

FRANCE – IRELAND

**Scientific impact of the ULYSSES program
(2005-2017)**

MESRI-DAEI / MEAE

2019

<http://www.enseignementsup-recherche.gouv.fr>

GENERAL PRESENTATION OF THE PROGRAMME

The purpose of this programme is to develop excellence scientific and technological exchanges between the French and Irish laboratories, by promoting new scientific collaborations and integrating in the projects young researchers and PhD students.

Total budget (France + Ireland, 2018) : around 77 500 € / year

>> including budget from the French part : 40 000 € / year

>> including budget from the Irish part : 37 500 € / year

Average budget per project (France + Ireland) : 2 500 € / year

Number of new projects per year : around 18

From 2005-2017 :

634 applications submitted

234 projects funded

DATA SOURCES

Campus France

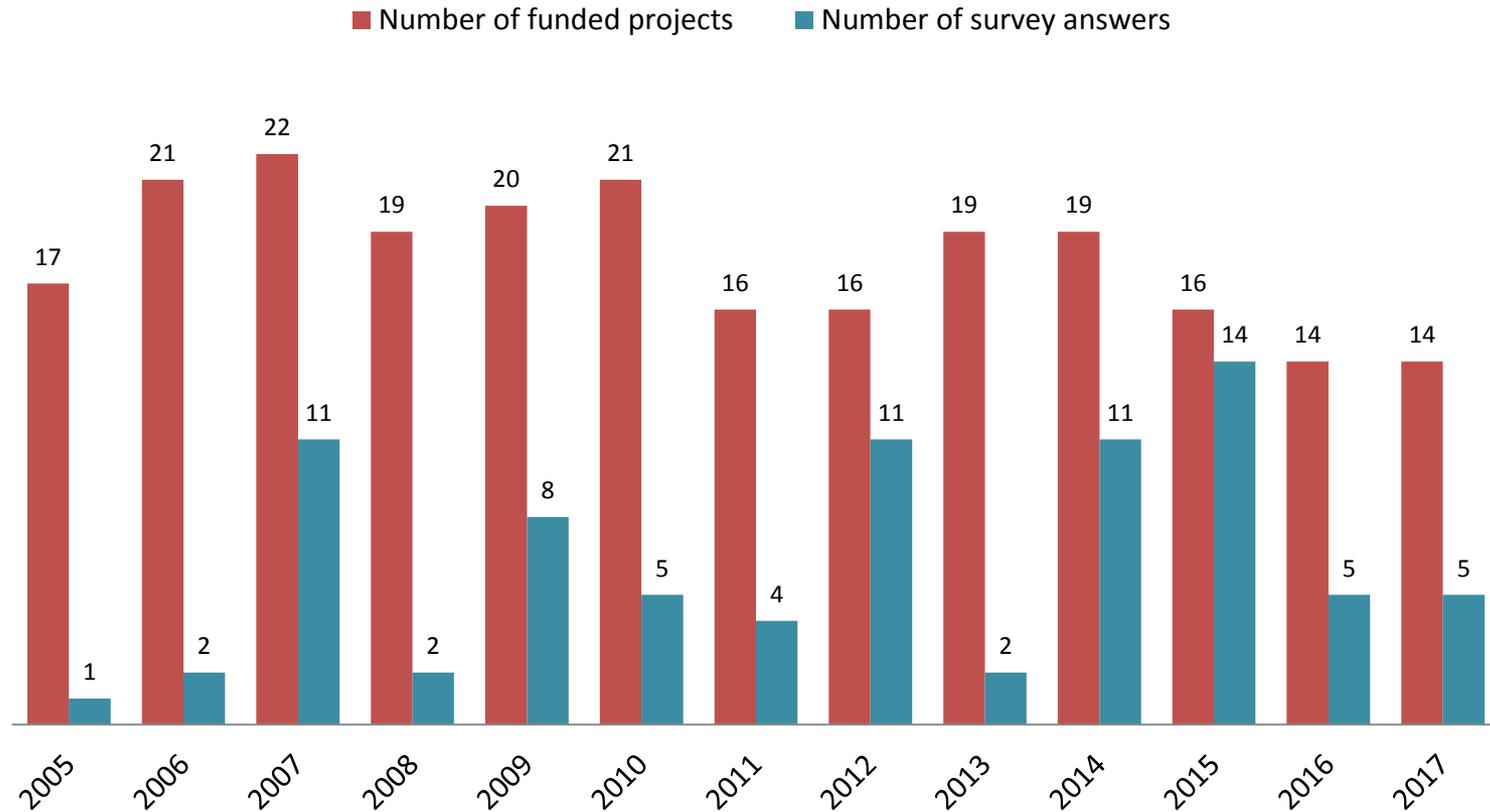
- Information about the PHC Ulysses applications
- List of mobilities (from France to Ireland and from Ireland to France)

Survey

- Target : French Principal Investigators of selected projects between 2005 and 2017
- Survey duration : 6 weeks between May and June 2019
- **35%** response ratio (81 respondents for 234 funded projects)

ANSWERS TO THE SURVEY

Average response rate to the survey : **35 % (81 answers)**

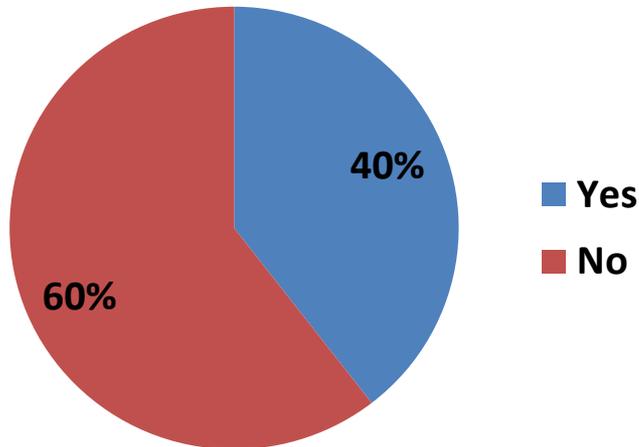


2005-2017

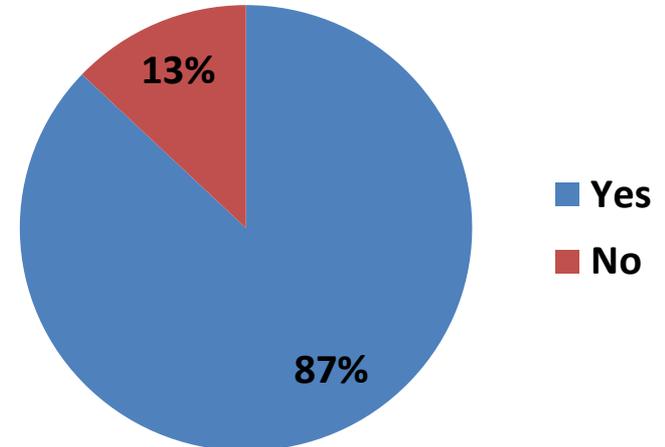
Key Points

BEFORE THE ULYSSES PROJECT (1/2)

Did you already cooperate with Ireland in the past ?



If yes, was it with the same partner?

