



JRC Scientific Development Unit

Collaborative Doctoral Partnership

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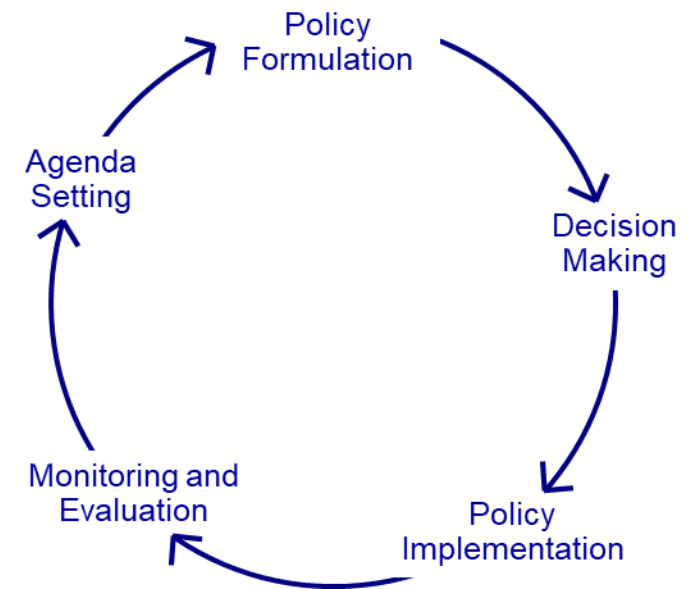
Collaborative Doctoral Partnership (CDP)

Strategic collaborations with Higher Education Institutions (HEIs) to co-supervise a new generation of doctoral students with a specific focus on the **science-policy interface**.

- **Strengthen the collaboration between the JRC and higher education institutions** in key scientific areas.
- **To train** a new generation of doctoral graduates in science and technology with a focus on the science-policy interface,
- **To co-develop, co-host and co-supervise doctoral studies** between higher education institutions and the JRC.

Win – Win Scheme

- **Higher Education Institutions** 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.



In order to achieve the win - win

- **Close interaction between supervisors** from JRC and HEI.
- **PhD students** have right to travel to meet **HEI supervisors**.
- **Workshops for supervisors** to support them with **professional development possibilities** to meet the needs of doctoral training with optimum efficiency.
- **Science for Policy** training element.

Information flow in CDP

Dedicated workshops for supervision

- Managing Expectations
- Effective Feedback
- Diversity & Conflict Prevention
- Covid-19 work - new processes, challenges, options/solutions
- Research impact.
- Understanding and communicating with different profiles and interlocutors.
- Policy Impact

PhD community with monthly meeting with students

Q&A sessions

CDP seminars on rules and procedures

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

Collaborative Doctoral Partnership (CDP) workflow



- **Strategic fields**
- **Evaluation and selection** by Scientific Committee and Units responsible of thematic field
- Definition **collaboration topics and PhD project/s.**
- **Negotiation and signature** of CDP agreement
- PhD student is **co-selected**
- PhD student is **co-supervised** by JRC and HEI supervisors

Call for Applications - Evaluation criteria (I)

Applications for CDP at Department/Institute level to allow smaller universities to compete with larger universities and allow for better regional distribution of applicants

Research reputation (25%)

- Description of **research excellence in the thematic field**
- **Average number a) of peer-reviewed publications** per academic staff over the past 10 years and b) a list of 10 selected **recent publications** representative of your research in the thematic field

Research Profile (30%)

- Description of **research activities** within the thematic field
- Description on how the **research profile complements the research of the JRC** in the thematic field

Call for Applications - Evaluation criteria (II)

PhD Programme (25%)

- Description of the **PhD Programme**
- Description of the **PhD student selection criteria**
- **Supervision modalities** for the PhD student at the HEI

European/International collaborations (20%)

- List established **European and international research collaborations**
- List and briefly describe any **previous experience with collaborative PhD programmes**, PhD partnerships or similar schemes with other HEI/Universities in your PhD programme

Selection of **up to 5 HEI with highest score**.

