



SCIENTIFIC DEVELOPMENT PROGRAMMES

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COLLABORATIVE DOCTORAL PARTNERSHIP (CDP) PROGRAM:

- **14 PhD students at JRC:** Brussels (1), Geel (1), Ispra (8), Karlsruhe (3), and Petten (1), **working on two main thematic areas: Energy/Transport and Digital Governance and Data Analysis.**

MARIE CURIE SKLODOWSKA ACTIONS (MSCA) DOCTORAL NETWORKS

- **10 MSCN PhD fellows hosted at the JRC**

- The CDP is a scheme offered to higher education institutions (HEIs) to benefit from a strategic, **win-win collaboration with the JRC** bearing in mind the importance of science-based evidence for policy making.
- The scheme allows **universities to gain a better understanding of research needs throughout the policy cycle** while at the same time providing the JRC with **innovative** research input and exchange of information with **leading academic institutions in the field.**



- Interested **universities** may apply to calls in which **collaboration topics are proposed by JRC** and to which research groups in academia can match **specific PhD proposals**, all aligned with the overall JRC strategic lines.
- Selected applications may lead to the signature of an **Agreement between the university and the JRC**, whose implementation needs the **joint selection of a student**. **IPR** (foreground) is entirely owned by the university.



- A **Call for students** is launched by the university and supported by the JRC, following the guidelines set in the Agreement.
- The selected PhD student should be **enrolled in a PhD academic program**, whilst there, her/his contract should be paid by the university.
- That student may stay **up to 24 months at the JRC** host unit, whilst there, **JRC pays for the contract.**



CDP Programme: present status

A new agile CDP:

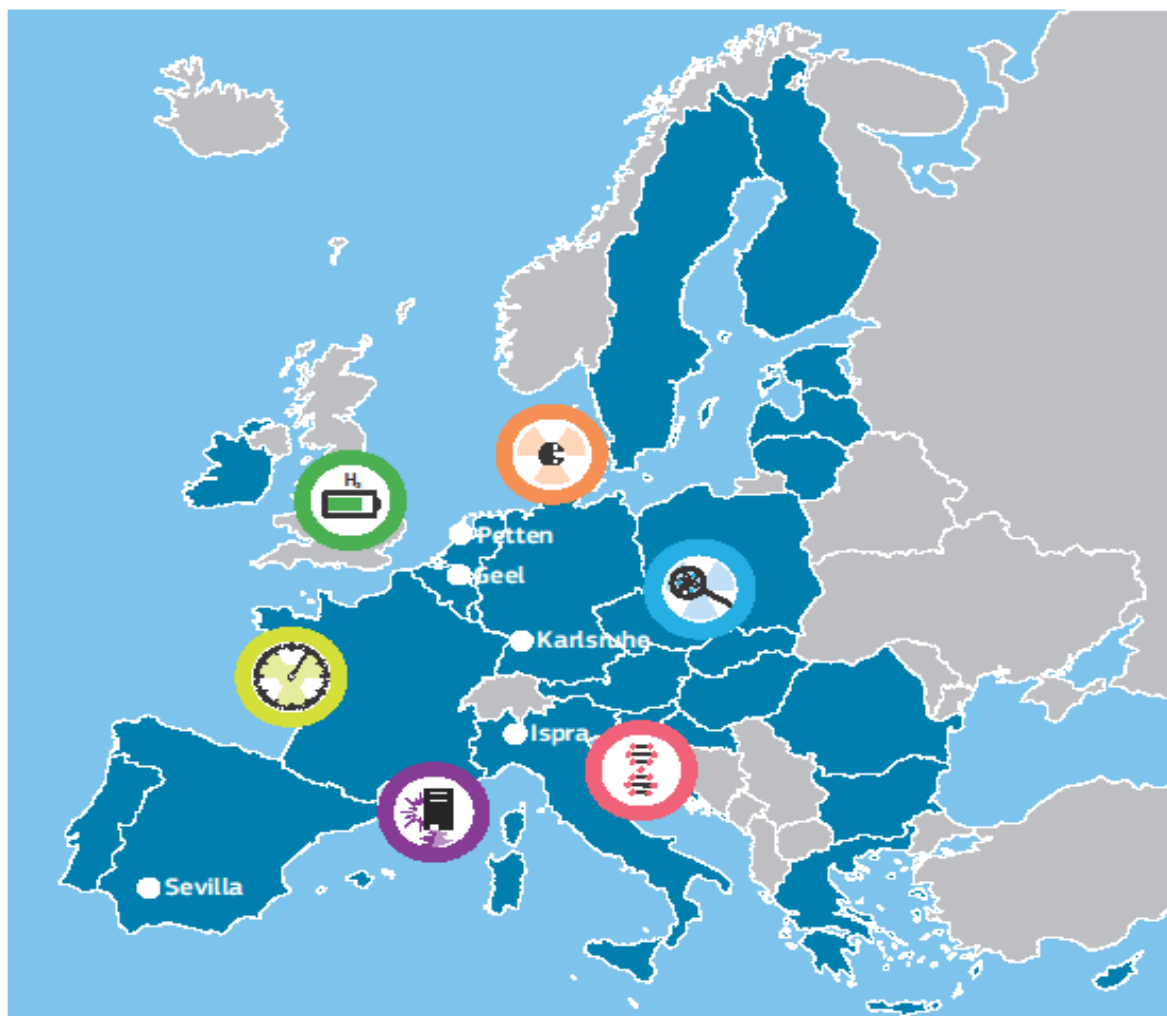
- with **more frequent calls**: next one this month or early January 2025
- collaboration topics **aligned with the overall JRC strategic lines and the Portfolios/projects**
- a more agile **administrative procedure** and a greater dissemination of the calls for EoI (Expression of Interest) of HEIs.