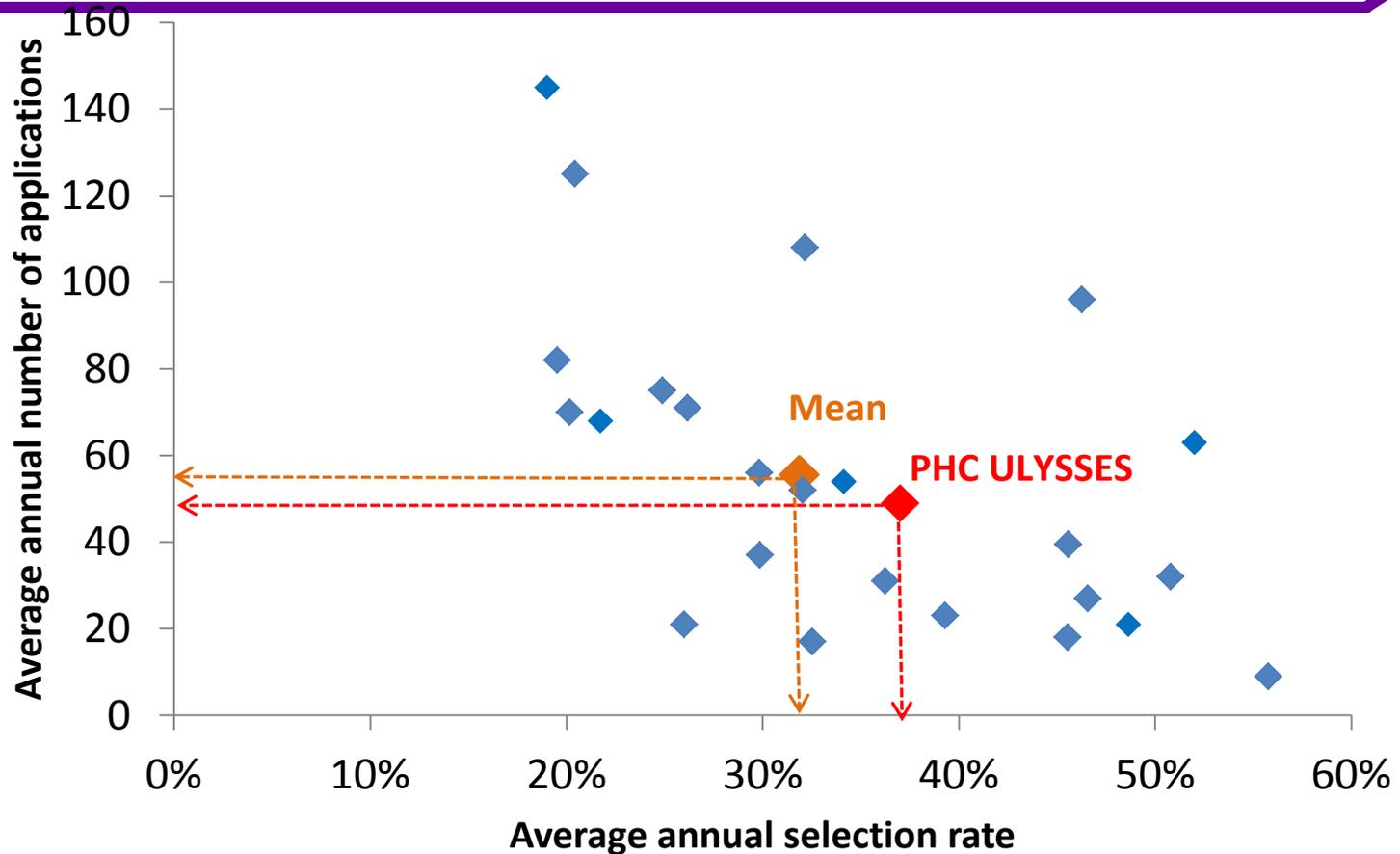


BEFORE THE ULYSSES PROJECT (2/2)

With which scientific collaboration programme ?

PHC Ulysses	19
Others (postdoc, publications, meetings...)	7
European projects (FP7, COST, ECO-NET, Marie Curie...)	4
CNRS International Project of Scientific Cooperation (PICS)	1
French Institutions	1
Irish Institutions	1

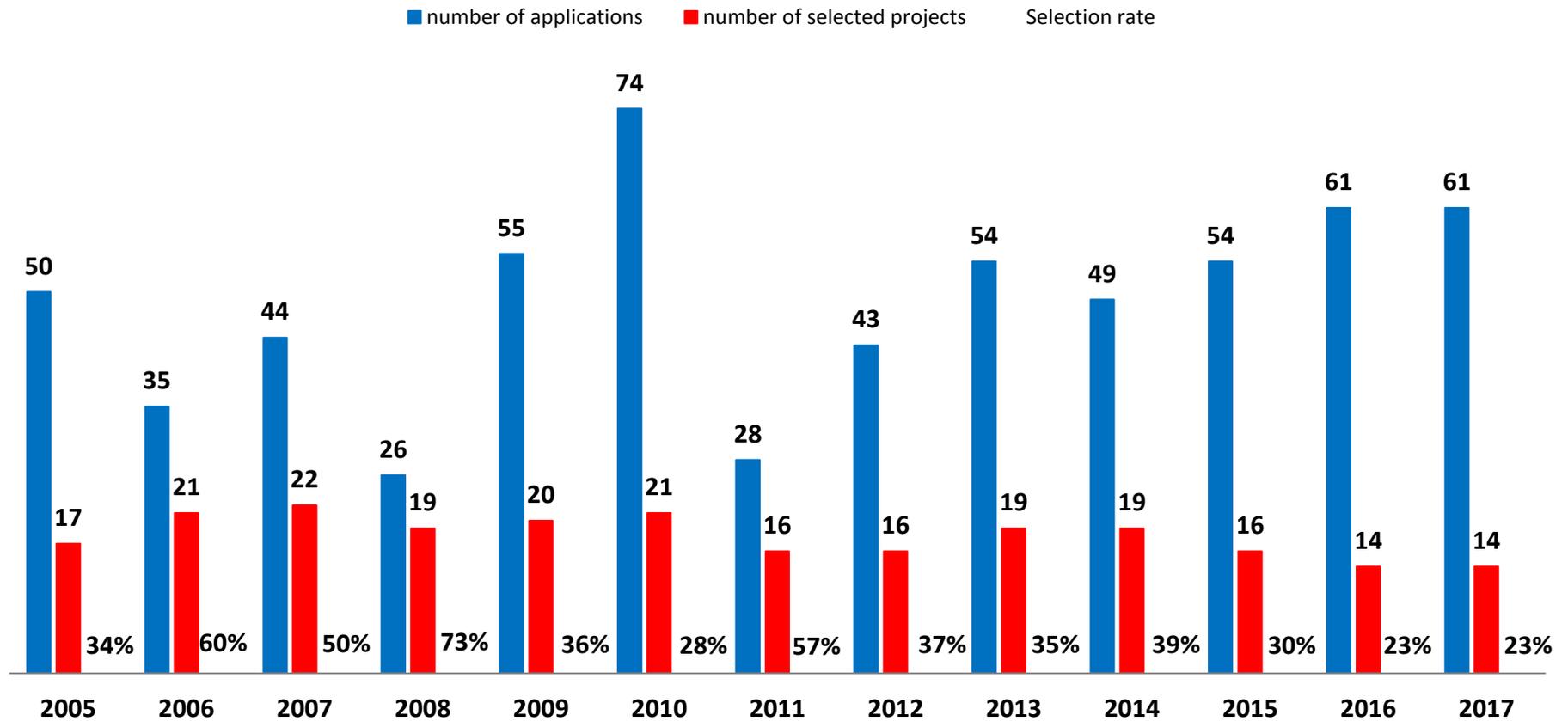
NUMBER OF APPLICATIONS VS SELECTION RATE (COMPARISON BETWEEN 25 DIFFERENT BILATERAL PROGRAMMES)



Average selection rate for 2005-2017 : 37% vs 32% mean
Average number of applications 2005-2017 : 49 vs 56 mean

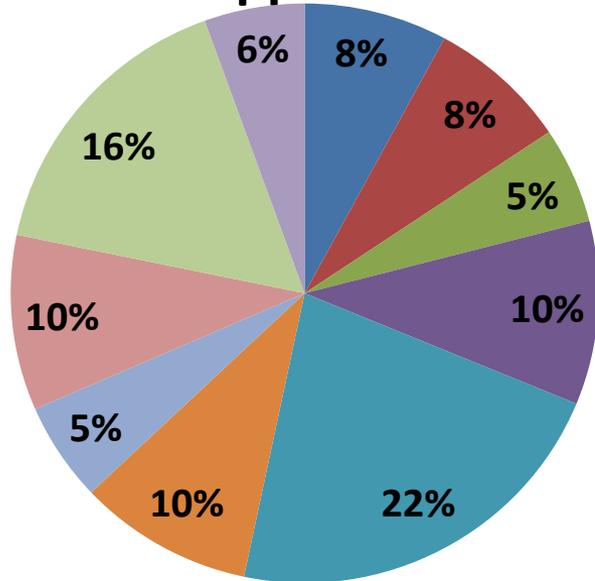
NUMBER OF APPLICATIONS AND SELECTION RATE

