

FRANCE – PORTUGAL

**Scientific impact of the PESSOA programme
(2005-2017)**

MESRI-DAEI / MEAE

2019

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

GENERAL PRESENTATION OF THE PROGRAMME

Creation : 2005

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

Total budget (France + Portugal, 2017) : around 160 000 € / year

>> including budget from the French part : 80 000 € / year

>> including budget from the Portuguese part : 80 000 € / year

Average budget per project (France + Portugal) : 9 412 € / year

Number of new projects submitted per year : around 60

Number of new projects funded per year : around 20

From 2005-2017 :

776 applications submitted

263 projects funded

DATA SOURCES

Campus France

- Information about the PHC Pessoa applications
- List of mobilities (from France to Portugal)

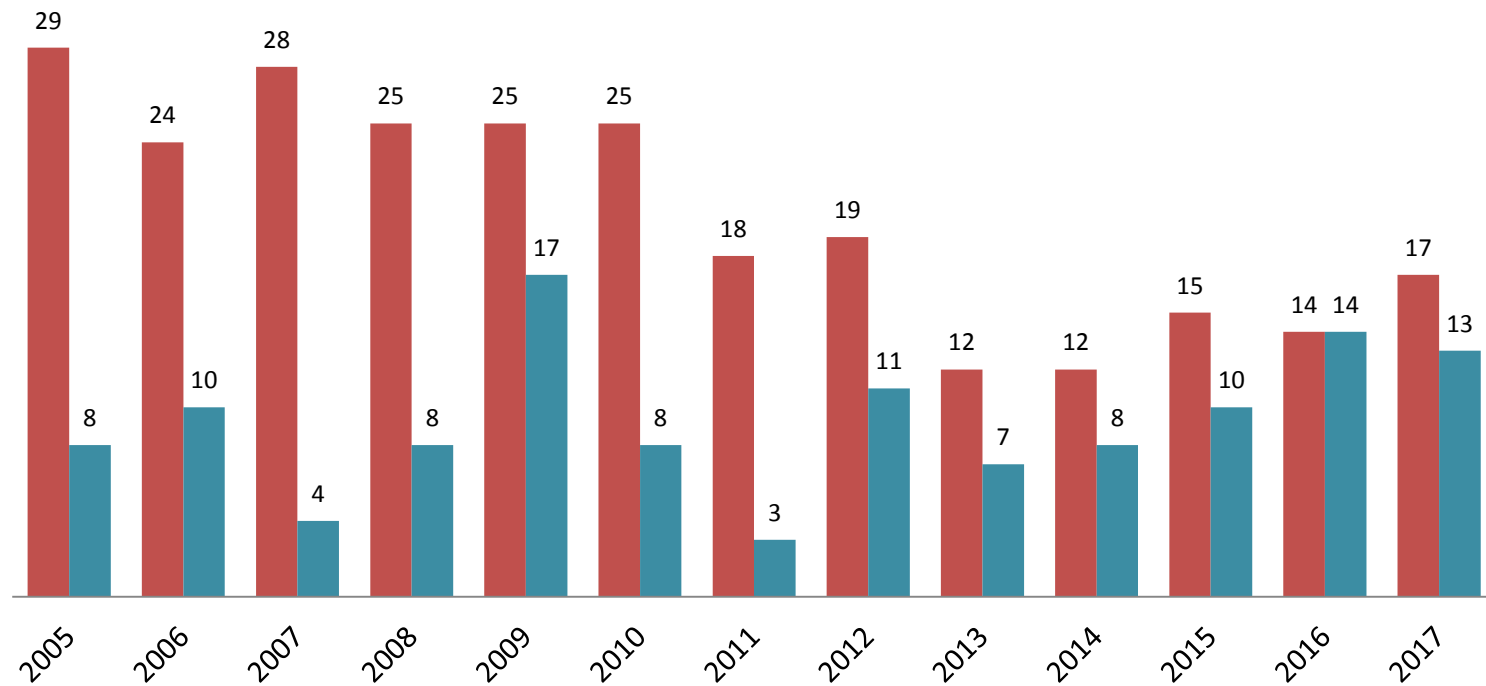
Survey

- Target : French Principal Investigators of selected projects between 2005 and 2017
- Survey duration : 8 weeks between May and July 2019
- **46%** response ratio (121 respondents for 263 funded projects)

ANSWERS TO THE SURVEY

Average response rate to the survey : **46 % (121 answers)**

■ Number of funded projects ■ Number of survey answers

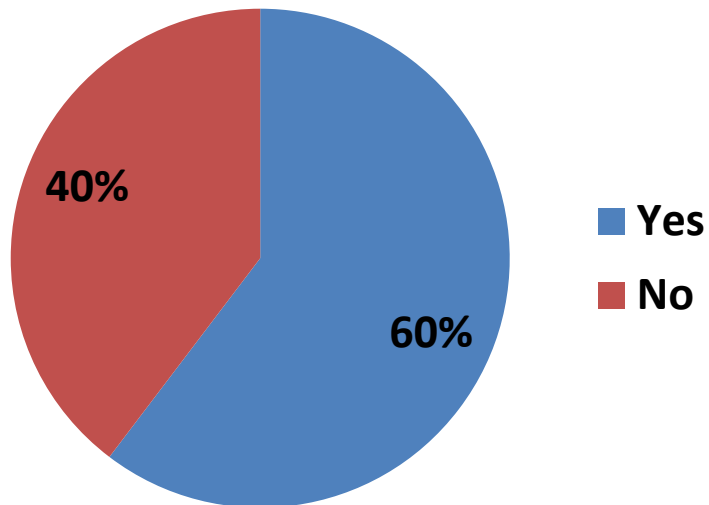


2005-2017

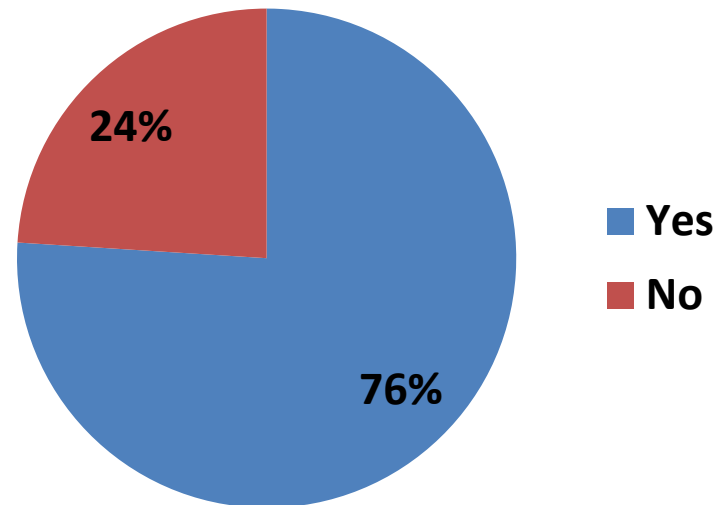
Key Points

BEFORE THE PESSOA PROJECT (1/2)

Did you already cooperate with Portugal in the past ?



If yes, was it with the same partner?