MSCA AT THE JRC

JRC Case

- **JRC's Role in a Consortium:** Associated Partner for a MSCA Network.
- **Administrative format for visiting researcher:** Secondment (UVS for JRC).
- **Duration of Secondment:**
 - Standard DN: 1/3 of fellowship duration (i.e., max 12 months).
 - ID and JD: No duration limit



Did you know?

JRC publishes more than 1100 scientific publications annually, 40% of them in the most cited journals, and more than 500 briefs and reports providing evidence-based support to policy makers?



Do you know?

JRC trains **Marie Skłodowska-Curie Action (MSCA)** doctoral candidates and postdoctoral fellows?



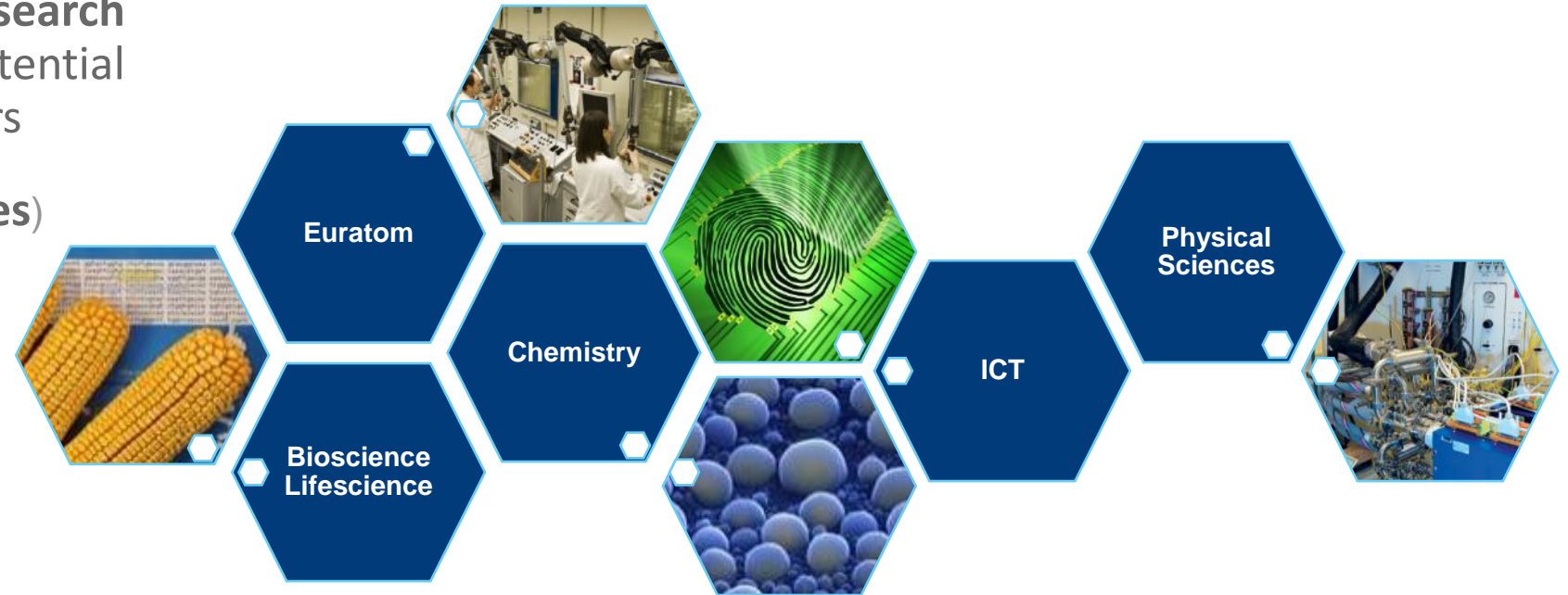


Open access to JRC Research Infrastructures

Landscape of JRC Research Infrastructures

JRC hosts **39 physical research infrastructures** with a potential of opening to external users

(out of a total of **53 facilities**)



Rationale

Opening up access to JRC Research Infrastructures is part of the **JRC Strategy 2030**

Benefits to users and the ERA

- **Fair and transparent** method for allocating access
- Make JRC RIs available to external users in view of the **limited resources** in Europe
- Provide **training and capacity building**
- Bridge the **gap between science and Industry**
- **Dissemination** of knowledge, foster collaboration in Europe

Benefits to the JRC

- Expand JRC **networking** capabilities
- Enter into **new key areas** of research
- Maintain JRC **scientific excellence**
- Raise the **value and visibility** of JRC RIs

Framework for Access

Based on the [Charter of Access to RIs of DG RTD](#)

Principles and guidelines when defining Access policies for RIs

Access Modes

- **Relevance-driven**
 - **Peer-review selection** following a call for proposals: Scientific implementation, collaboration and access to new users, strategic relevance to the JRC, strategic importance for Europe
 - Mainly targeted to **academia and research institutions**, as well as to **SMEs**
 - Users charged the **additional costs**; nuclear RIs free of charge – Users pay for consumables
 - Open dissemination after an 18 month embargo period
- **Market-driven**