Average selection rate from 2005-2017: **37 %**

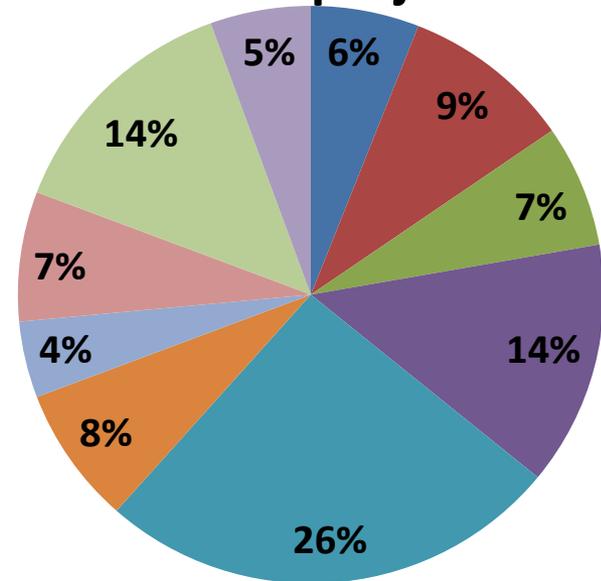


SCIENTIFIC DOMAINS OF PROJECTS

Number of applications : **634**



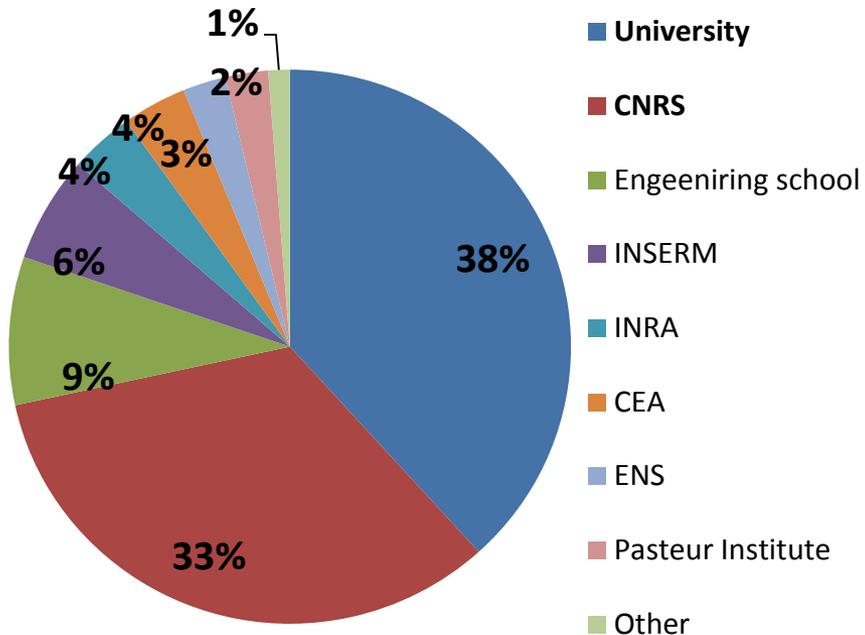
Number of funded projects : **234**



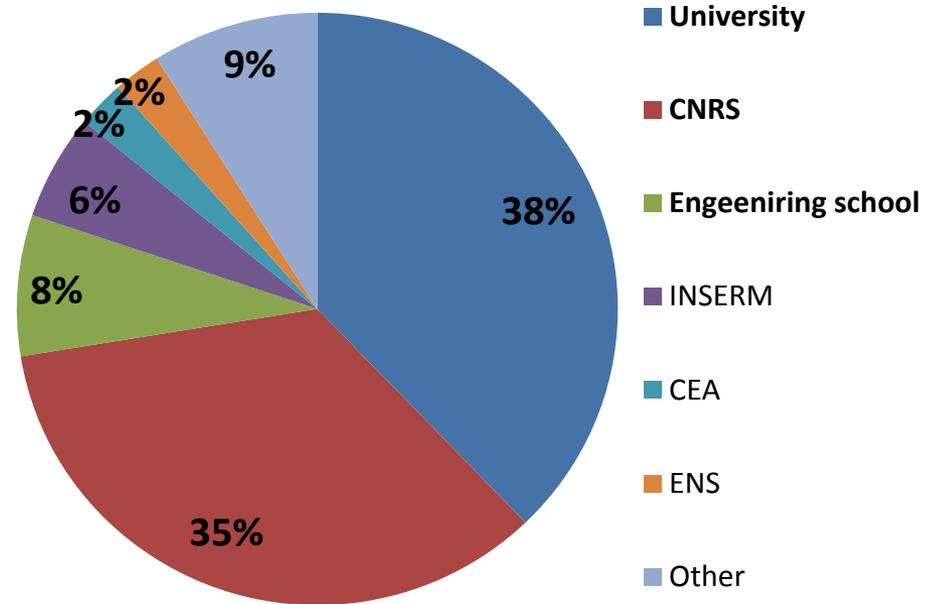
- | | |
|--------------------------------|------------------------|
| ■ Mathematics | ■ Physics |
| ■ Marine/Earth/Planet Sciences | ■ Chemistry |
| ■ Biology and Health | ■ Humanities |
| ■ Social Sciences | ■ Engineering Sciences |
| ■ Information Technology | ■ Agronomy/Ecology |

FRENCH PARTICIPATING INSTITUTIONS

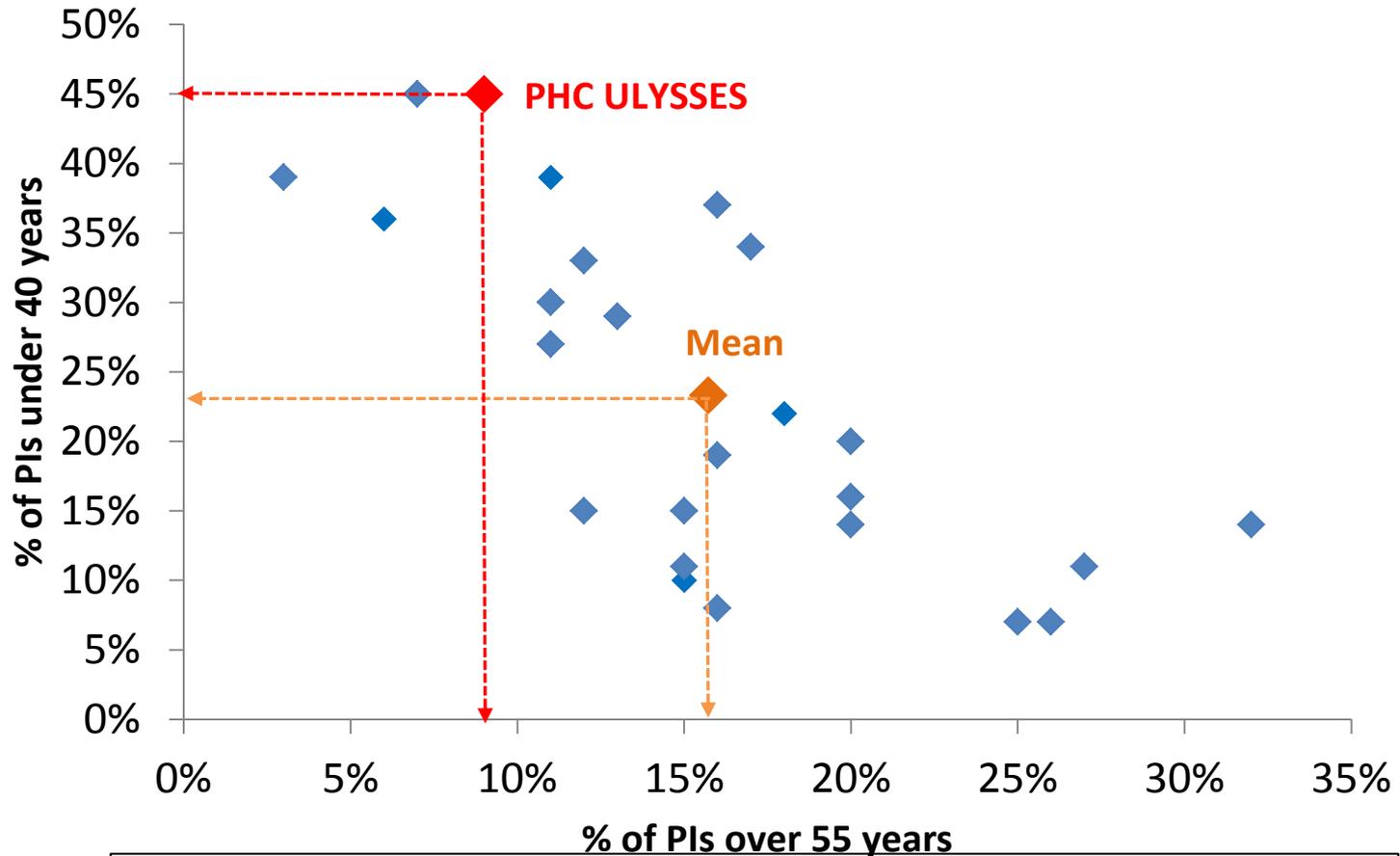
Principal investigator's employers



Laboratories authorities



AGE OF PRINCIPAL INVESTIGATORS (PI) (COMPARISON BETWEEN 25 DIFFERENT BILATERAL PROGRAMMES)



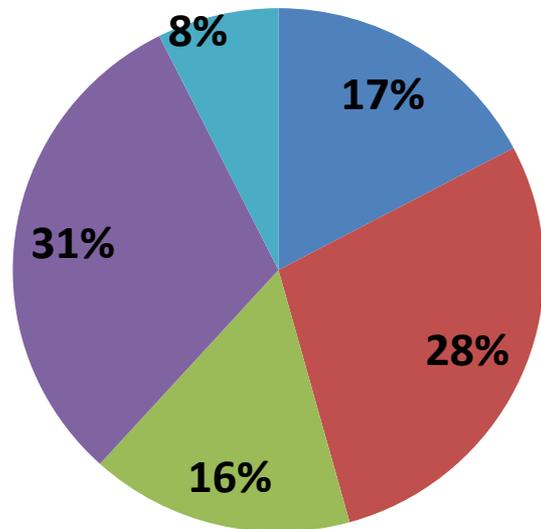
PIs under 40 years : **45% vs 23% mean**