CDP Agreement

Defines rights and obligations of the two parties

ARTICLE 1 – OBJECTIVES OF THIS COLLABORATIVE DOCTORAL PARTNERSHIP AGREEMENT

ARTICLE 2 – RESPONSIBILITIES OF PARTIES

ARTICLE 3 – LIABILITY

ARTICLE 4 – COORDINATION AND OVERSIGHT

ARTICLE 5 – PROGRESS OF THE WORK, MEETINGS

ARTICLE 6 – REPORTS

ARTICLE 7 – FUNDS

ARTICLE 8 – PROTECTION OF THE RESULTS OF THE COOPERATION

ARTICLE 9 – CONFIDENTIALITY

ARTICLE 10 – SUBCONTRACTS

ARTICLE 11 – APPLICABLE LAW AND SETTLEMENT OF DISPUTES

ARTICLE 12 – ENTRY INTO FORCE AND DURATION

ARTICLE 13 – MISCELLANEOUS AND ANNEXES

Annex A - CDP Agreement

Describes the **scientific part** of the collaboration between both HEI and JRC.

Gives the **direction** of the collaboration and contains ideas, milestones, etc.

Acts as a **benchmark** to evaluate the performance of the cooperation

Annex A includes:

(A) **GENERAL COLLABORATION TOPICS**

Collaboration means

(B) **PhD TOPICS**

Proposed topics/titles

Time indication

(C) **EXPECTED OUTPUTS**

Call for Applications

1st Call – 2016

- Received **134 eligible proposals**
- **25 countries** participated (22 from EU, 3 from H2020)
- **74 universities** participated of which 50 ranked in Times Higher Education (THE) Index between place 9 to 801 (out of 980 universities)

2nd Call – 2020

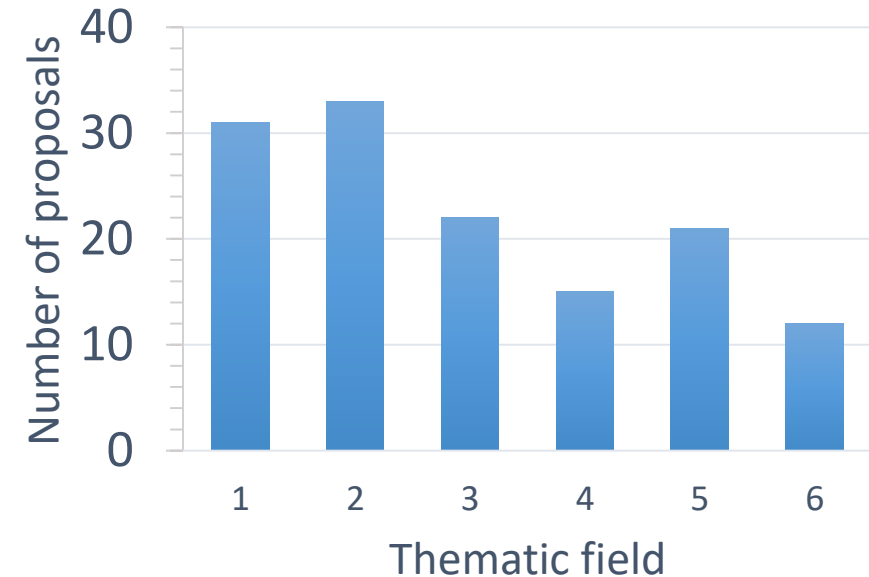
- Received **146 eligible proposals**
- **24 countries** participated (21 from EU, 3 from H2020)
- **80 universities** participated of which 50 ranked in Times Higher Education (THE) Index between place 9 to 801 (out of 980 universities)

1st Call - Thematic fields

Thematic fields:

1. Energy and transport modelling.
2. Soil and land use change.
3. Bio-economy and forests.
4. Machine learning.
5. Genomics and bioinformatics.
6. Nuclear decommissioning and waste management.

Number of proposals per thematic field



Stats – 1st call

CDP agreements signed	24
PhD students active at JRC	26
Completed the stay at JRC	2
Left the programme	2

1st Call - CDP Agreement

University Pontifical Comillas, Spain - (1)

University Zilina, Slovakia - (1)

Utrecht University, Netherlands - (1)

Universidad Politecnica de Madrid, Spain - (1)

University Cantabria, Santander, Spain, - (1)

University of Zurich, Switzerland - (2)

University Vigo, Spain - (2)

University Aarhus, Denmark - (2)

Universite de Versailles, LSCE, France - (2)

University ETH Zurich, Switzerland - (2), (3)

University Wageningen, Netherlands - (3)

Radbout University Nijmegen, Netherlands - (3)

University of Padua, Italy - (3)

University of Zvolen, Slovakia - (3)

Thematic fields:

1. Energy and transport modelling.
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University of Ljubljana, Slovenia - (4)

University of Bari Aldo Moro, Italy - (4)

University of Valencia, Spain - (4)

University College Dublin, Ireland - (4), (5)

University KU Leuven, Belgium - (2), (3), (4), (5)

Università degli studi di Milano, Italy - (5)