 - **Selection by the JRC**
 - Mainly targeted to industry
 - Users charged the full costs
 - Data not disseminated via open schemes



Eligibility

Non-nuclear

- **Member States**
- **Associated countries:** Albania, Armenia, Bosnia and Herzegovina, Faroe Islands, Georgia, Iceland, Israel, Kosovo, Moldova, Montenegro, North Macedonia, Norway, Serbia, Tunisia, Turkey, UIK, Ukraine

Nuclear

- **Member States**
- **Associated countries:** Ukraine

Open to

- ✓ EU Member States
- ✓ Countries associated to Horizon Europe

Facilitating Access – Conditions

Relevance-driven mode – Non-nuclear

Widening Participation and Spreading Excellence (WPSE) countries

- **Cover travel and subsistence** of Users from User Institutions located in the **WPSE** list of countries.
- **Waive the access costs** in the relevance-driven mode to proposals where the Lead User Institution, and at least 2/3 of the Users Institutions are from the **WPSE** list of countries.
- The calls are in competition with EU Member States

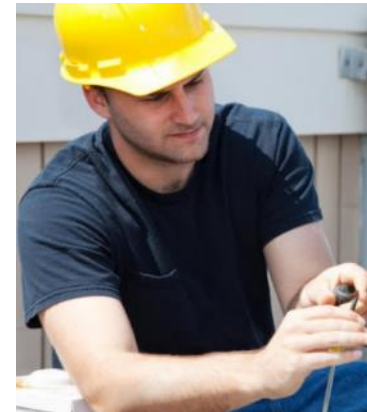
Relevance-driven mode – Nuclear

- **Cover travel and accommodation** of Users as part of the Pilot Action in the field of nuclear safety

Research Infrastructure Access Agreement

Rights and obligations of JRC and the user(s) concerning:

- Health and safety
- Security rules
- Data protection
- Confidentiality
- Liability and financial aspects
- User access assessment



In-kind contributions:

- Human resources, i.e. for running all or parts of the experimental work or assisting the experimental campaign
- Provision of consumables and equipment

Dedicated portal at EU Science Hub

- **All supporting documents:** Framework and related annexes (template for proposals, agreement documents, IP rules, etc.)
- **Eligibility Criteria**
- **Call for proposals per Research Infrastructure**
 - ✓ Estimated total number of Access Units allocated to the call
 - ✓ Average number of Access Units per project
 - ✓ Estimated additional costs per Access Unit
 - ✓ Priority topics of the Research Infrastructure
- **Selected Projects**
- **User Access Report** / link to databases (after embargo period)