PIs over 55 years : **9% vs 16% mean**

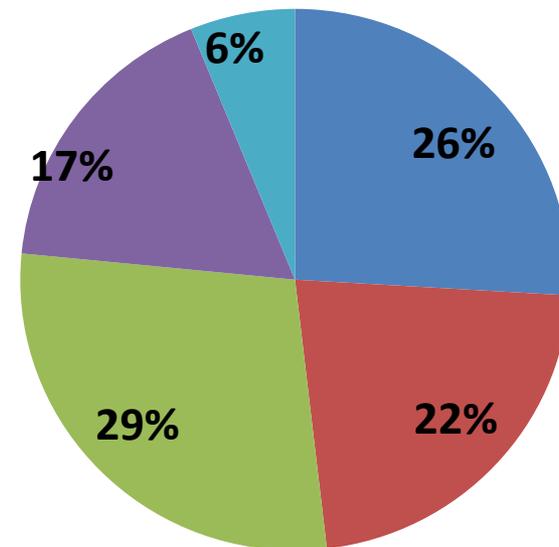
46% of the PIs are between 40 and 55 years

FRENCH PIS (PRINCIPAL INVESTIGATORS) : STATUS

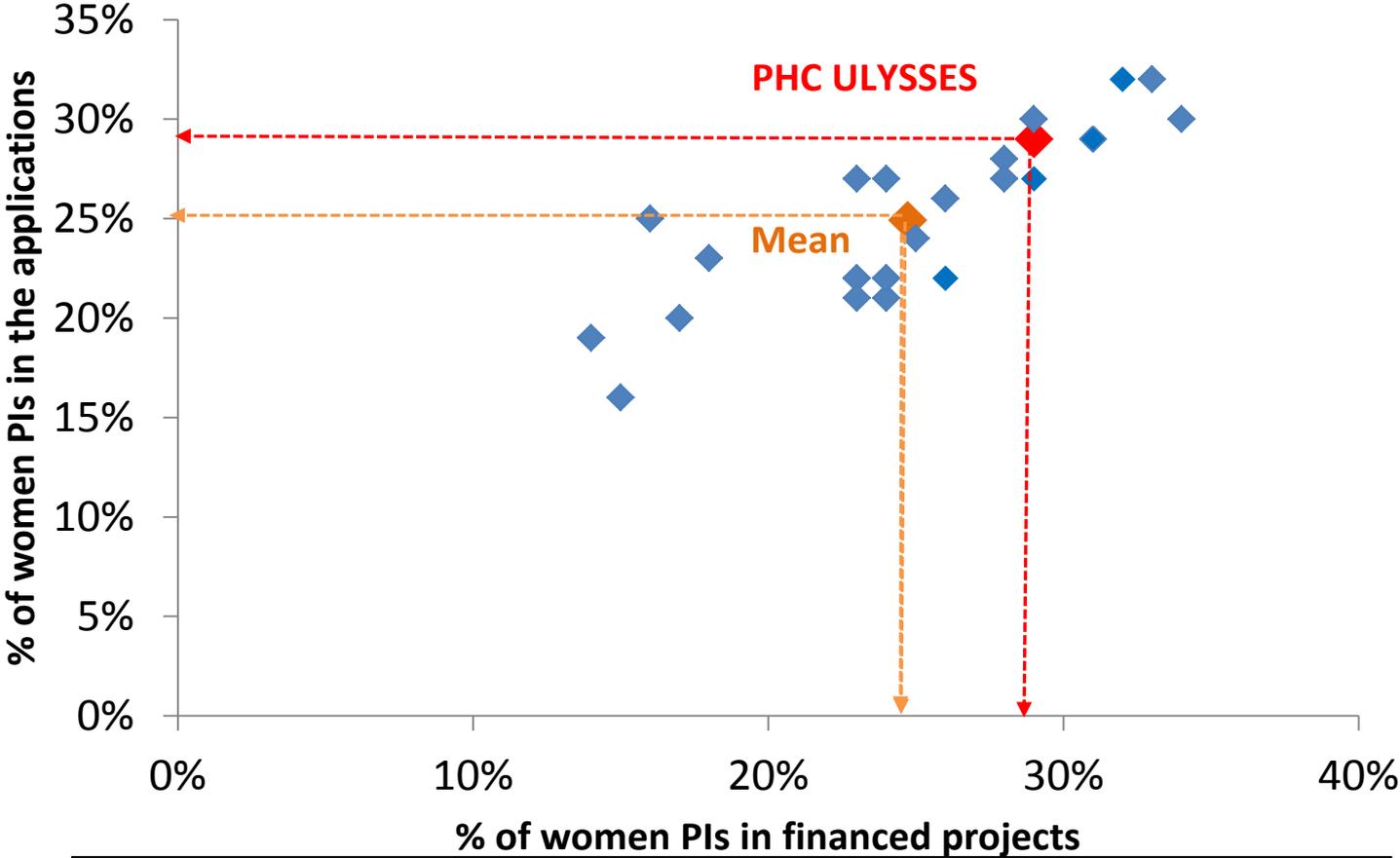
Previous professional status (at the beginning of the project)



Current professional status



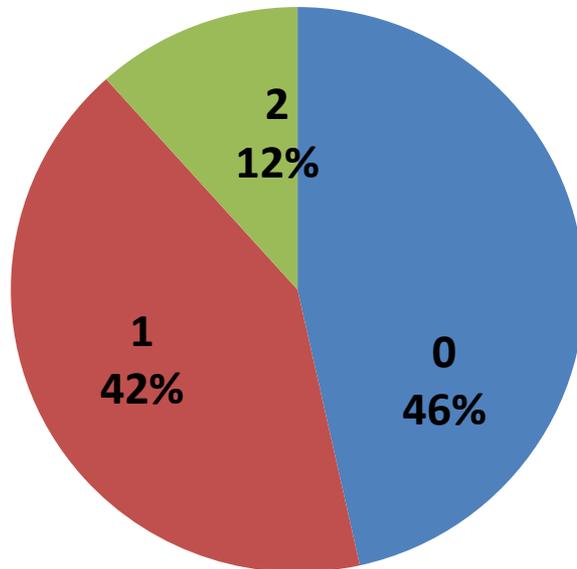
IMPLICATION OF WOMEN (FRANCE) (COMPARISON BETWEEN 25 DIFFERENT BILATERAL PROGRAMMES)



% of women PIs in the applications : 29% vs 25% mean
% of women PIs in the selected projects : 29% vs 25% mean

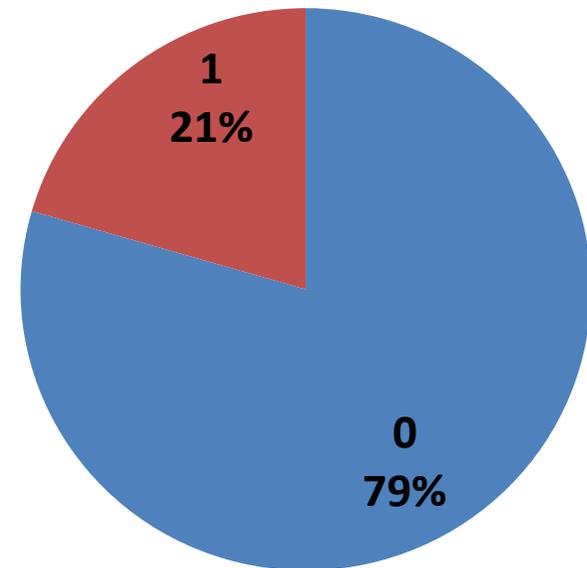
PARTICIPATION OF FRENCH YOUNG RESEARCHERS