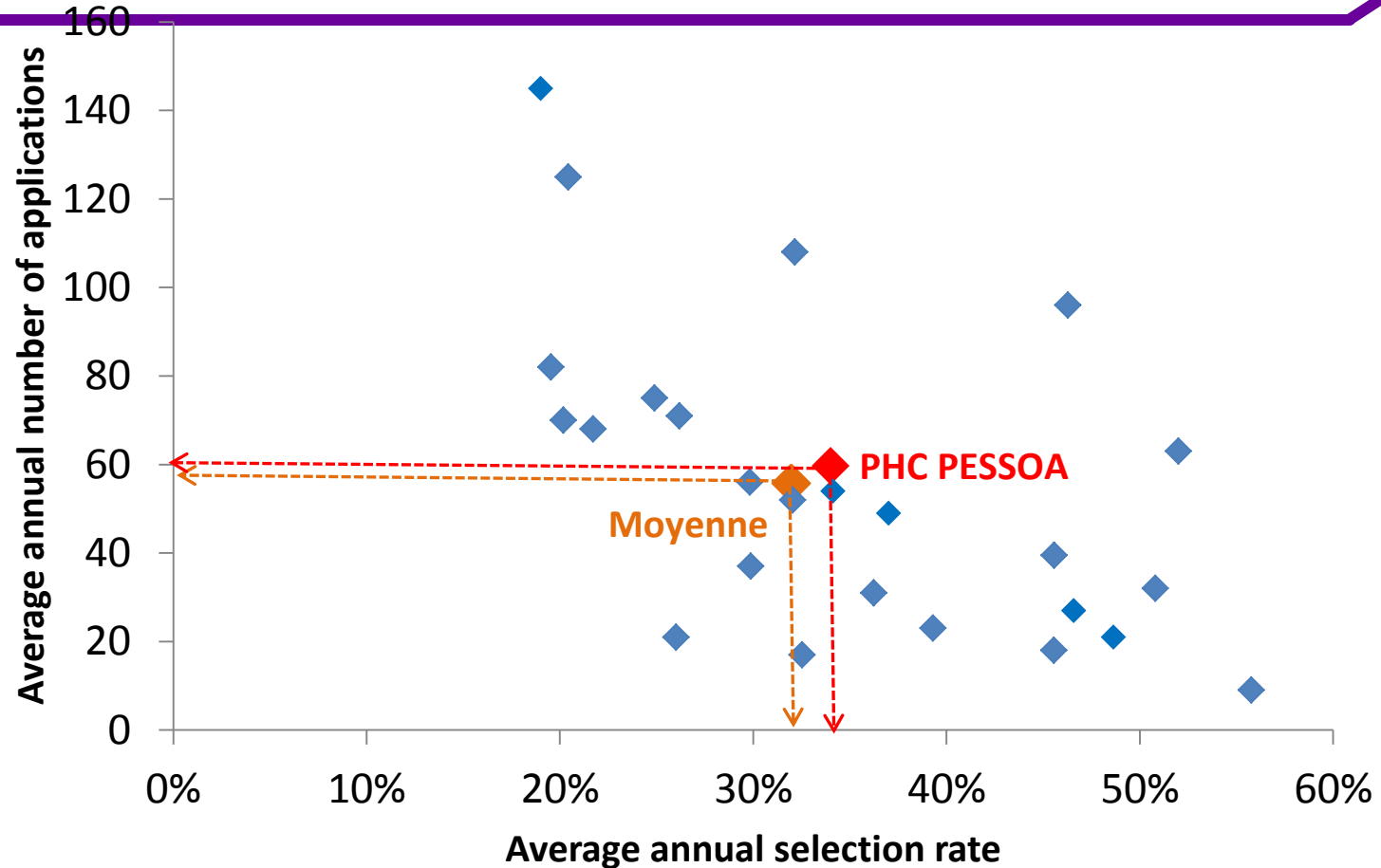


BEFORE THE PESSOA PROJECT (2/2)

With which scientific collaboration programme ?

Pessoa Programme	39
PAUILF Programme	8
Others (postdoc, publications, meetings...)	8
European programmes (FP7, COST, ECO-NET, Marie Curie...)	8
ANR (French National Research Agency), ANR-FCT	5
FCT Portugal	4
French institutions (CNRS, Universities, Embassy...)	4
Europe H2020	3

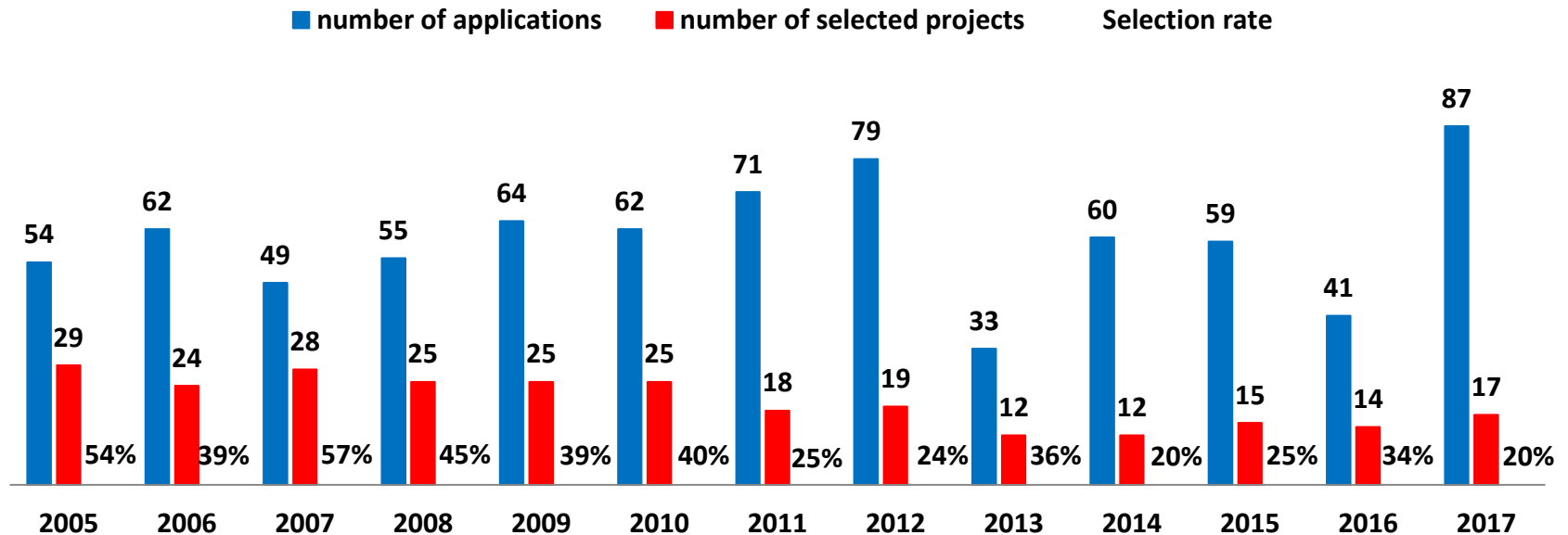
NUMBER OF APPLICATIONS VS SELECTION RATE (COMPARISON BETWEEN 26 DIFFERENT BILATERAL PROGRAMMES)



Average selection rate for 2005-2017 : 34% vs 32% mean
Average number of applications 2005-2017 : 60 vs 56 mean

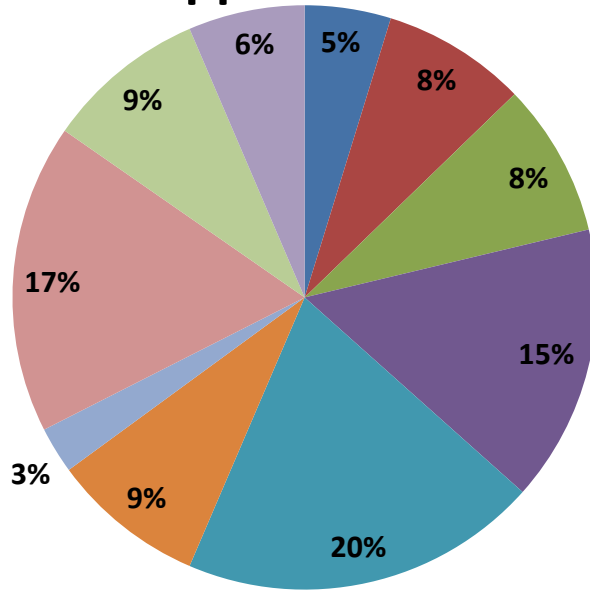
NUMBER OF APPLICATIONS AND SELECTION RATE

