



**Joint and Open REsearch Programmes:
features and potentialities of the JOREP database**

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**OPEN PROGRAMS AND OPENING OF NATIONAL R&D
PROGRAMS IN THE JOREP DATASET**

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Defining “Open programs”

“Publicly funded research programmes in which research organisations not located in the countries providing resources for the programmes are eligible to participate having an official role, performing research activities and receiving funding for research tasks”

- Programs that directly fund foreign research organizations
- Effective possibility to transfer money abroad

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Defining “Opening of national R&D programs”

“Possibility for actors not belonging to the national research space to participate in research funding programmes as applicants or co-applicants, whether or not they receive complementary funding”

- Funding flows abroad may or may not be included
- Several types and degrees of openness are possible






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Open programs in the JOREP dataset (1)

Few specific descriptors for open programs were developed in JOREP (other were similar to joint programs)

- The year in which the program was opened and countries opened to
- The partners' abroad eligible status (coordinator; co-applicant; sub-contractor)
- The conditions for funding (not possible, with a ceiling, with no conditions) and amount transferred abroad (estimation)
- An estimate of the share of projects with partners abroad







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Open programs in the JOEP dataset (2)

Two groups of programs emerged:

- **investigator-driven programmes** oriented to advancement of knowledge, generally open worldwide, with low shares of projects with participants from abroad receiving funding this being mostly subject to some restrictions (e.g. no similar competences available nationally), managed by national research councils
- **programs with targeted countries** (developing countries or Eastern European countries) , similar to joint bilateral cooperation projects, mostly driven by a foreign policy rationale of supporting research in less developing countries and by the specific research and social needs of the target countries , less relevant for science

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Open programs in the JOEP dataset (3)

The restrictive definition of open programs in JOEP proved to be highly problematic

- Correct identification of the perimeter was difficult (funding abroad formally possible , not the case in practice)
- Some misleading results (programs included in some cases and excluded in other)

Very limited number of programs (7 programs)

The focus on levels of funding abroad not always significant (having partners abroad even if without funding might have deeper impact on research than programs with few foreign partners but funding flow abroad)

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Opening of national R&D programs: a tentative overview (1)

- Pilot exploration in three countries: Switzerland, France and Italy
- Large national research programmes selected according to their financial volume and importance in the national funding landscape
 - *For Switzerland programmes selected correspond to ¾ of total national project funding*
 - *For Italy main programmes funded by the Ministry of Research are included*
 - *For France only national programmes funded by the Agence Nationale de la Recherche (ANR) are included*
- 2009 year of reference




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Opening of national R&D programs: a tentative overview (2)

- 52 programmes analysed as a whole (*set of data quite restricted for some information-e.g funding volume*)
- Programs excluded from the perimeter
 - *mobility-only schemes or personnel grants schemes (e.g. programs aimed at attracting foreign talented researchers and PhDs to work in national research institution)*
 - *programs overlapping with 'brain gain' national initiatives (e.g. the "Rientro dei Cervelli" action in Italy)*
 - *programs funding travels abroad only or envisaging subcontracting of specific services from foreign providers).*




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Why looking at opening of national R&D programs

EU push for member states' opening up their national research programmes to strengthen coordination of nationally rooted policies and funding schemes (EC, 2000, 2004; Optimat, 2005)

Opening is supposed to be a step towards Europeanization of research along one of the relevant functions (orientation, programming and funding) (Barré et al, 2013)

Opening is a complex and multidimensional phenomenon fostered by highly diversified motivations (i.e. *strengthening domestic excellence providing the access to best facilities abroad and attracting best scientists, addressing global problem*) (Edler, 2010; Knight, 2004)

Institutional arrangements orient differently national research policies and funding decisions although facing the same external pressures (Lepori et al, 2007; Nedeva 2013; Svanfeldt, 2009; Elena Pérez, De Dominicis and Guy, 2010)




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How to operationalize opening of national R&D programs



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graph LR
    A[Portability of grants] --- B[International collaboration]
    B --> C[Participation with no research funding]
    C --> D[Bilateral joint program]
    C --> E[Participation with research funding]
  