Number of PhD students



54% of projects involve at least one PhD student

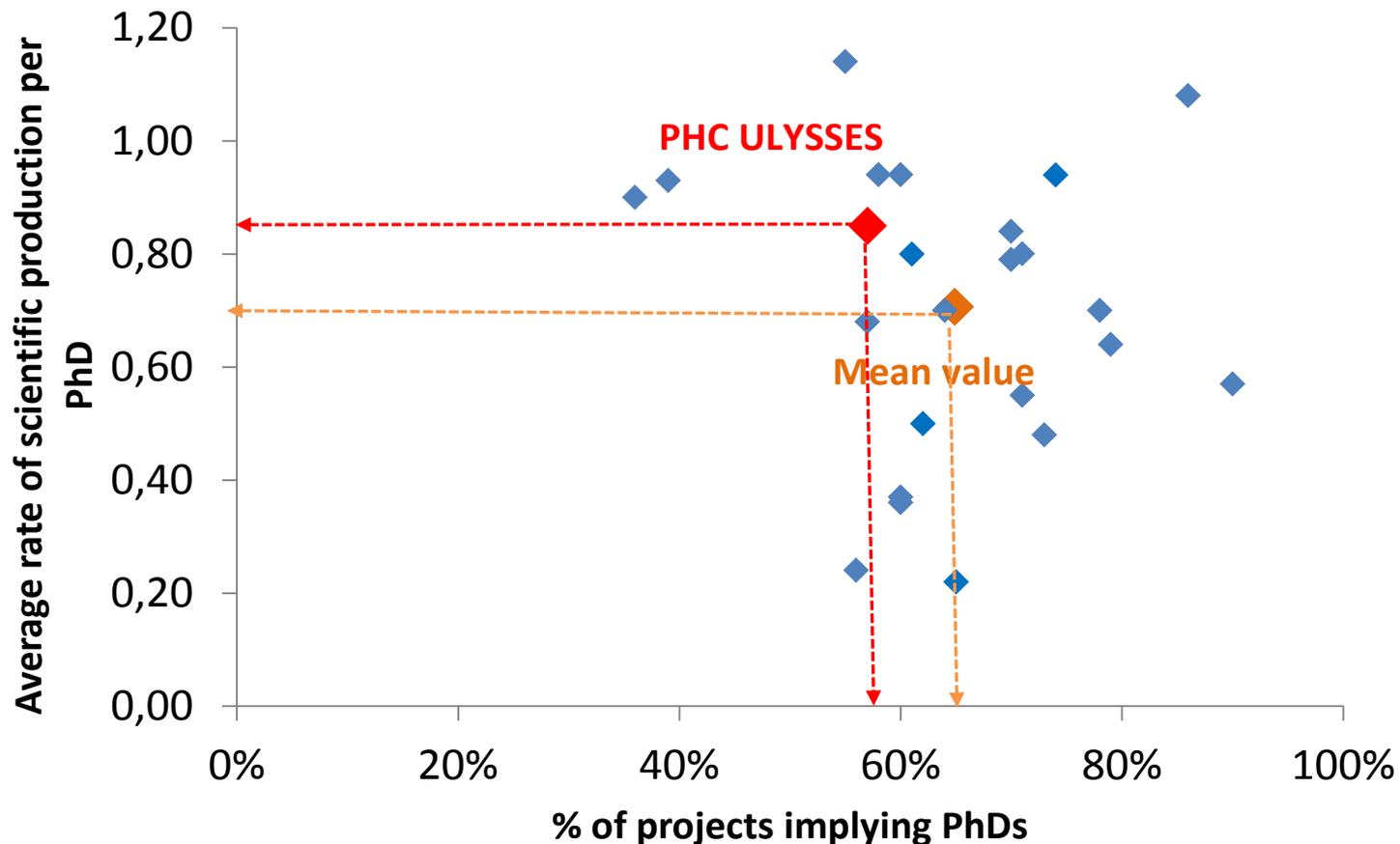
Number of post-doctoral researchers



21% of projects involve at least one post-doctoral researcher

IMPLICATION OF PhDs

(COMPARISON BETWEEN 25 DIFFERENT BILATERAL PROGRAMMES)

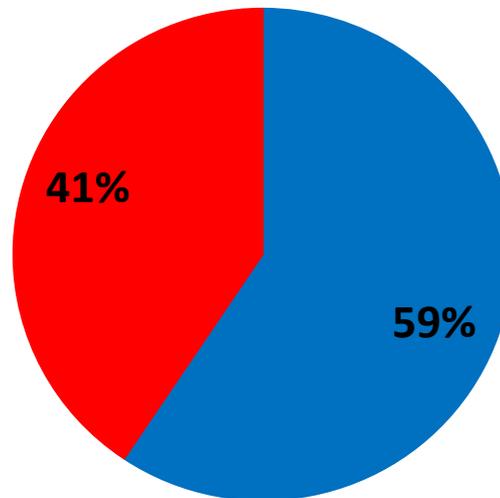


% of projects implying PhDs : 57% vs 65% mean
Average rate of scientific production per PhD : 0,85 vs 0,70 mean

MOBILITY

MOBILITY : GENDER DISTRIBUTION

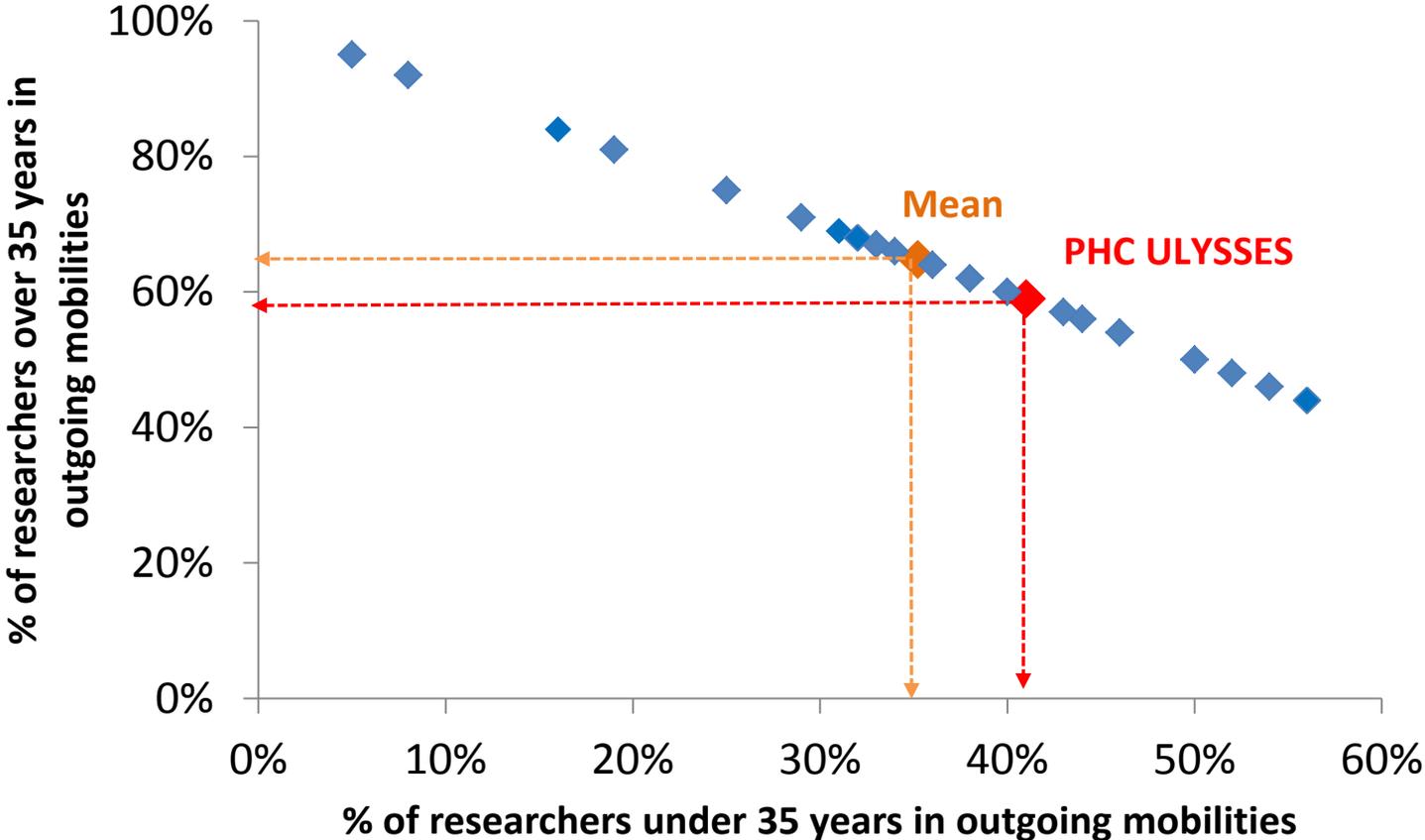
France → Ireland



■ Men ■ Women

MOBILITY FRANCE – IRELAND

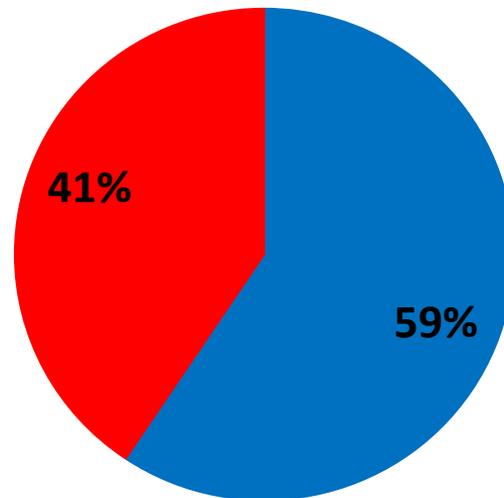
(COMPARISON BETWEEN 25 DIFFERENT BILATERAL PROGRAMMES)



