# ESF MO Forum Evaluation: Indicators of Internationalisation

#### Results of the pilot study January 2010 - May 2012

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#### **Objectives and Methodology**

**Objective:** explore the feasibility of designing a set of indicators of the international orientation of Research Organisations

**Expected results:** a set of indicators allowing ROs to evaluate their positioning and to support their strategic decisions, new results for the research community

#### Methodology: a participative process involving

- users: bottom-up process, based on users needs
- experts: designing indicators is serious issue, need of professional skills
- support and coordination (ESF)

#### Action plan 1/2

♦ Step 0: Preparing and launching the project

Topic choice, design of the study, validation and support, recruiting interested MOs...

- ◆ Step 1: Create an agreement on
  - why internationalisation should be addressed through evaluation
  - on which specific questions indicators should provide information
    - analysis of MOs needs, 2) analysis of the literature,
       designing a framework

#### Action plan 2/2

- ◆ Step 2: Selection of the list of indicators (3 selection steps)
- Step 3: Data collection and full description of the indicators
- Step 4: Drawing conclusions and diffusing of the results

#### Time and actors table 1/3

	Step	Action	Actors	Time
	0.1	Topic choice	MOs Core group ESF scientific officer	April 2009 (Budapest W)
	0.2	Design of the study	MOs Core group, Experts	Summer 2009
	0.3	Validation of the proposal; recruiting MOS	ESF Governing council, ESF officer	Sept -Dec 2009
	1.1	Overview of MOs international policy and instruments	MOs (9 contributions)	March-April 2010
	1.2	Survey of literature, Framework for the International research system	Experts	May 2010 (Stockholm W)
O	1.3	Framework for MOS.	Experts + MOs	Feb 2011

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#### Time and actors table 2/3

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	Step	Action	Actors	Time
	2.1	Collecting a comprehensive large set of indicators	MOs (10 contributions) Experts	June-Dec 2010
	2.2	Selecting useful indicators for MOs management	MOs + Experts	May Summer 2010 (Paris W)
	2.3	Providing information on data availability	MOs (10 contributions)	Summer 2011
	2.4	Selecting a balanced list of feasible indicators	Experts	Sept 2011

#### Time and actors table 3/3

	Step	Action	Actors	Time
	3.1	Providing data	MOs (14 contributions)	Nov 2011-Feb 2012
	3.2	Selecting final set	Experts + MOs	Nov 2011 (Bern W)
	3.3	Testing the feasibility of bibliometric indicators	Experts	Nov 2011-March 2012
	4.1	Drawing conclusions	Experts + MOs + ESF	May 2012
Dsl	4.2	Diffusion of results: report, scientific papers, final conference	Chairs, Experts, ESF	Sept 2010 – Dec 2012

#### Results: frameworks 1/2

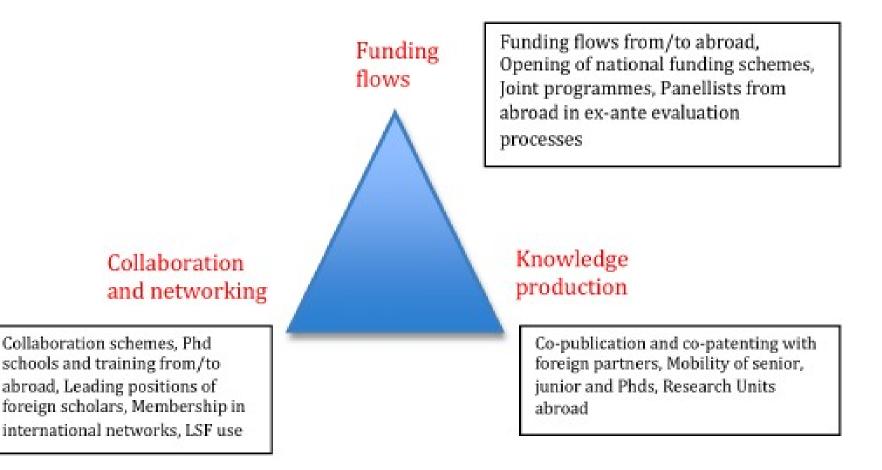
#### 1. Framework of European research system

Showing 3 types of interactions between European and national agencies, governments, performers:

- Funding flows,
- Collaboration and networking,
- Knowledge production.