Average selection rate from 2005-2017: **34 %**

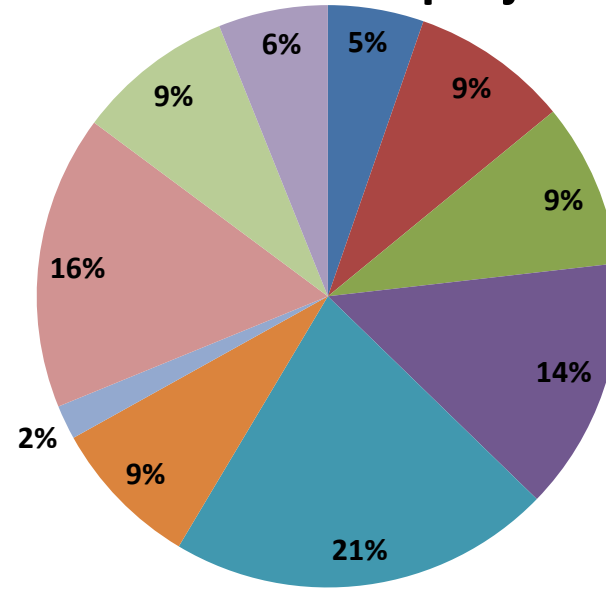


SCIENTIFIC DOMAINS OF PROJECTS

Number of applications : **776**



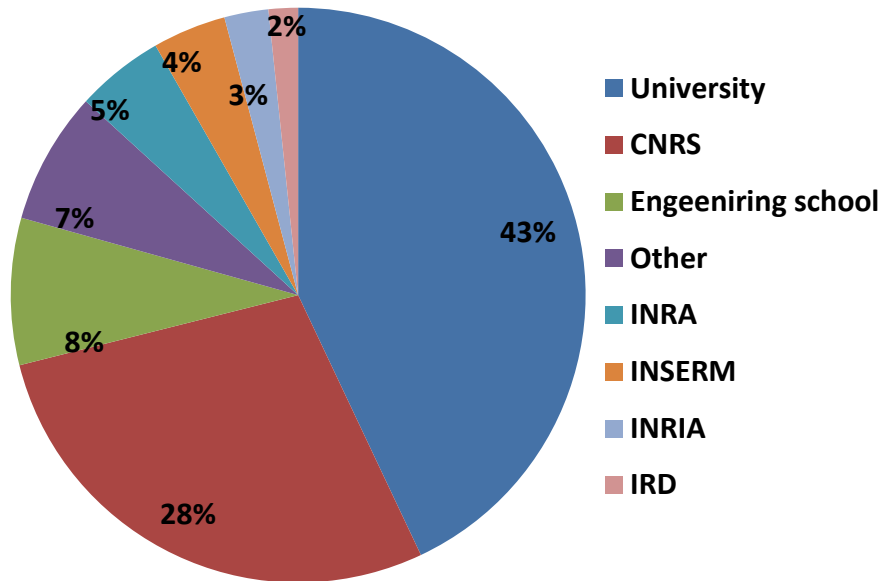
Number of funded projects : **263**



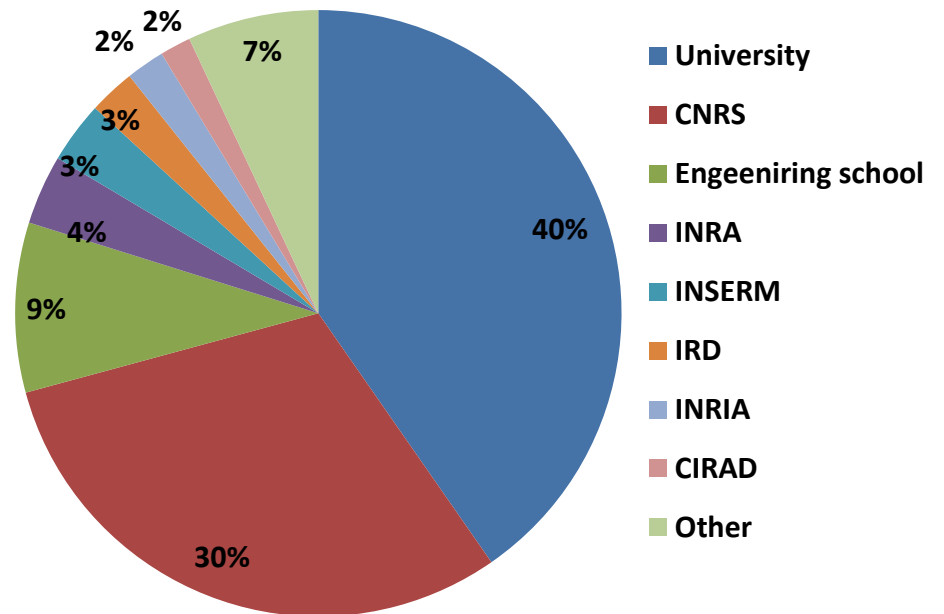
- Mathematics
- Physics
- Marine/Earth/Planet Sciences
- Chemistry
- Biology and Health
- Humanities
- Social Sciences
- Engineering Sciences
- Information Technology
- Agronomy/Ecology

FRENCH PARTICIPATING INSTITUTIONS

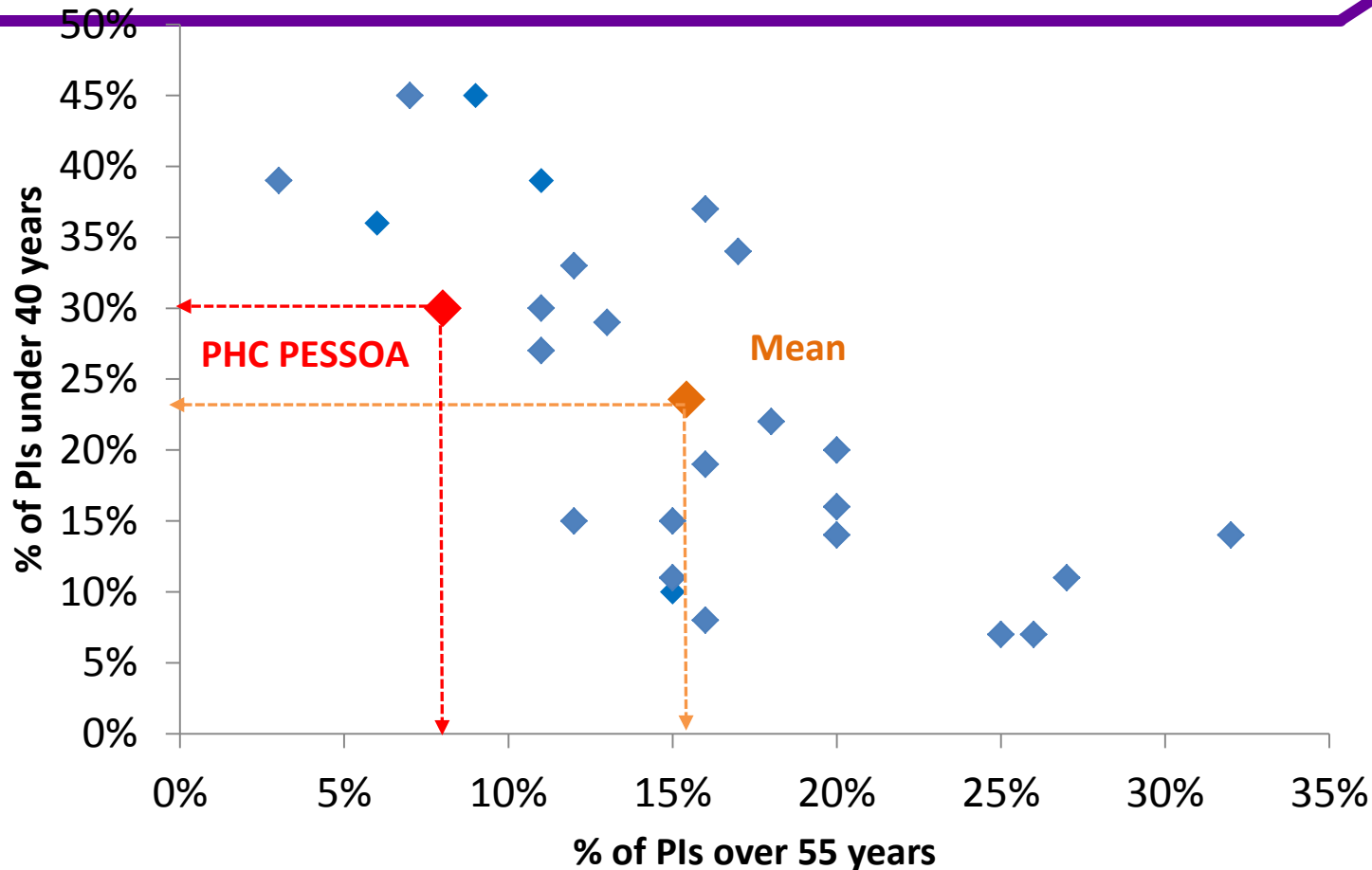
Principal investigator's employers



Laboratories authorities



AGE OF PRINCIPAL INVESTIGATORS (PI) (COMPARISON BETWEEN 26 DIFFERENT BILATERAL PROGRAMMES)