% of french young researchers in outgoing mobilities : 41% vs 35% mean

MOBILITY : DURATION

France → Ireland



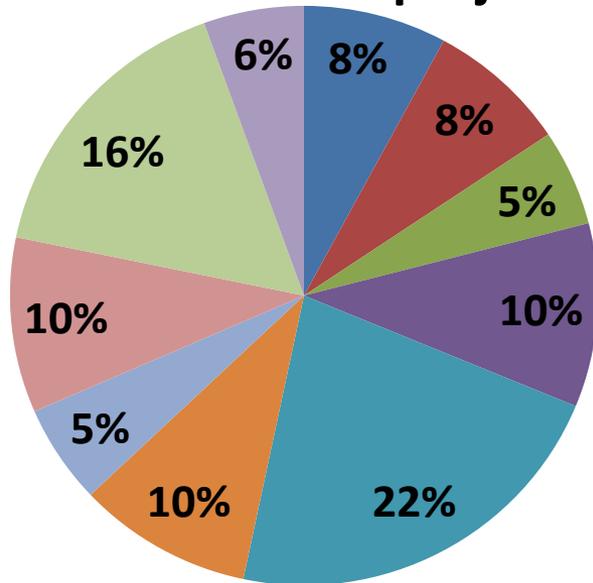
■ < 15 days

■ between 15 days and 3 months

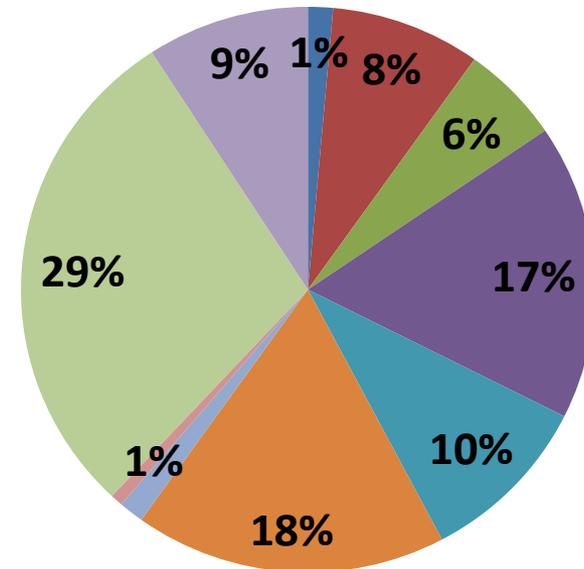
SCIENTIFIC PRODUCTION

SCIENTIFIC OUTPUT (1/2)

Number of funded projects : **234**



Percentage of copublications



- | | |
|--------------------------------|------------------------|
| ■ Mathematics | ■ Physics |
| ■ Marine/Earth/Planet Sciences | ■ Chemistry |
| ■ Biology and Health | ■ Humanities |
| ■ Social Sciences | ■ Engineering Sciences |
| ■ Information Technology | ■ Agronomy/Ecology |

SCIENTIFIC OUTPUT (2/2)

Data from 81 funded projects

	Number of financed projects in the survey	Average number of co-publications per project
Mathematics	4	0,5
Physics	7	1,7
Marine/Earth/Planet Sciences	6	1,3
Chemistry	15	1,6
Biology and Health	19	0,7
Humanities	5	5,0
Social Sciences	4	0,5
Engineering Sciences	5	0,2
Information Technology	9	4,6
Agronomy / Ecology	7	1,9
TOTAL	81	1,8

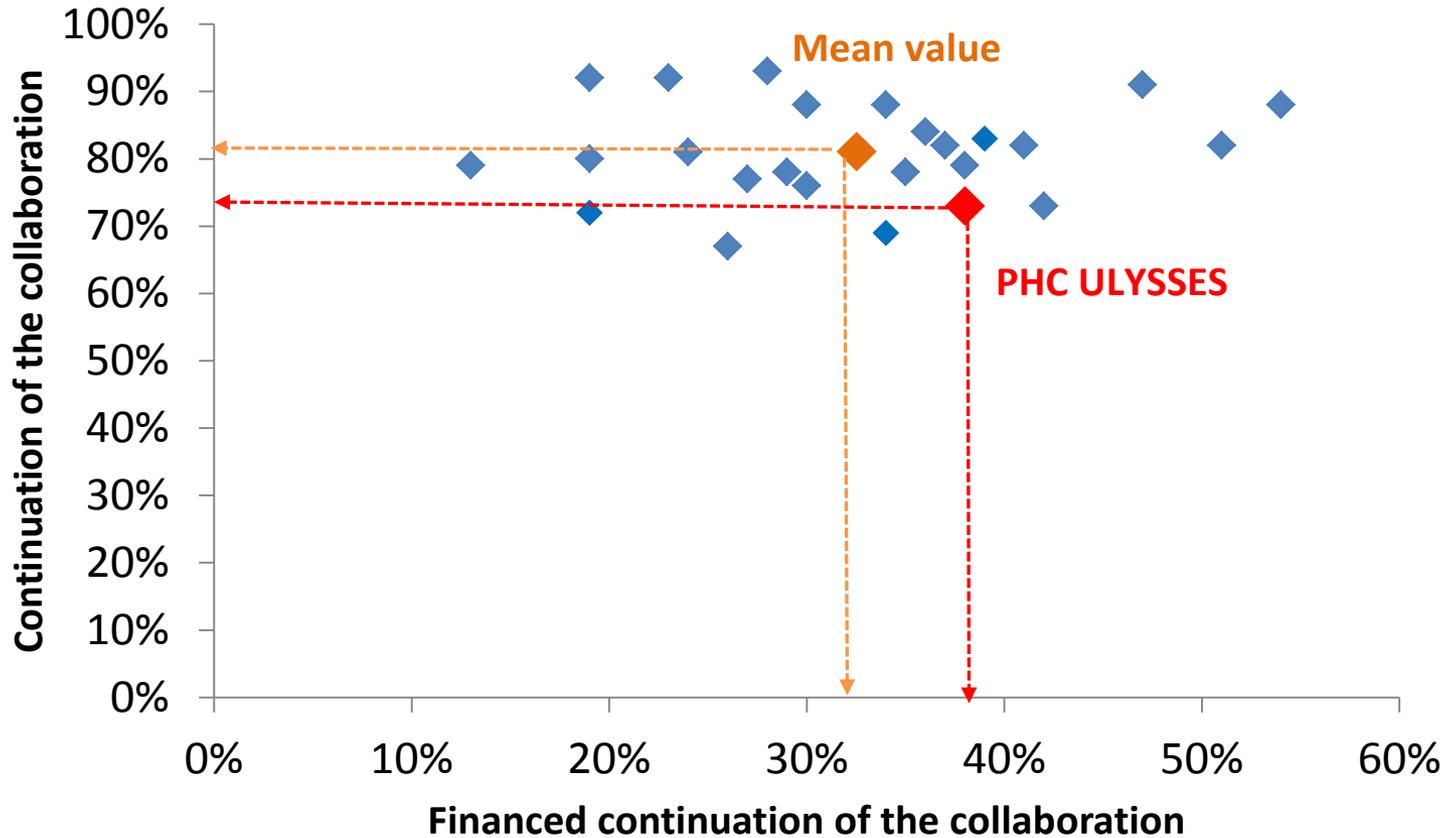
Overall average annual number of copublications per project : 0,9 vs 0,9 mean

59% of funded projects led to one co-publication at least

36% of copublications include at least 1 PhD or PostDoc

WHAT HAPPENS AFTER A ULYSSES PROJECT ?

CONTINUATION OF THE COLLABORATION (1/5) (COMPARISON BETWEEN 25 DIFFERENT BILATERAL PROGRAMMES)



Continuation of the collaboration : 73% vs 81% mean

Continuation of the collaboration with other sources of subvention : 38% vs 33% mean