Triangle
Oriented graph

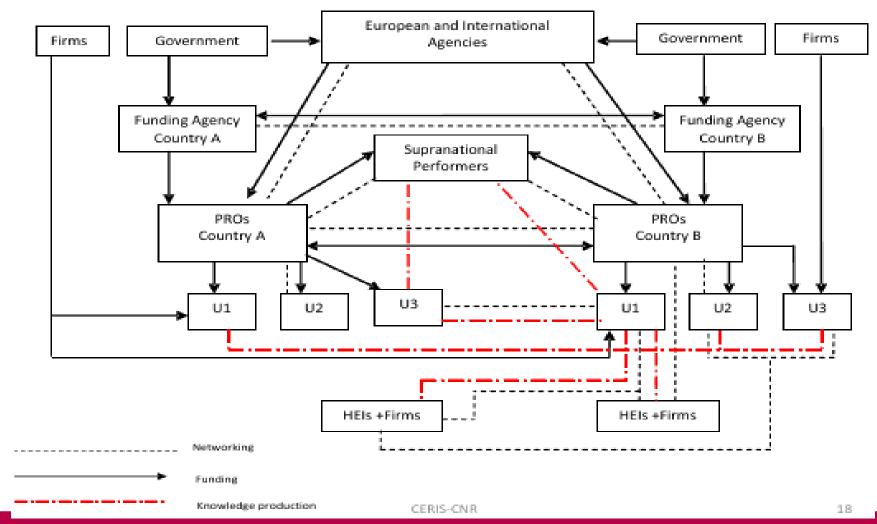
## 3 dimensions of activity impacted by internationalisation process



**ESF MO Forum: Indicators of Internationalisation** 

Results of the pilot study

### The European research system: the actors and their interactions



#### Results: frameworks 2/2

#### 2. Framework for MOs international activities

Adding 2 dimensions of activity:

- Knowledge circulation,
- Governance and processes (internationalisation of the RO itself)

Crossing 5 activities with 4 rationales → *MATRICES* 

FAs RPOs

Reaching critical mass Joinii

Benefit from complementarities G

Aiming at global coverage

**Enlarging innovation networks** 

Joining high quality research activities

**Getting access to additional resources** 

Signalling and visibility

Broadening scope of research agenda

#### Results: 9 indicators for FAs 1/3

F1	Resource flow	Budget for Joint Research Programmes	Internal data	Share of Direct Research funding budget
F8	Resource flow	Budget spent abroad	Bue sky indicator	Difficult to identify money effectively spent abroad
F1b	Funding collaboration and networking	Co-funded research output	WoS	Share of funded papers which are internationally co-funded

#### Results: 9 indicators for FAs 2/3

F4	Funding K production	International co- authored papers	WoS	Share of funded papers with international co-authors / share of national output with international co-authors
F5	Funding K production	International co- patenting	Bue sky Indicato <b>r</b>	
F2	Funding K circulation	Budget for attracting researchers from abroad	Internal data	Share of total direct research funding budget
F6	Funding K circulation	International mobility	Internal data	Number of researchers whose mobility has been funded

#### Results: 9 indicators for FAs 3/3

F7	Governance Openness of and processes programmes	Blue sky indicator	1. Direct budgets going to researchers working abroad 2. Count of the number of applicants from abroad 3. Share of papers funded by FA with no national authors
F3	Governance <b>Evaluation</b> and processes	Internal data	Share of reviewers and panelists for ex ante research proposal selection coming from abroad

#### Discussion about FAs indicators

- FAs internationalisation can be investigated through indicators
- The matrix Rationale X Dimensions provided a good support to guide the choice of indicators
- The two levels are useful:

Organisation level = international orientation of programmes and funding schemes, governance features

Performers level: international collaborations and standing of funded performers = a proxy for effectiveness of funding schemes and soundness of the selection process

#### Results: 9 indicators for RPOs 1/3

P7	Resources from non nat. sources	Budget coming from abroad	Internal data	Budget and share ot total
P7b	Resources from non nat. sources	Output generated from ressources coming from abroad	WoS	Number of papers acknowledging foreign funders
P2	K circulation	Recruitment of researchers from abroad	Internal data	Share of researchers recruited from abroad
P5	K circulation	International incoming and outgoing mobility	Internal data	Number of researchers coming from or going to a foreign or international RO

#### Results: 9 indicators for RPOs 2/3

P6 K production International WoS or Share of total publication output with international co-authors co-authored other base papers Budget and share of total budget (total or marginal costs?) P8 Collaboration Budget for Joint Research Internal data and P&P networking P9 Collaboration International Blue sky indicator and use of own networking infrastructures

#### Results: 9 indicators for RPOs 3/3

Governance and processes Recruitment committees Internal data Number and share of members coming from abroad Governance **Evaluation**: Internal data Share of total number of reviewers and panelist coming from abroad reviewers and and processes panelists from abroad in ex-post evaluation

#### Discussion about RPOs indicators

- Indicators of internationalisation more usual for RPOs
  - European indicators for country scale are often relevant e.g. ERA monitoring system
  - RPOs follow up indicators for the management process e.g. co-publications, recruitments, budget coming from abroad
  - some indicators are dependent on legal constraints
     recruitment committees, evaluation panels
     or difficult to obtain
     decision taken by the labs (e.g. short term mobility),
     issue about full costs versus marginal costs for JRP
- Europeanisation versus Internationalisation issue should be tractable
- Usefulness for RPOs positioning and strategic thinking

## Tasks to be achieved until December 2012

- Discussion on the report draft
- Feedback from MOs and from experts about the process the output and its immediate usefulness
- Discuss about Forum recommendations and suggestions for future work
- Finish writing the report
- Design a communication event for the end of 2012