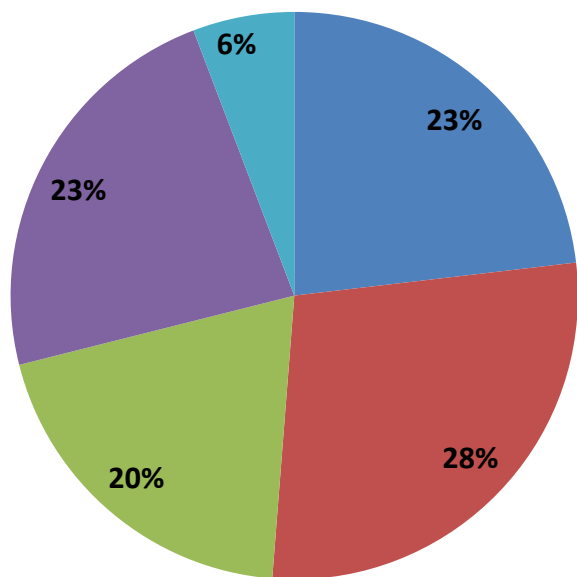
PIs under 40 years : **30% vs 23% mean**

PIs over 55 years : **8% vs 15% mean**

62% of the PIs are between 40 and 55 years

FRENCH PIS (PRINCIPAL INVESTIGATORS) : STATUS

**Previous professional status
(at the beginning of the project)**



■ Full professor

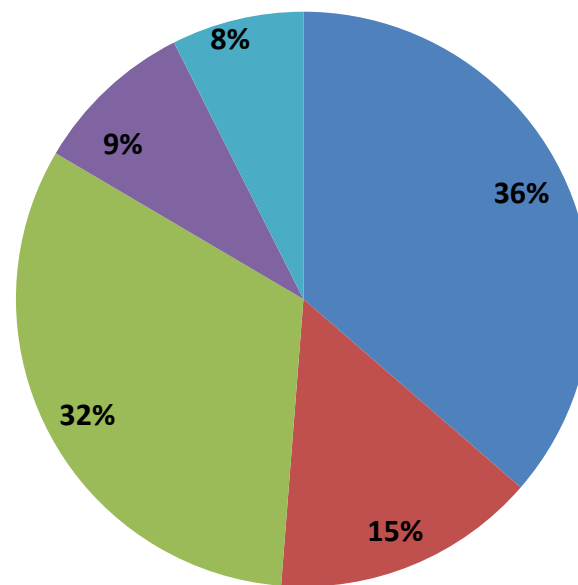
■ Assistant professor

■ Senior researcher

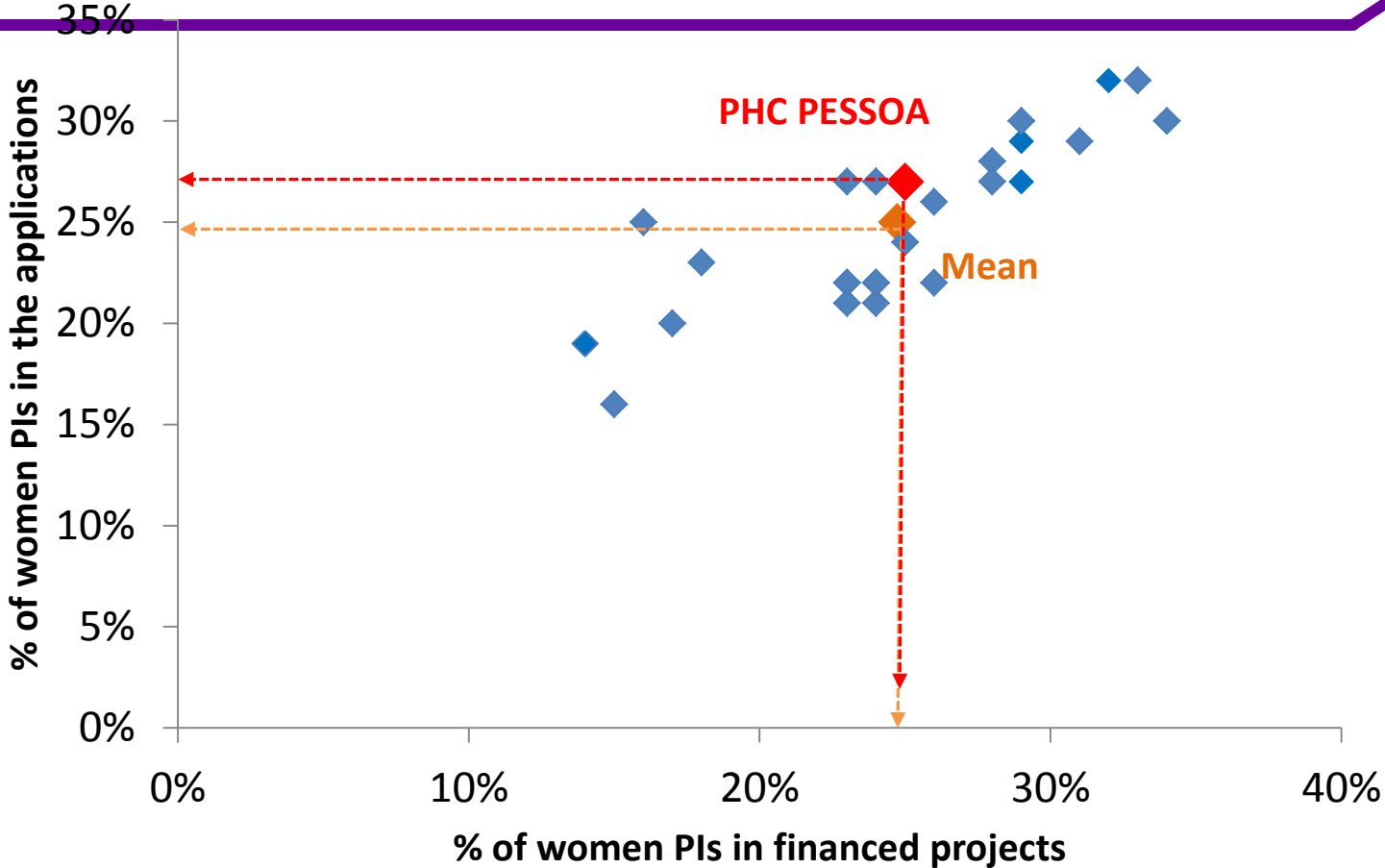
■ Junior researcher

■ Other

Current professional status



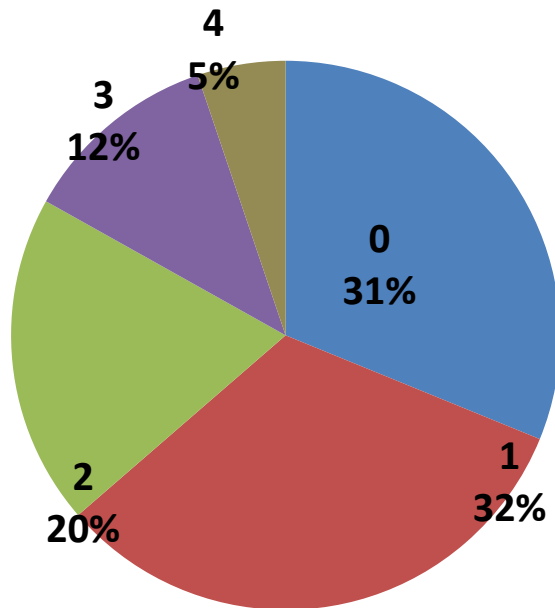
IMPLICATION OF WOMEN (FRANCE) (COMPARISON BETWEEN 26 DIFFERENT BILATERAL PROGRAMMES)