MINISTÈRE
DE L'ENSEIGNEMENT SUPÉRIEUR,
DE LA RECHERCHE
ET DE L'INNOVATION

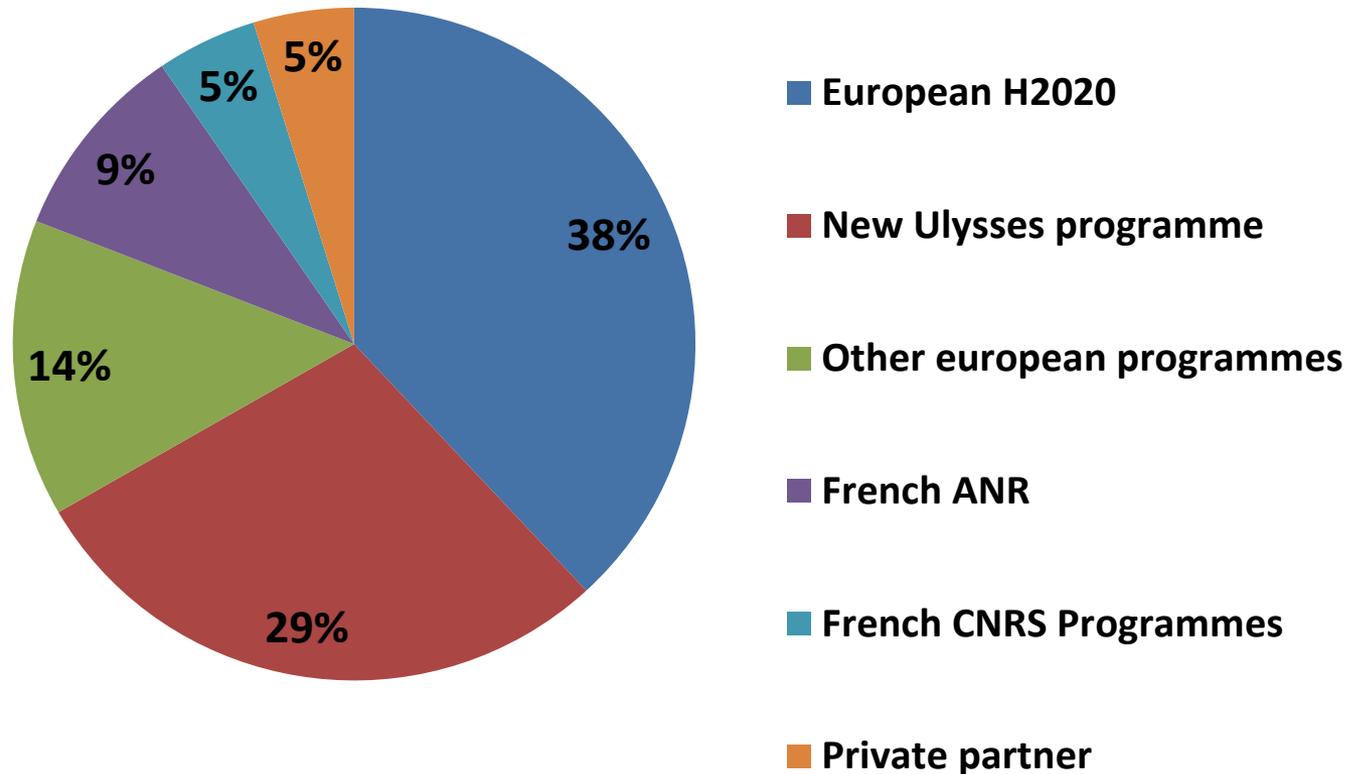
CONTINUATION OF THE COLLABORATION (2/5)

73% of the collaborations continued after the Ulysses project

Which activities?	
Collaborative research	70%
Co-publications	44%
Researchers mobility	42%
Joint participation to conferences	30%
Co-organisation of scientific events	21%
PhD mobility	14%
Others	14%
Joint participation to PhD thesis jury	7%
Master students mobility	7%

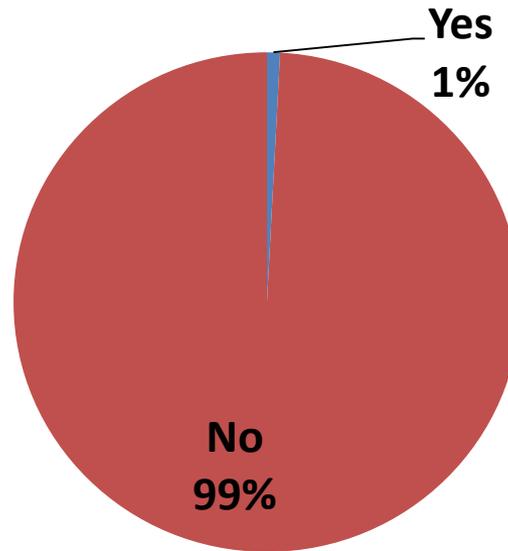
CONTINUATION OF THE COLLABORATION (3/5)

What kind of funded collaborations after the Ulysses project ?



CONTINUATION OF THE COLLABORATION (4/5)

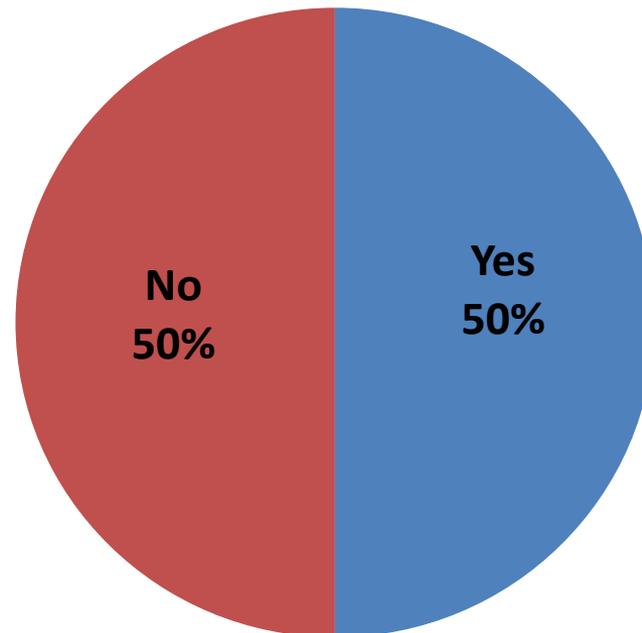
Has the Ulysses project led to the set-up of joint structures?



1 European network

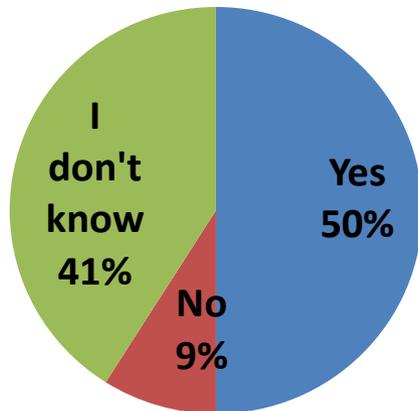
CONTINUATION OF THE COLLABORATION (5/5)

Has the French-Irish collaboration involved new partners?

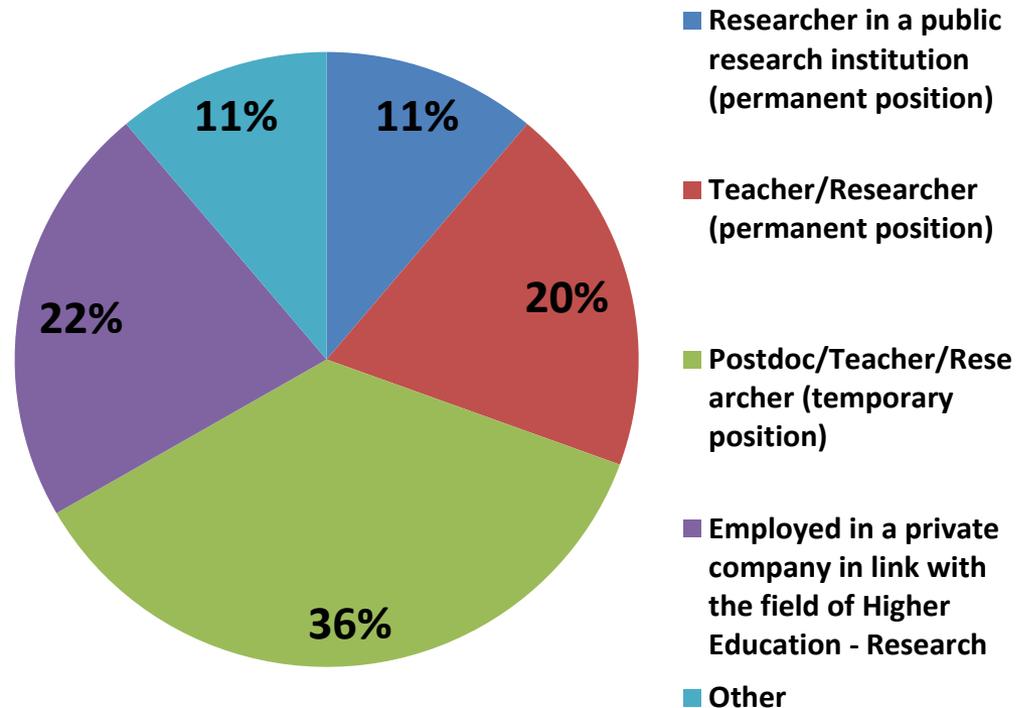


IMPACT ON YOUNG RESEARCHERS' CAREER (1/2)

Was young researchers career impacted by the Ulysses programme ?



