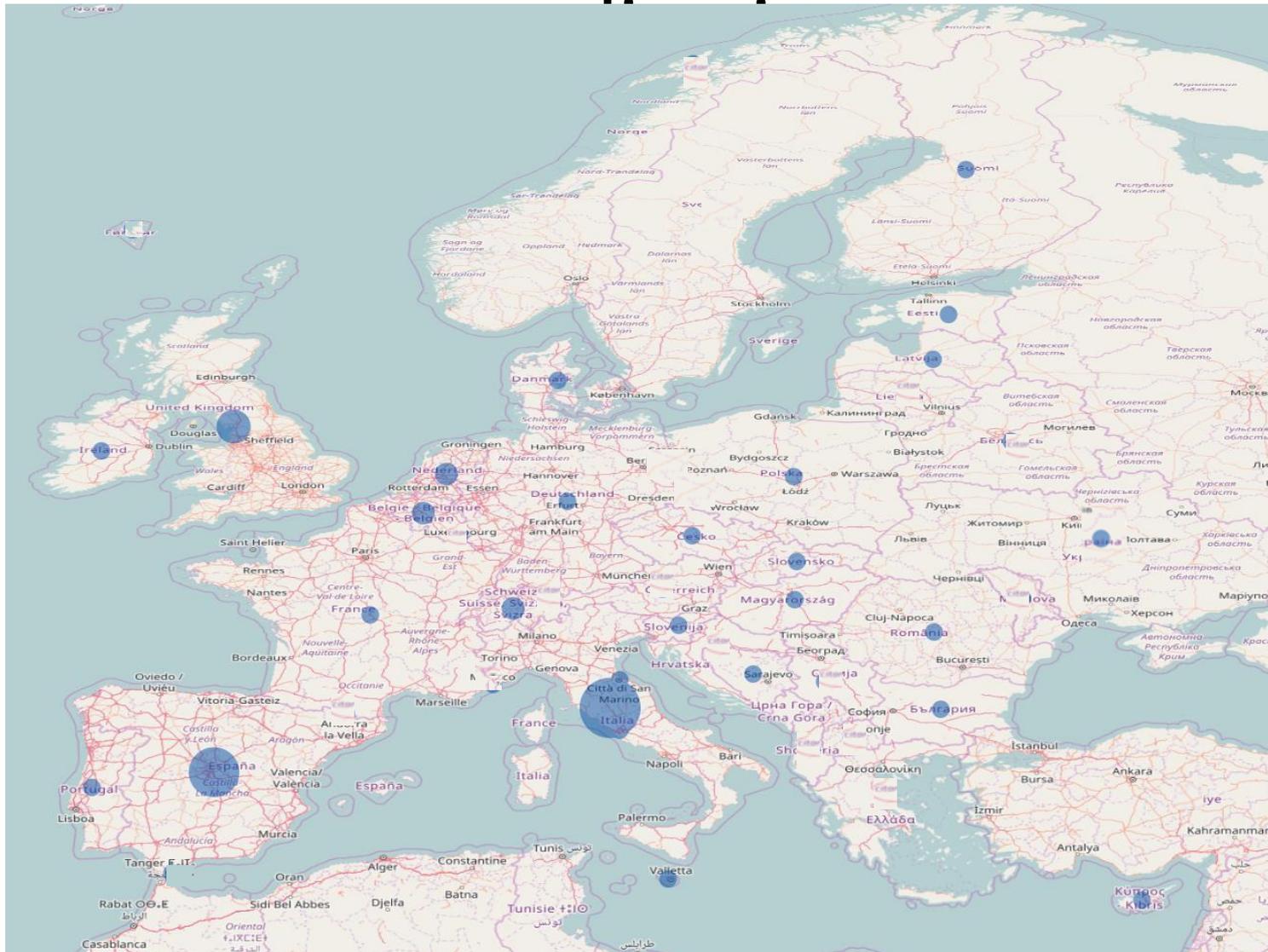
134 eligible applications from 74 universities and 25 countries



Applications per country – in numbers



Geographic distributions of



The larger the circle, the more applications. (IT=38 applications)

CDP – Statistics

- No of Countries participating: 25 (EU:22, H2020:3)
- No of Universities participating: 74 of which 50 ranked in Times Higher Education (THE) Index between place 9 to 801 (out of 980 universities)
- 67,5% of responding HEIs are ranked in THE
 - Among first 100 – 9 HEI
 - Among first 200 – 16 HEI

Next steps: Selection and Negotiations

- Evaluation and Selection of applications done by JRC experts and JRC Scientific Committee members
- Negotiations on a Collaboration Agreement with Higher Education Institutions was initiated with the 5 highest ranked applicants in each thematic area.
- Remaining applicants are put on a reserve list for (potential) future negotiations
- As soon as negotiations are concluded: PhD students are co-selected between the higher education institution and the JRC. Expected start date : mid 2018
- Further steps depend on negotiation and are to be reviewed annually. A second call on different topics is expected to be launched next year with different topics

Summary:

- Clear interest of Higher Education Institutions to collaborate with JRC on CDP including some of the best universities
 - 134 eligible applications received for the 6 themes
 - 74 Higher Education Institutions (HEI) with high ranking have applied from 25 countries (22 EU; 3 HOR2020)
- Selection by topic & department instead of university ranking is beneficial to get the best collaboration for JRC
- Selection on the basis of HEI research and expertise excellence
- Selection on the basis of compatibility with JRC research
- Main issues to be addressed during negotiation phase: structure of PhD program, study obligations, IPR and co-selection process

More information:

<https://ec.europa.eu/jrc/en/working-with-us/collaborative-doctoral-partnerships>

Questions, please contact

jrc-cdp@ec.europa.eu