% of women PIs in the applications : 27% vs 25% mean
% of women PIs in the selected projects : 25% vs 25% mean

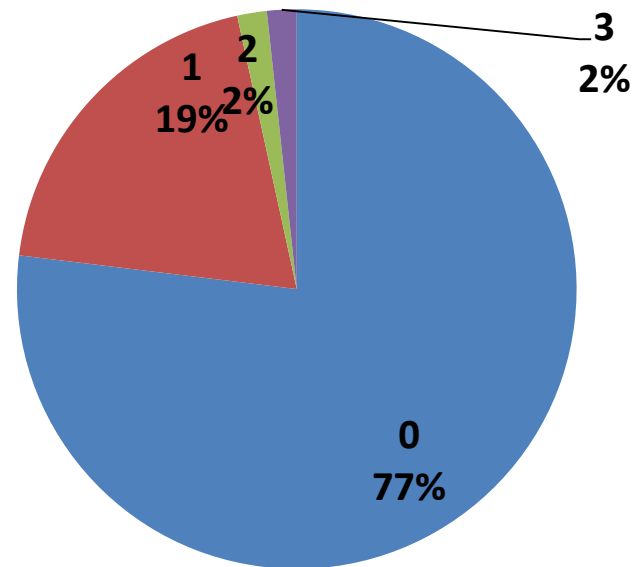
PARTICIPATION OF FRENCH YOUNG RESEARCHERS

Number of PhD students



69% of projects involve at least one PhD student

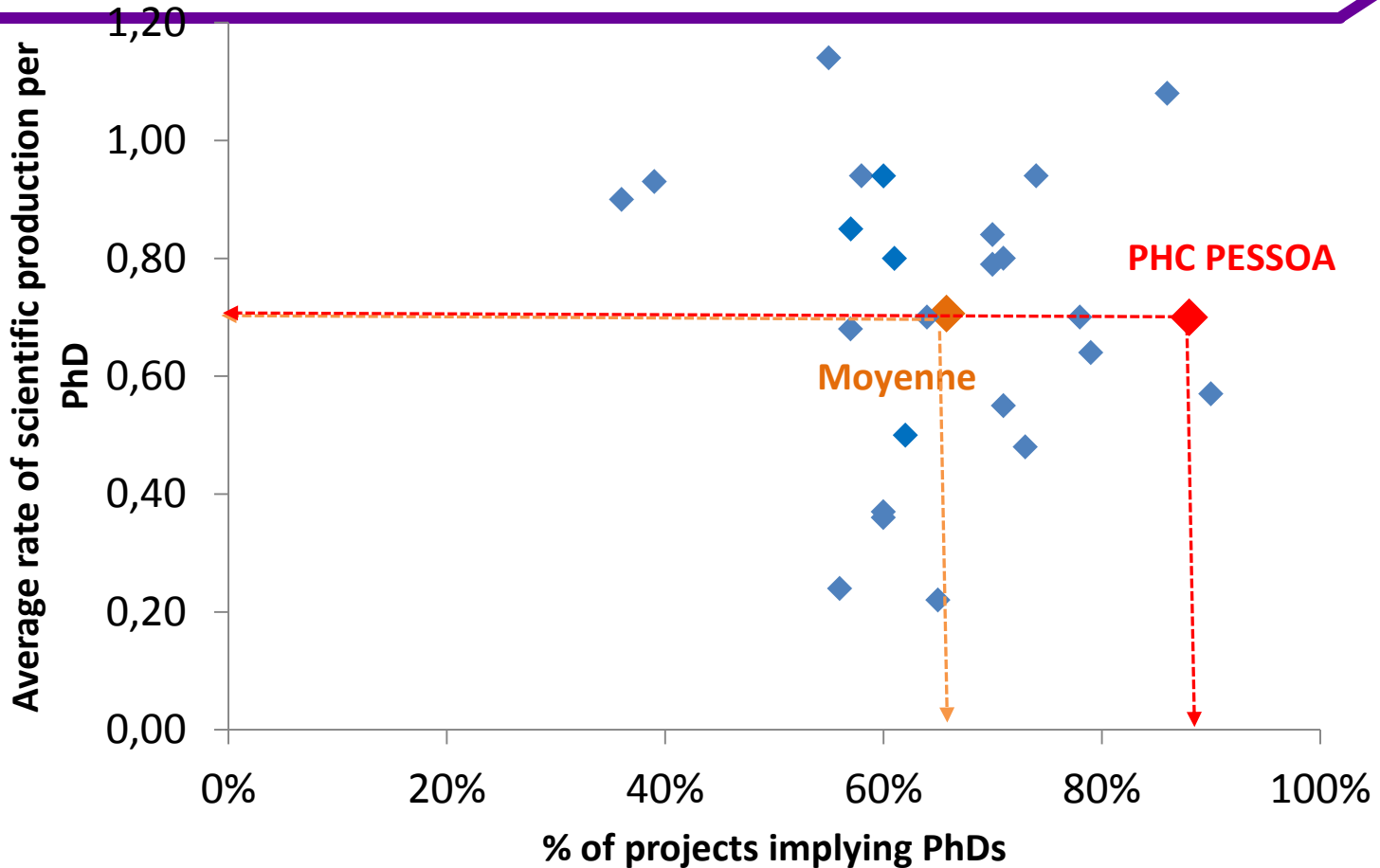
Number of post-doctoral researchers



23% of projects involve at least one post-doctoral researcher

IMPLICATION OF PhDs

(COMPARISON BETWEEN 26 DIFFERENT BILATERAL PROGRAMMES)



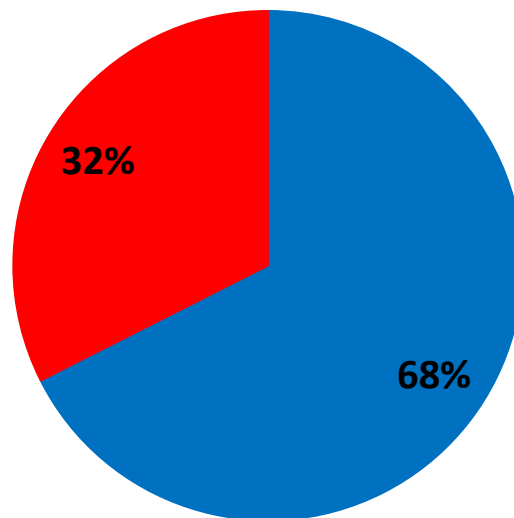
% of projects implying PhDs and Post-doc : 88% vs 65% mean
Average rate of scientific production per PhD : 0,71 vs 0,70 mean