<https://ec.europa.eu/jrc/en/research-facility/open-access>

Research Infrastructures opening access

European Laboratory for Structural Assessment (ELSA) (Ispra, IT)

Reaction Wall

HopLab

Consumer Products Safety (Ispra, IT)

Nanobiotechnology Laboratory

Energy Storage Facilities (Petten, NL)

BESTEST – Battery Energy Storage Testing for Safe Electric Transport

FCTEST – Fuel Cells and Electrolyser Testing facilities

GASTE F – Gas Tank Testing Facility

European research infrastructure for nuclear reaction, radioactivity, radiation and technology studies in science and applications (EUF RAT) (Geel, BE)

GELINA – Neutron time-of-flight facility for high-resolution neutron measurements

HADES – Underground laboratory for ultra-low level gamma-ray spectrometry

MONNET – Tandem accelerator based fast neutron source

RADMET – Radionuclide Metrology laboratories

Actinide User Laboratory (ActUsLab) (Karlsruhe, DE)

PAMEC – Properties of Actinide Materials under Extreme Conditions

FMR – Fuels and Materials Research

HC-KA – Hot Cell Laboratory

Laboratory of the Environmental & Mechanical Materials Assessment (EMMA) (Petten, NL)

LILLA – Liquid Lead Laboratory

SMPA – Structural Materials Performance Assessment Laboratories

AMALIA – assessment of nuclear power plants core internals

MCL – Micro-Characterisation Laboratory

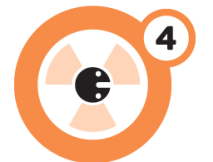
Since 2017, 17 RIs have opened access to external users at the JRC sites of Ispra, Karlsruhe, Petten and Geel:



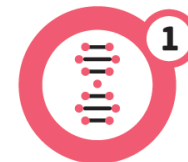
EUFRAT, GEEL



ACTUSLAB, KARLSRUHE



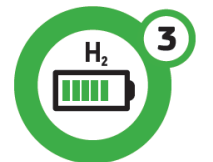
EMMA, PETTEN



NANOBIOTECH, ISPRA



ELSA, ISPRA



ENERGY STORAGE, PETTEN

Statistics

Statistics of the selected projects

User institutions:
countries associated to Horizon
Europe vs. EU Member States

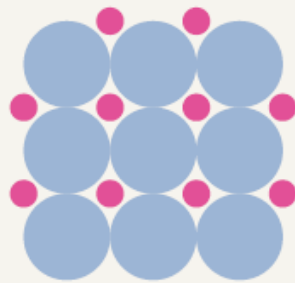
12 % Institutions from countries
associated to Horizon Europe