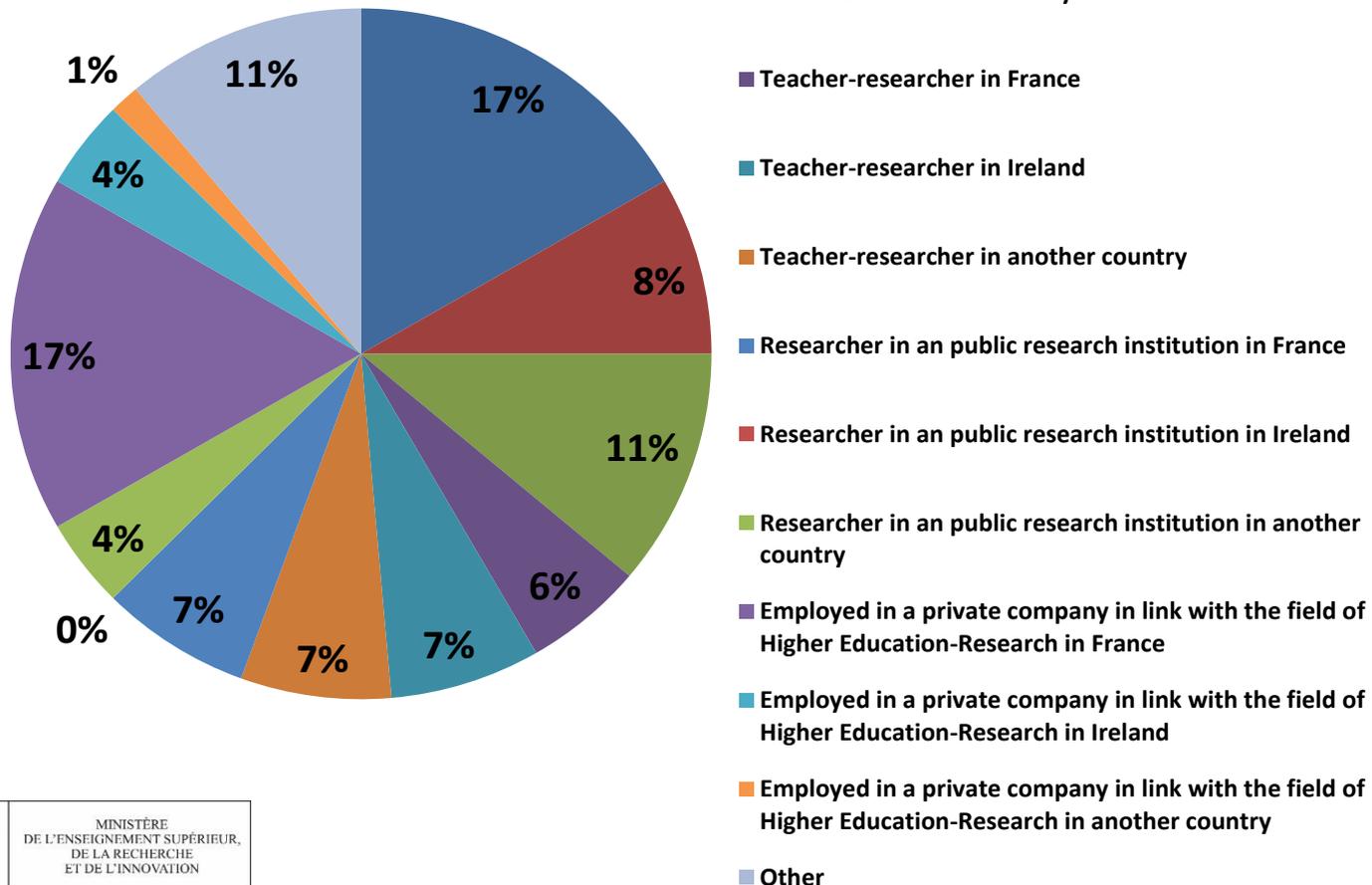
Type of impacts



- Researcher in a public research institution (permanent position)
- Teacher/Researcher (permanent position)
- Postdoc/Teacher/Researcher (temporary position)
- Employed in a private company in link with the field of Higher Education - Research
- Other

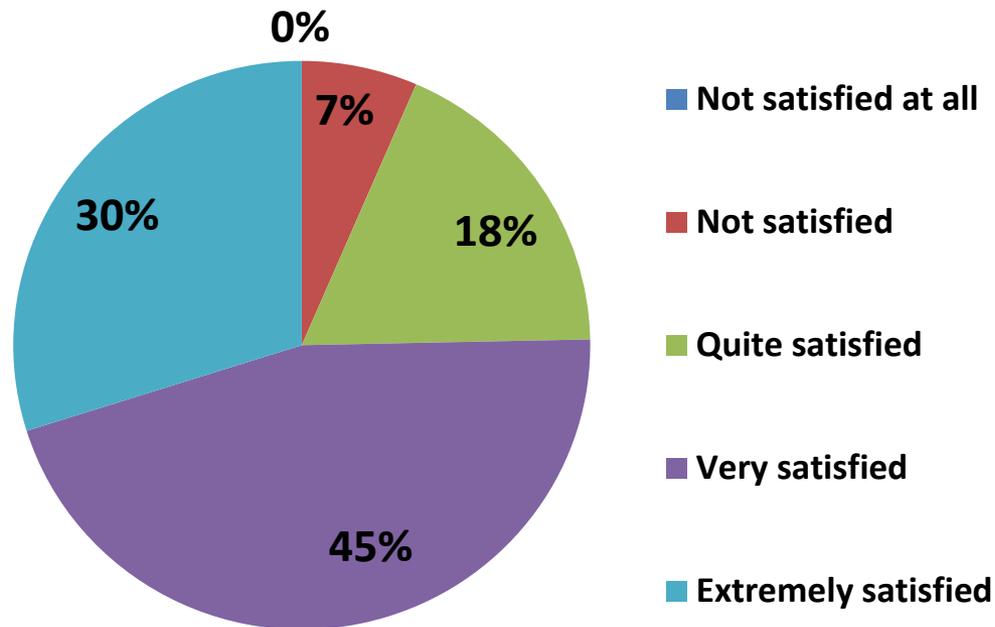
IMPACT ON YOUNG RESEARCHERS' CAREER (2/2)

Type of impacts



GENERAL OPINION OF FRENCH PIS ON THE PROGRAMME

93% of French principal investigators are satisfied



GENERAL OPINION OF FRENCH PIS ON THE PROGRAMME (2/3) POSITIVE COMMENTS

SURVEY OF 77 RESPONSES

Strengths of this program	Number of occurrences (out of 77)	% (out of 77)
Allows an international scientific collaboration	63	78%
Allows the mobility of the researchers	63	78%
Simplicity of the application process	54	67%
Allows the training of the young researchers	43	63%
Allows exchanges which allow a scientific production	51	53%
Easy implementation (administrative flexibility)	30	37%
Allows a knowledge of the country partner	29	36%
Financial means sufficient for the expenditure of mobility	24	30%
Is used as starting for raising other funds	23	28%
Good scientific appreciation compared to the financial investment	21	26%
Transparency of the methods for selecting the projects	8	11%
Duration of mobilities adapted to the needs	3	10%
Sufficiently long duration of the projects	9	4%
Others	3	4%
<i>Total number of occurrences</i>	<i>424</i>	

GENERAL OPINION OF FRENCH PIS ON THE PROGRAMME (3/3) NEGATIVE COMMENTS

SURVEY OF 75 RESPONSES

Weaknesses of this program	Number of occurrences (out of 75)	% (out of 75)
Too short duration of the projects	44	54%
No funding of the operation and capital expenditures	34	42%
Too short duration of mobilities	21	26%
Difficult perpetuation of collaboration	20	25%
Too low number of mobilities	15	19%
Financial means insufficient for the expenditure of mobility (transport)	14	17%
Heaviness of the process of applications	12	15%
Financial means insufficient for the expenditure of mobility (per diem)	11	14%
Administrative heaviness of the missions management	10	12%
Other	7	9%
Insufficient communication on the evaluation's results	7	9%
Lack of transparency on the methods of projects selection	6	7%
Too long duration of mobilities	0	0%
<i>Total number of occurrences</i>	<i>201</i>	

PRELIMINARY CONCLUSIONS

Preliminary conclusions suggest that the funding scheme has efficiently contributed to create (or to maintain) fruitful and long-term cooperation, despite the relatively low financial support, which is to be considered as “seed money”.

- + Ulysses programme is an opportunity to initiate new collaborations (60%)**
- + Good average rate of scientific production per PhD (0,85)**
- + French PIs young researchers represent 45 % of laureates**
- + 38% of the collaborations were pursued through an European programme**
- Only 57% of the projects involve at least one PhD student**
- Too many applications to Ulysses programme after an Ulysses funding (29%)**
- Average co-publications rate including at least 1 PhD or PostDoc is too low (36%)**

PRELIMINARY RECOMMENDATIONS

RECOMMENDATIONS

- Explore new financial supports after the Ulysses funding
- Promote co-publications (31% of projects with no co-publications)
- Promote number of co-publications per project
- Encourage PIs to increase the implication of PhDs
- Encourage the mobility of young researchers (41% of all mobilities)
- Promote REAL new cooperations

French national ministries (MESRI / MEAE) will provide a complete analysis of the survey. It will be sent to the recipients of the funding and participants in this symposium.

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Thank you for your attention