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Descriptors and indicators

Descriptor/Indicator	Details	
Countries opened	- ERA countries /Worldwide/towards some countries only	Patterns of opening
Year of opening	- The year programs opened to foreign collaboration	
Beneficiaries	- Beneficiary sectors	
Time of opening	- Application and funding stages	Dimensions/forms of opening
Modes of participation	- Later opening	
	- Participation without a formal role in the project	
	- Participation with a formal role (foreign partner, foreign coordinator)	
Portability of grant	- Foreign partner not receiving research funding	
	- Foreign partner receiving research funding (for research performed in the within of the project)	
Language barriers and information affordability	- Availability of funding to support international cooperation (travels, exchanges)	Opening facilitations
	- Possibility of funding to follow researcher (if moving abroad)	
	- Availability of information in foreign languages	
Level of opening of national research programs	- Call text in English	Actual level of opening
	- Proposal submission in English	
	- Share of projects with partners abroad	
	- Share of projects with foreign participants receiving funding as a percentage of the project's entire funding volume	






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Opening of national R&D programs: the pilot exploration in JOREP

Opening policies, strategies and objectives vary across countries and are shaped by the interests and scientific priorities of strategic actors (government, funding agencies, and performers).

We can expect 'strong' and 'light' forms of opening nationally, with both displaying different levels and degrees of opening.

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Strong and light opening (descriptors)

Descriptors		Forms of opening	
		Strong Opening	Light Opening
Patterns of opening	Wide		X
	Ad hoc	X	
Dimensions of opening	Foreign partner official status	X	X
	Funding to foreign applicants/ portability	X	
	Funding for international cooperation		X
	Later opening		X
Opening facilitations	Opening since application/ funding stages	X	
	Information availability	X	X
	Language barriers	X	X
Level of opening	Share of projects with foreign participants		X
	Share of projects with foreign participants receiving funding	X	

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Strong and light opening

- *Strong opening* with transfer of funding abroad might happen if:
 - Reciprocity between countries in different forms (ANR or LAA)
 - When there is a strong complementarity
 - When the results are not appropriate in economic terms but the collaboration/networking is important
 - When the national research system is highly internationalized

- *Light opening* as a “label” for compliance with the EU policy hiding collaborative schemes.

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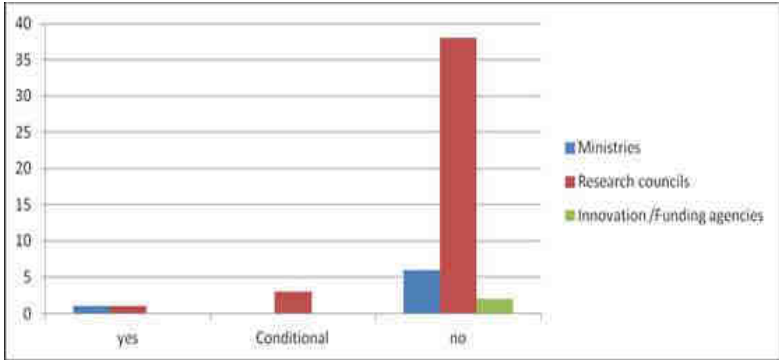
Opening of national R&D programs – some examples

- Possibility to fund foreign partners
- Countries programs are opened to
- Facilitators of opening
- Share of projects with at least a foreign partner having an official role
- Share of projects with foreign participants receiving funding, compared to the whole project funding volume