MOBILITY

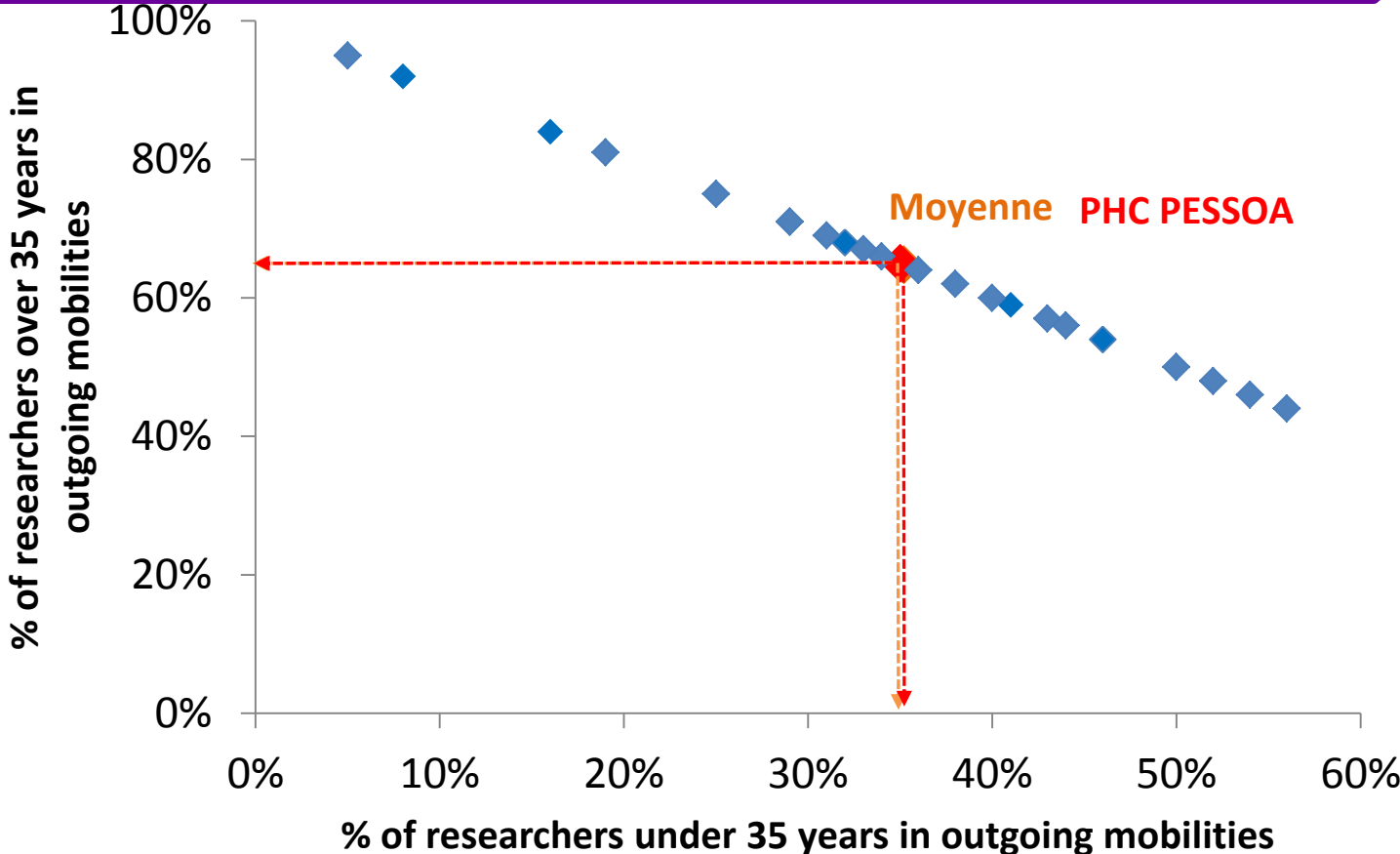
MOBILITY : GENDER DISTRIBUTION

France → Portugal



■ Men ■ Women

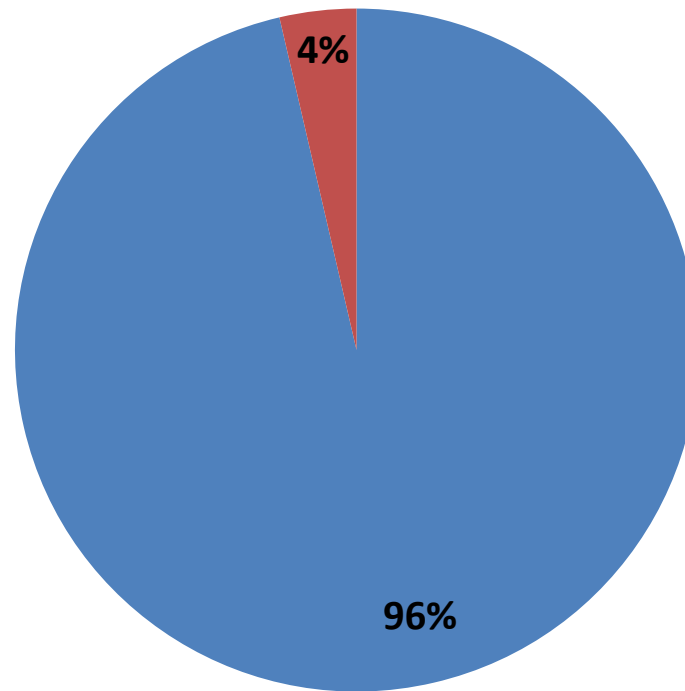
MOBILITY FRANCE – PORTUGAL (COMPARISON BETWEEN 26 DIFFERENT BILATERAL PROGRAMMES)



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

MOBILITY : DURATION

France → Portugal



1 mobility more than 3 months

■ < 15 days

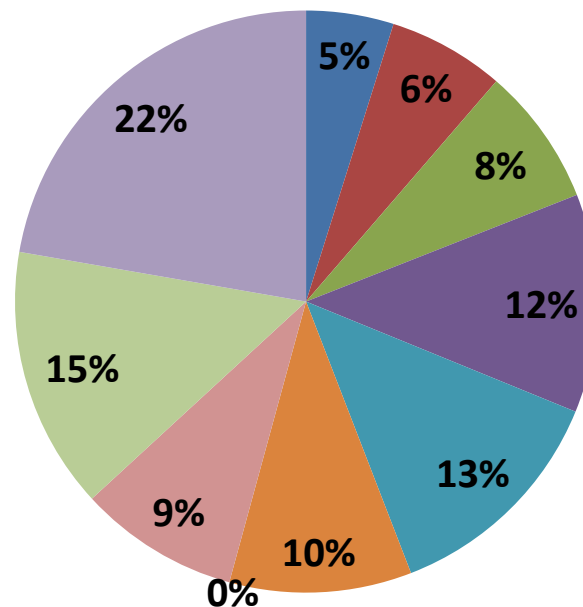
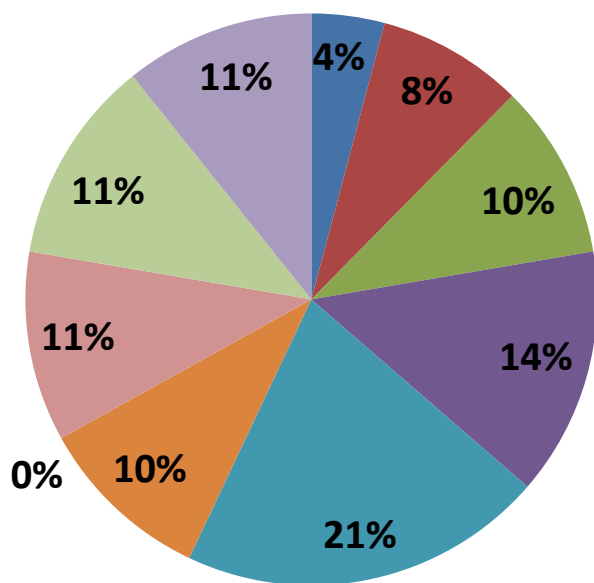
■ between 15 days and 3 months

SCIENTIFIC PRODUCTION

SCIENTIFIC OUTPUT (1/2)

Number of funded projects
in the survey: **121**

Percentage of copublications



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

SCIENTIFIC OUTPUT (2/2)