Politecnico di Milano, Italy - (6)

University Hasselt, Belgium - (6)

University of Sevilla, Spain - (6)

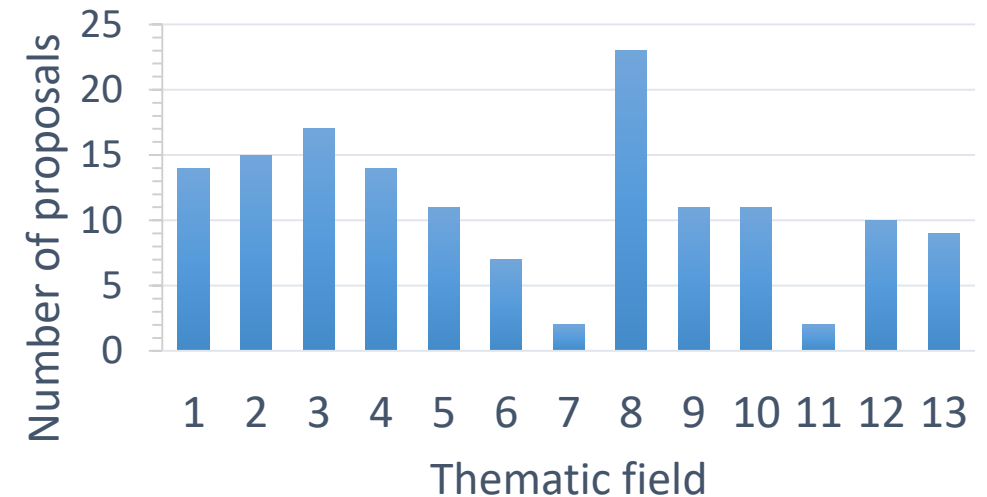
University of Kaunas, Lithuania - (6)

2nd Call - Thematic fields

Thematic fields:

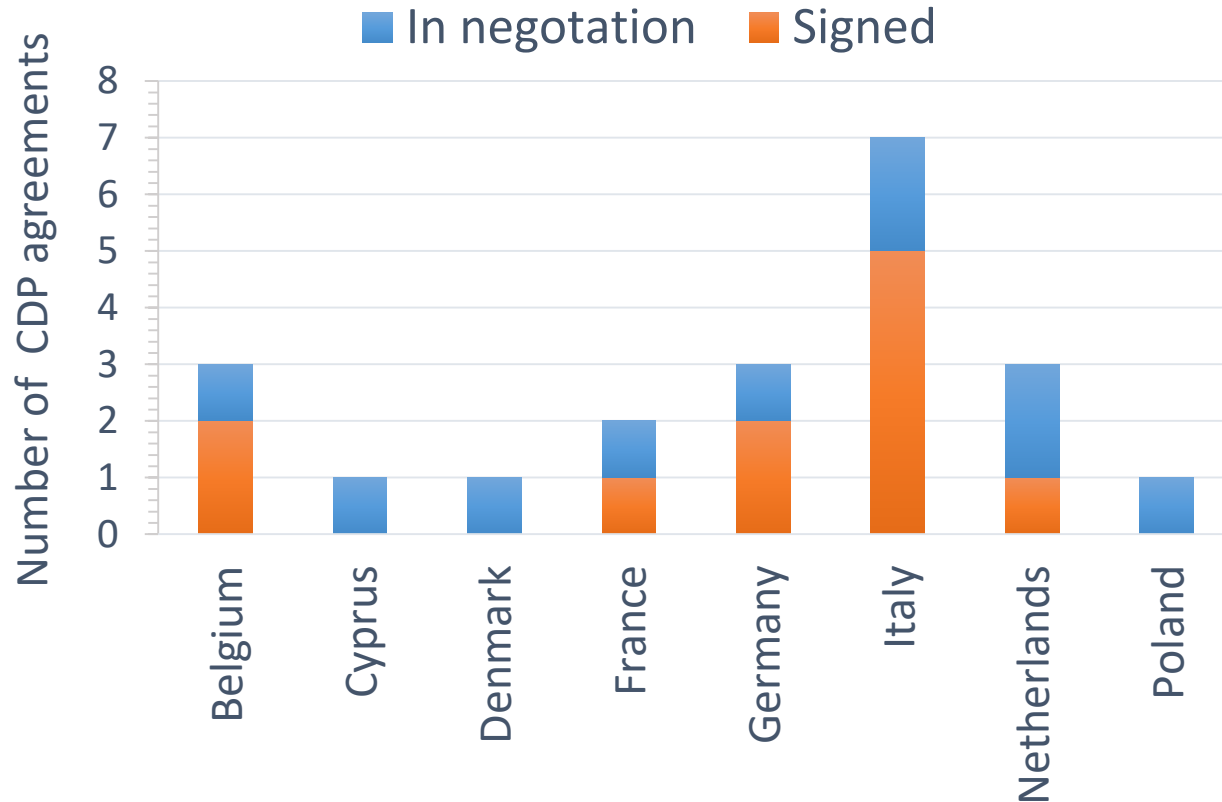
1. Digital Governance.
2. Smart, connected and clean mobility .
3. EU Energy Transition.
4. SDGs challenges and solutions / WEF Nexus.
5. Secure and sustainable supply of raw materials.
6. Artificial intelligence for earth observation.
7. Graphic causal models for hybrid threats.
8. Resilience of built infrastructure to natural and man-made hazards.
9. Health promotion and prevention of non-communicable diseases (NCDs).
10. Non-power nuclear and radiological technologies to achieve the SDGs 2030 Agenda.
11. Synergies of qualitative and quantitative methods for anticipation activities.
12. Behavioural insights applied to policy-making.
13. Robustness in complex data analysis and statistical modelling.