88 % Institutions from
EU Member States

Type of
institution

10 % SME/Industry



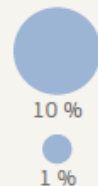
90 %
Academia/Research institutions

User distribution
by gender

32 % Female



68 % Male



279 eligible proposals submitted to the JRC

213 selected proposals

164 lead users signed agreements with the JRC

132 user institutions from the proposals having signed agreements with the JRC

562 users from the proposals having signed agreements with the JRC

33 countries from the proposals having signed agreements with the JRC

104 user access projects that have been completed

32 % of female applicants

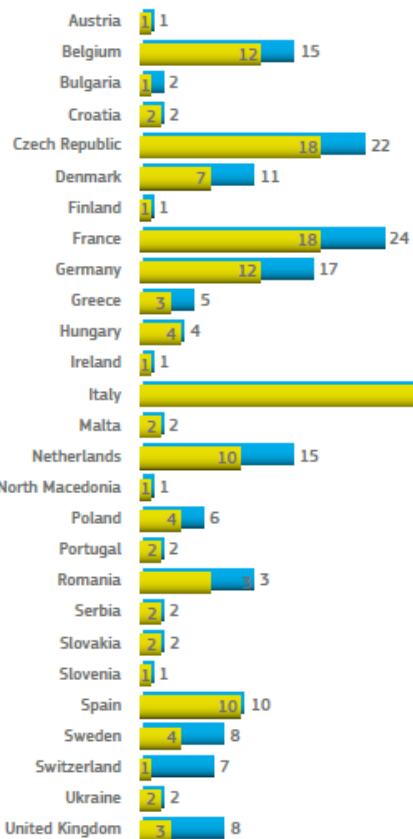
10 % of business participation

12 % countries associated with Horizon Europe

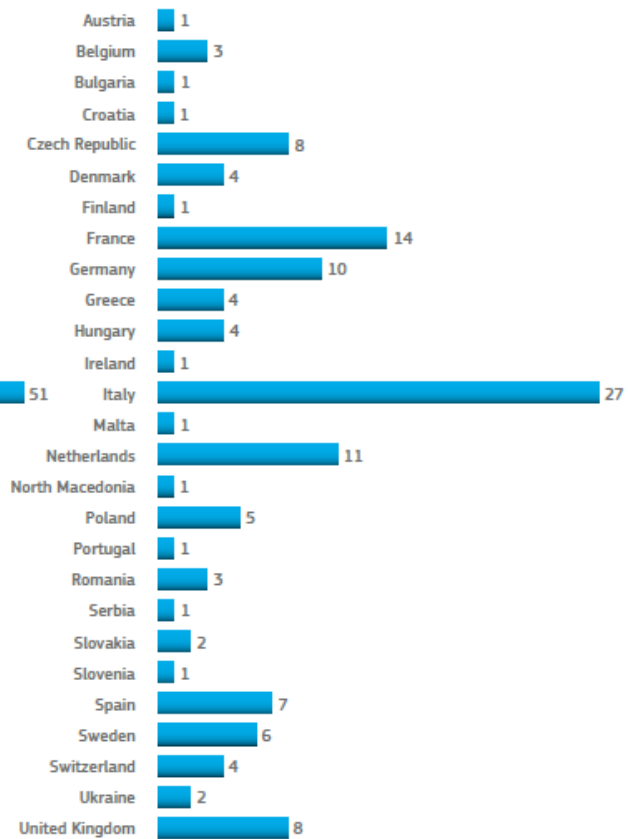
Statistics

Number of projects per country

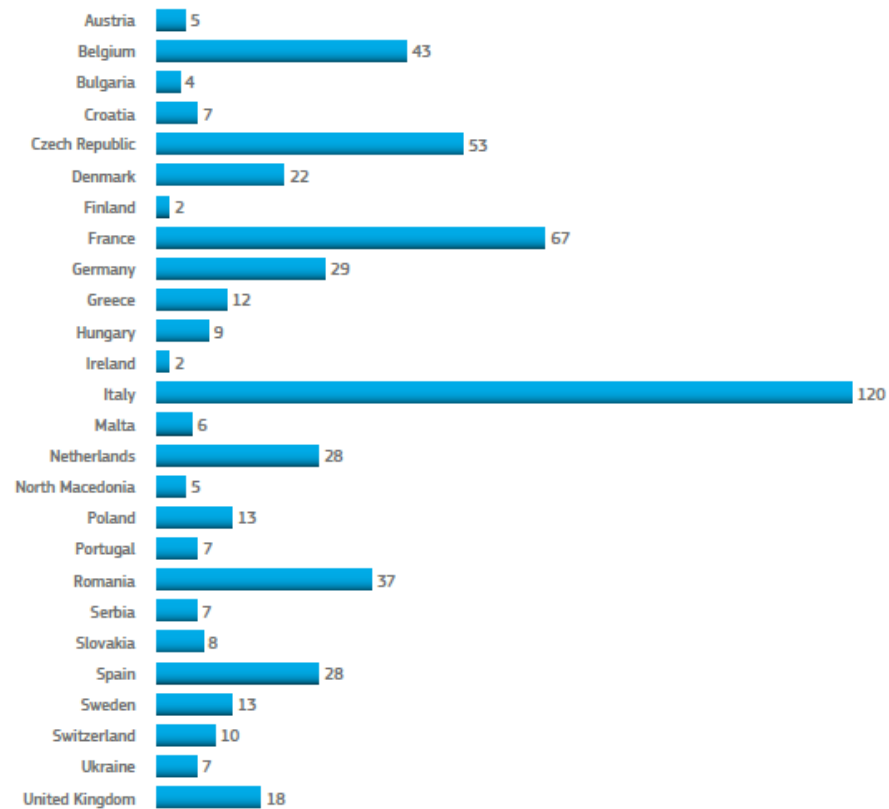
■ Only lead user
■ Countries from consortium members



Number of institutions per country



Number of users per country of applicant institutions



Training and capacity building

- Addressed to groups of Users from **universities, research or public institutions, or from a Small-Medium-Enterprises (SME)**
- Preferably with **existing** or under **construction/upgrading** RIs **similar** or **complementary** to those of JRC
- Stays at the JRC will comprise a **full week**, with the participation of groups from several institutions and countries.



Thanks

Open access calls: <https://ec.europa.eu/jrc/en/research-facility/open-access>