Data from 121 funded projects

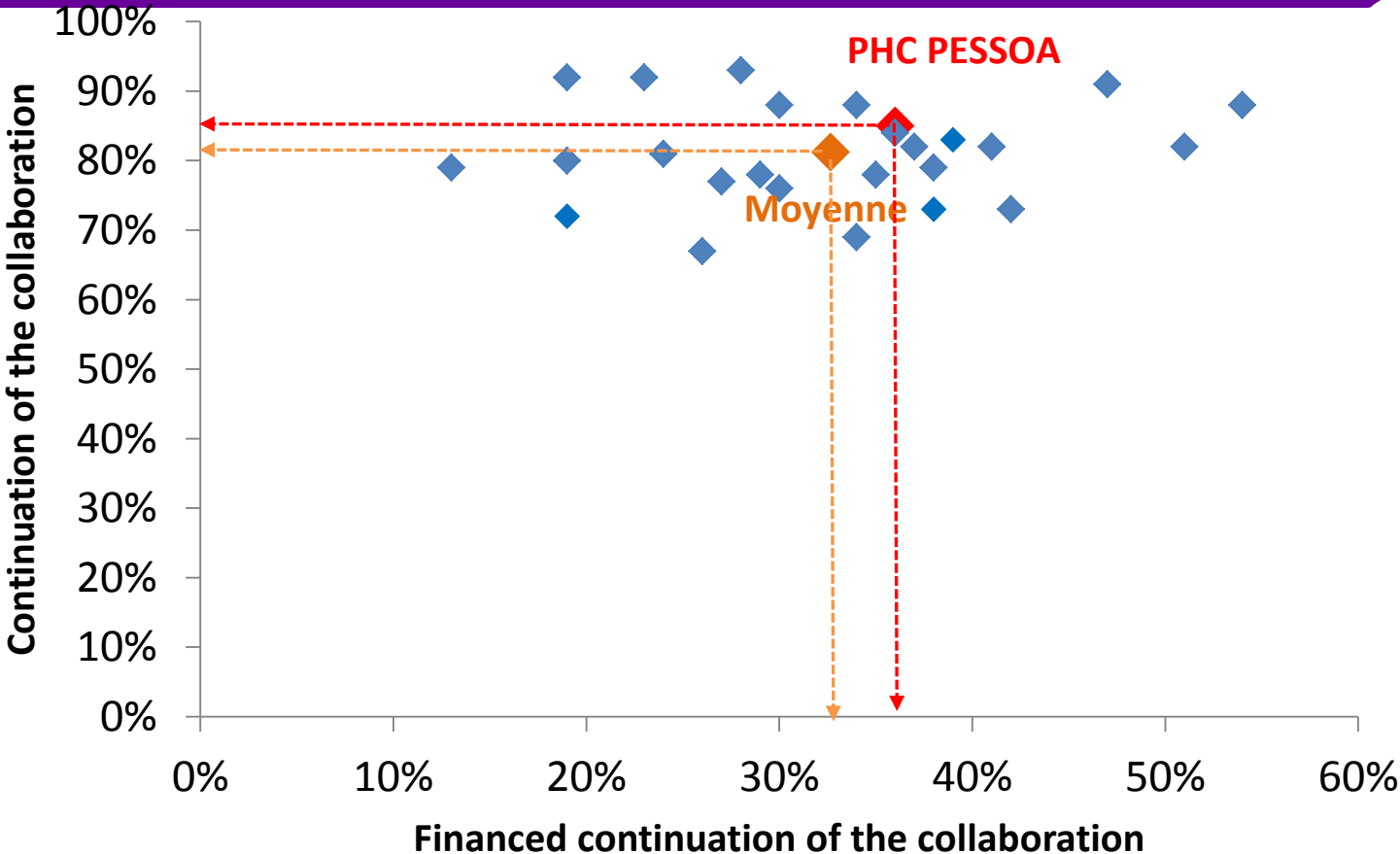
	Number of financed projects in the survey	Average number of co-publications per project
Mathematics	5	2,4
Physics	10	1,6
Marine/Earth/Planet Sciences	12	1,6
Chemistry	17	1,8
Biology and Health	25	1,3
Humanities	12	2,1
Social Sciences	0	0,0
Engineering Sciences	13	1,7
Information Technology	14	2,6
Agronomy / Ecology	13	4,2
TOTAL	121	2,0

Overall average annual number of coproduction per project : 1,0 vs 0,9 mean
62% of funded projects led to one co-publication at least vs 64% mean

WHAT HAPPENS AFTER A PESSOA PROJECT ?

CONTINUATION OF THE COLLABORATION (1/5)

(COMPARISON BETWEEN 26 DIFFERENT BILATERAL PROGRAMMES)



Continuation of the collaboration : 85% vs 81% mean
Continuation of the collaboration with other sources of subvention : 36% vs 33% mean

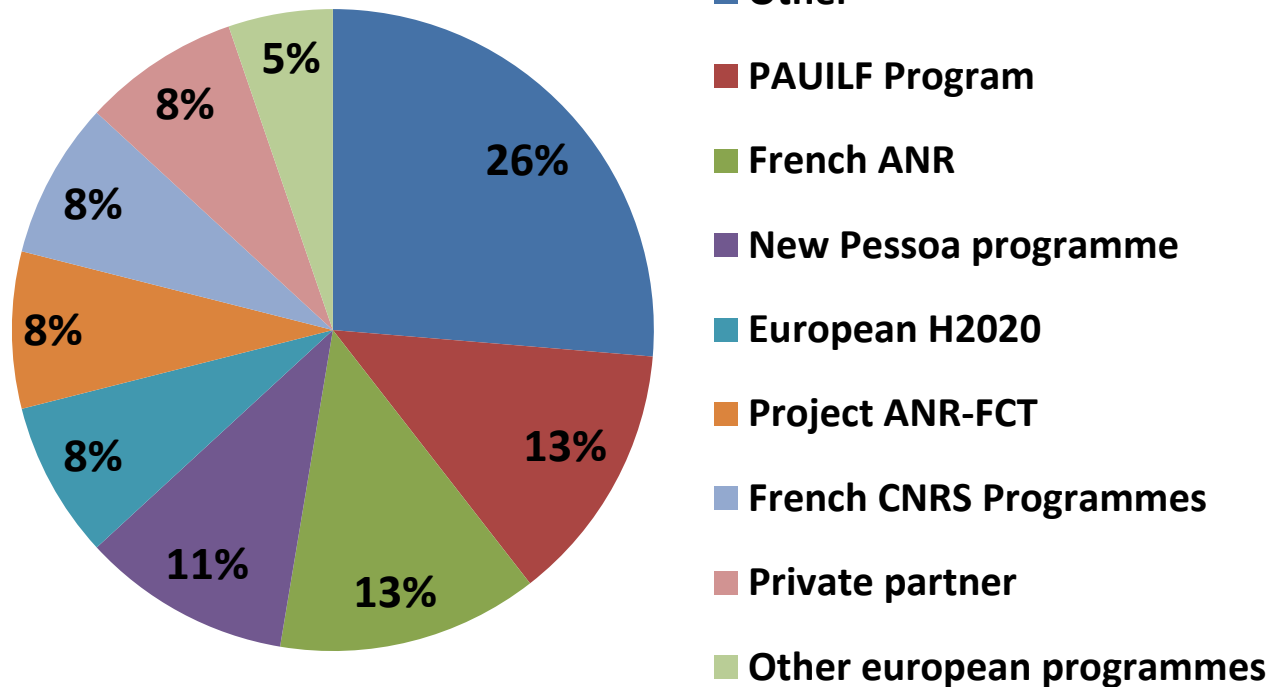
CONTINUATION OF THE COLLABORATION (2/5)

85% of the collaborations continued after the Pessoa project

Which activities?	
Collaborative research	68%
Co-publications	66%
Joint participation to conferences	53%
Researchers mobility	48%
PhD mobility	28%
Co-organisation of scientific events	24%
Joint participation to PhD thesis jury	23%
Others	11%

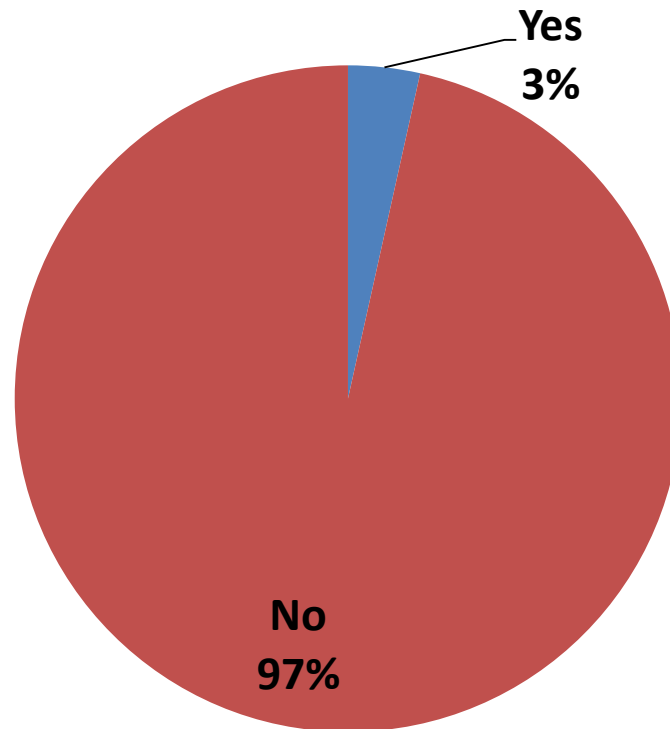
CONTINUATION OF THE COLLABORATION (3/5)

What kind of funded collaborations after the Pessoa project ?