Number of proposals per thematic field



2nd Call - CDP Agreement

Number of CDP agreements signed or in negotiation



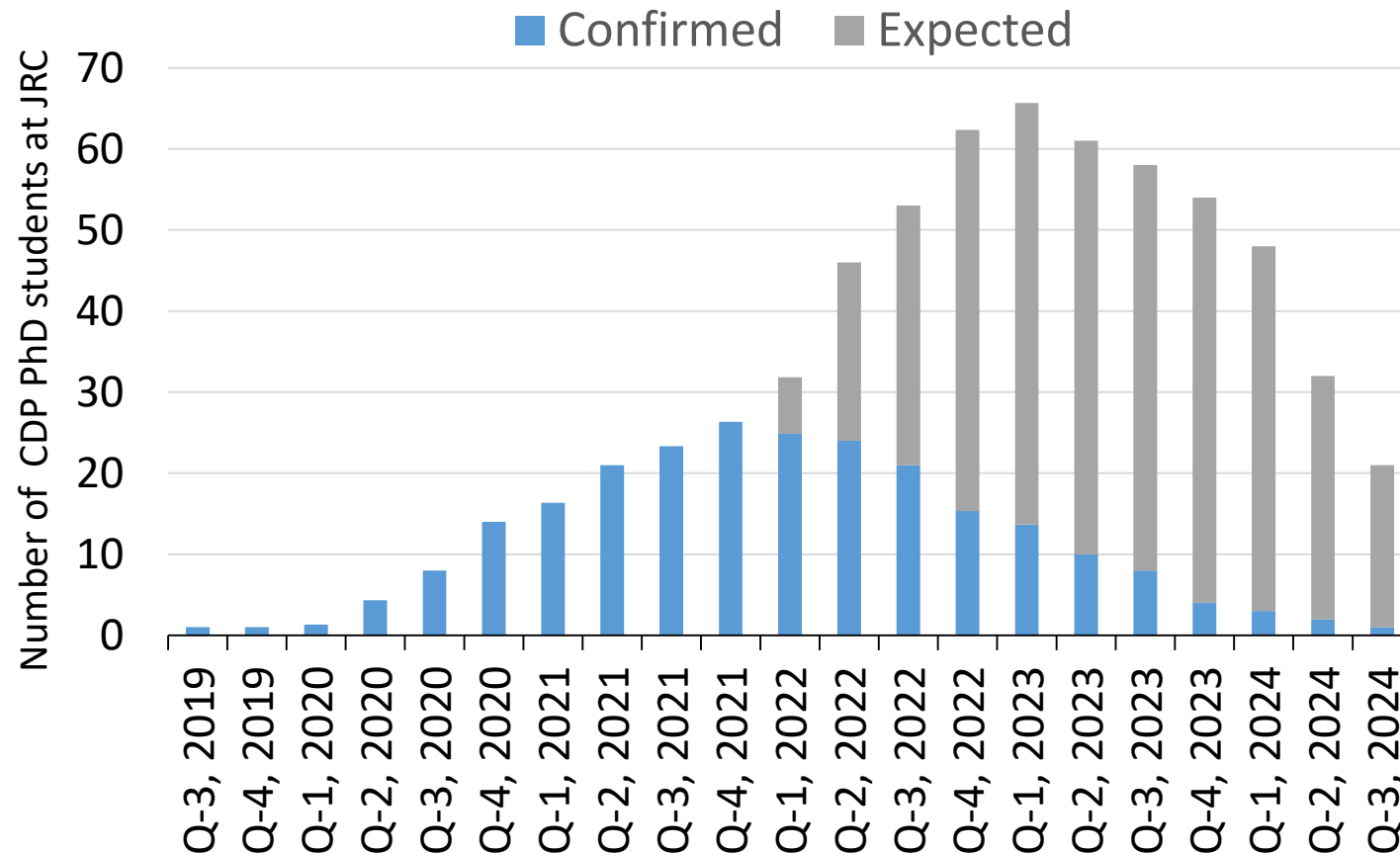
Signed CDP Agreements:

- Alma Mater Studiorum - Università di Bologna
- KU Leuven
- Politecnico di Milano
- Politecnico di Torino
- Scuola Universitaria Superiore IUSS Pavia
- Università degli studi di Firenze
- University Medicine Greifswald
- University of Groningen
- University of Montpellier
- University of the Bundeswehr Munchen
- Vrije Universiteit Brussel

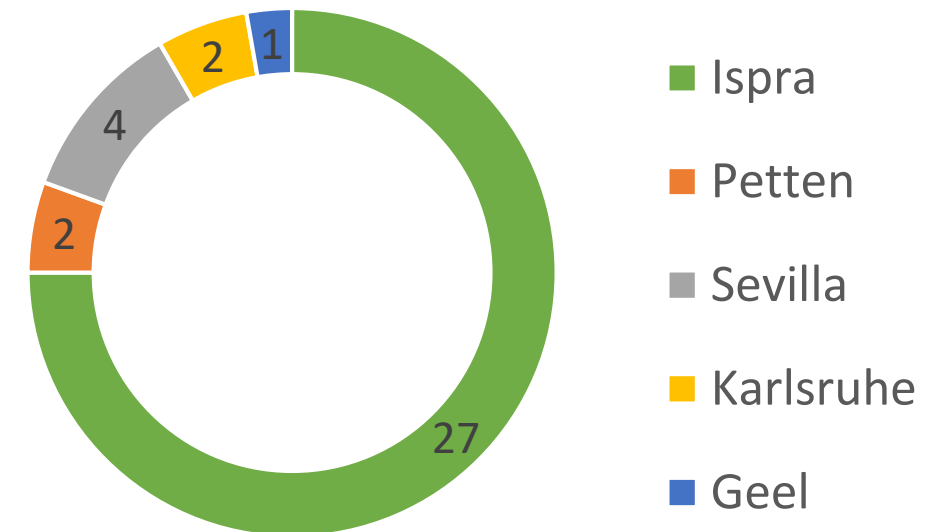
	Signed	Signature phase	In negotiations
CDP Agreements	11	7	3

CDP PhD students at JRC

Number of CDP PhD students at JRC per quarter-yearly period



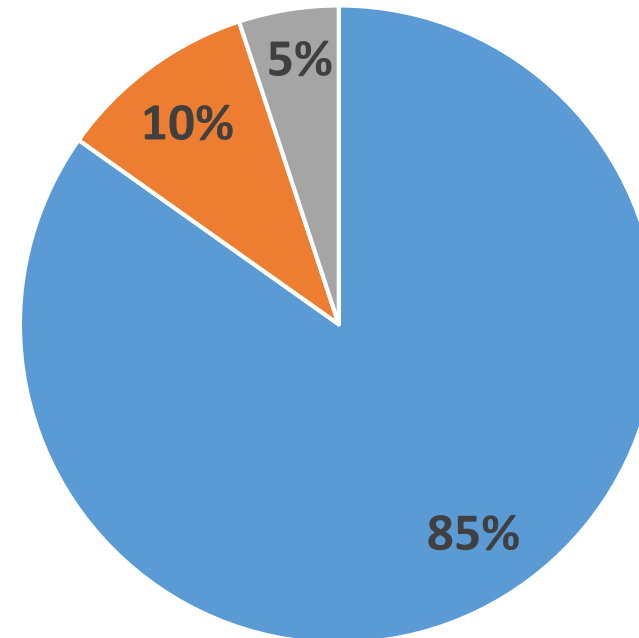
Distribution of CDP PhD student on JRC sites



CDP PhD Students

- ❑ Active at JRC = 26
- ❑ Expected = 48
- ❑ Finished at JRC = 4
- ❑ Cancelled = 2

How long CDP PhD students stay at JRC



■ 24 months ■ 36 months ■ <24 months

More information

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

Questions, please contact

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