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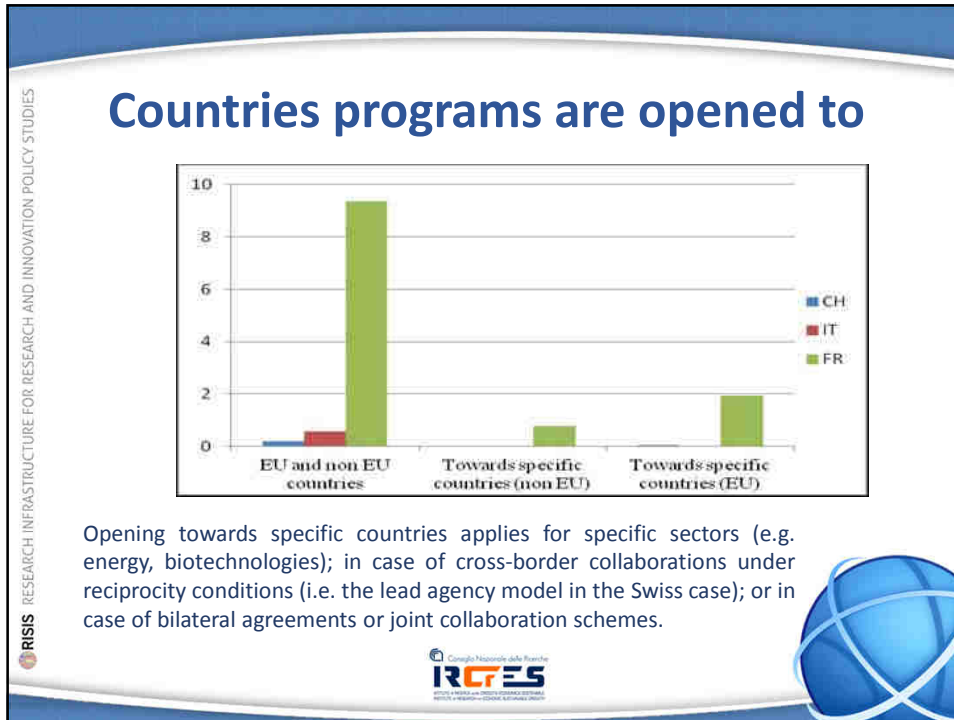
Possibility to fund foreign partners

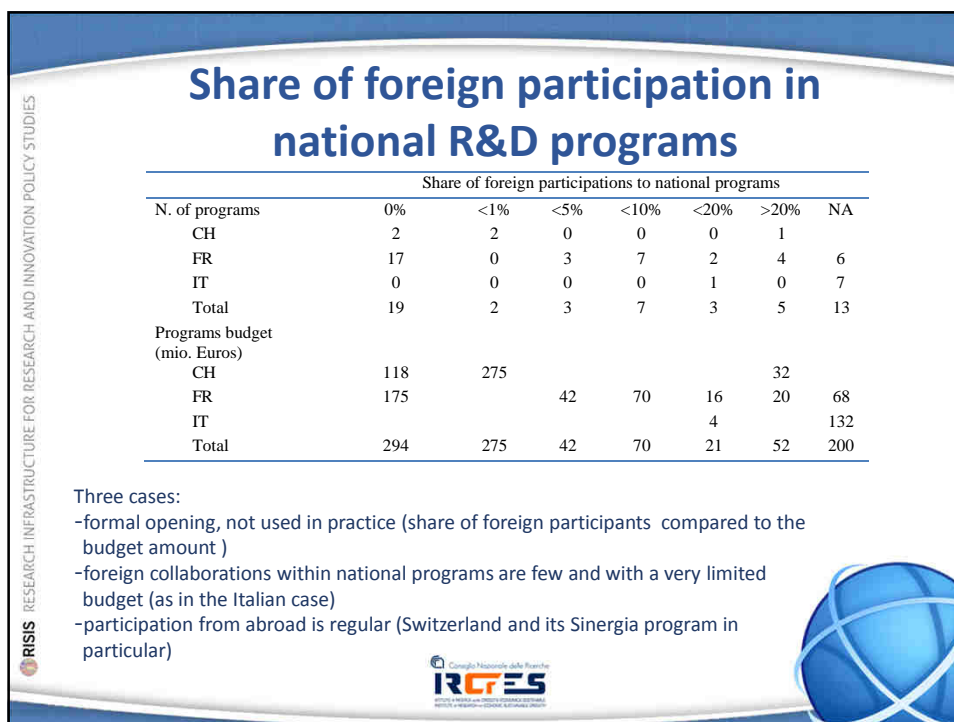


Agency Type	yes	Conditional	no
Ministries	~1	0	~6
Research councils	~1	~3	~38
Innovation /Funding agencies	0	0	~2

Mainly related to characteristics of the national regulations concerning public funding, and to different cultures and missions of funding agencies (Research Councils vs. Ministries).





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Observations from the pilot exploration (2)

Two main observations emerge:

- increasing “agencification” of several policy decision processes
- national agencies as strategic actors in national research contexts (national interests and views of the scientific community)
- Opening can represent a way for national states to respond to pressure for increasing the coordination of national research policies and international collaboration, accomplished mainly via formal rather than effective engagements, especially in financial terms
- Looking to the agency level is a relevant approach when analysing the ‘opening’ features of national research programs
- Analysing the ‘opening’ features of national research programs could improve the knowledge about strategic issues, such as the strategic role played by funding agencies within the public research funding system