CONTINUATION OF THE COLLABORATION (4/5)

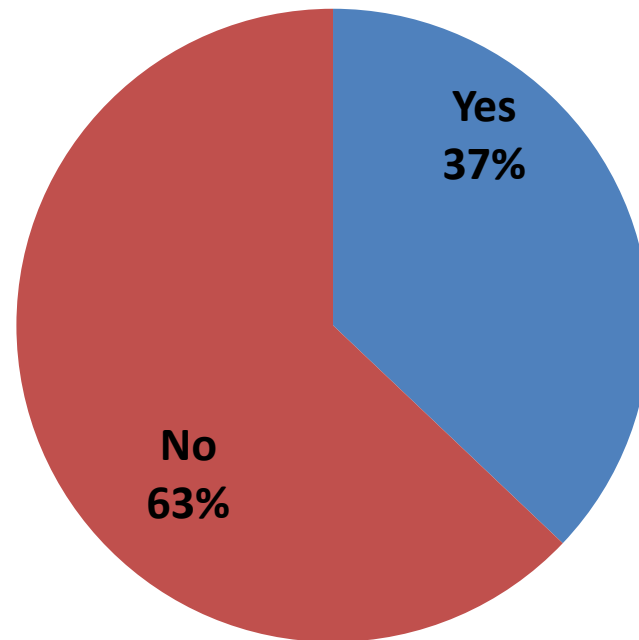
Has the Pessoa project led to the set-up of joint structures?



2 CNRS International laboratories
1 CNRS International mixed unit
1 European network

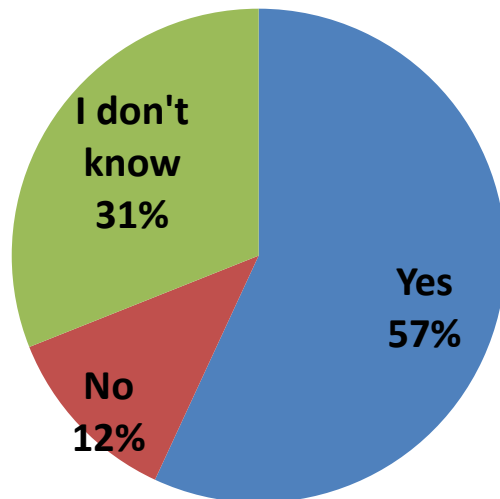
CONTINUATION OF THE COLLABORATION (5/5)

Has the French-Portuguese collaboration involved new partners?

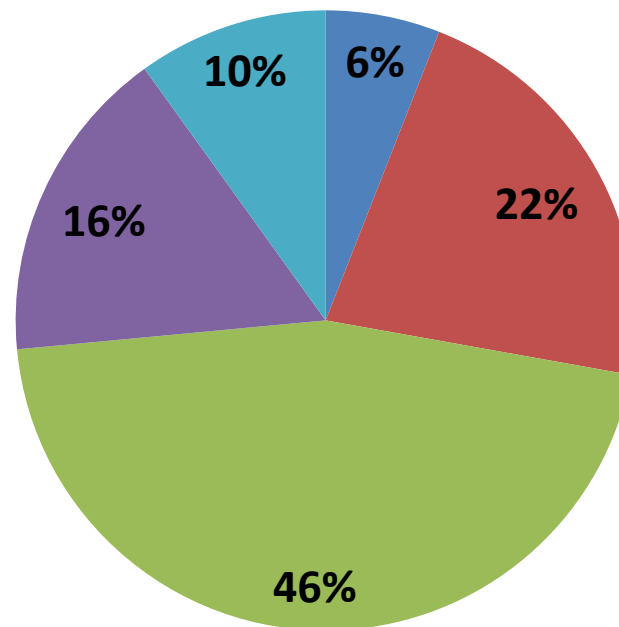


IMPACT ON YOUNG RESEARCHERS' CAREER (1/2)

Was young researchers career impacted by the Pessoa programme ?



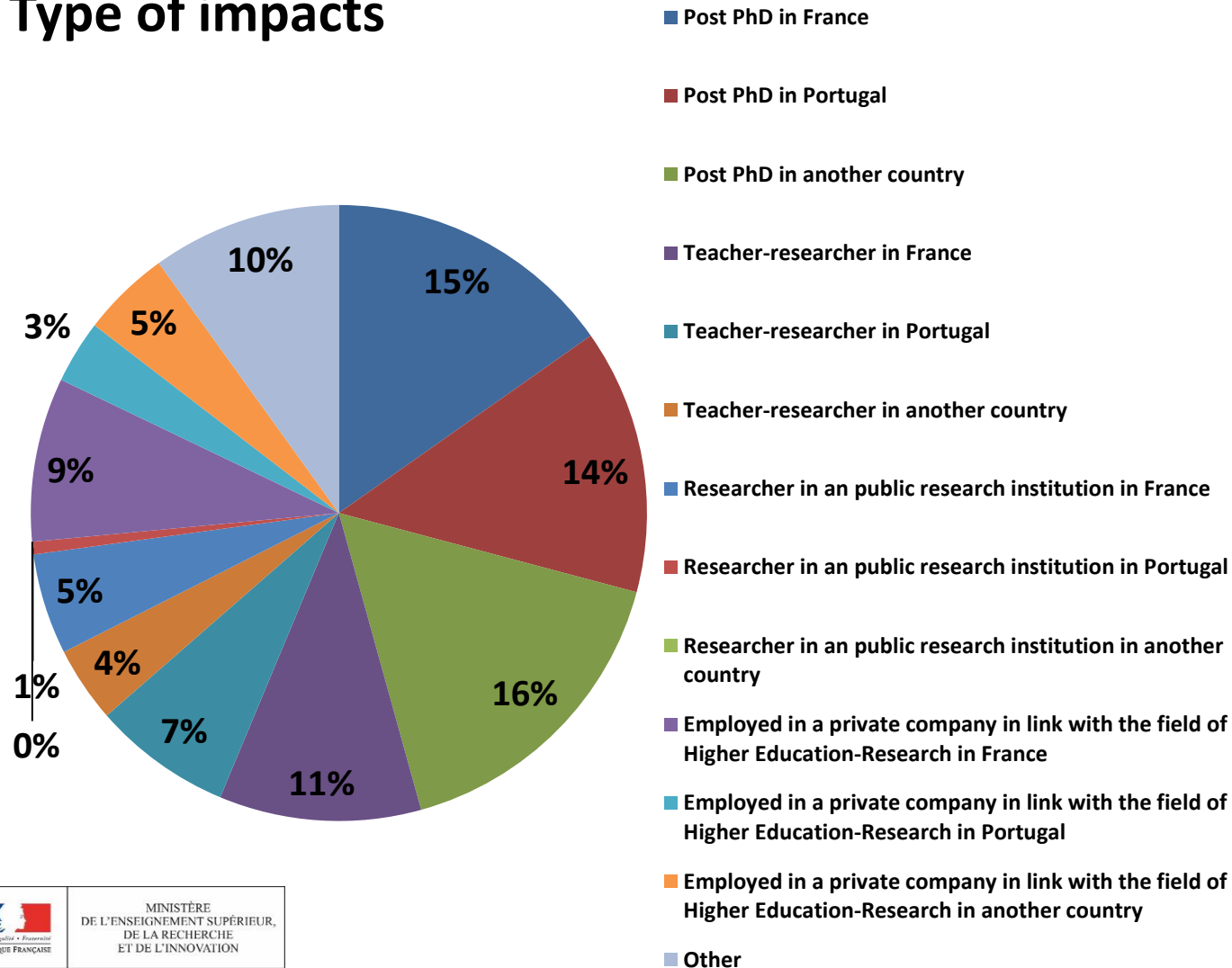
Type of impacts



- 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

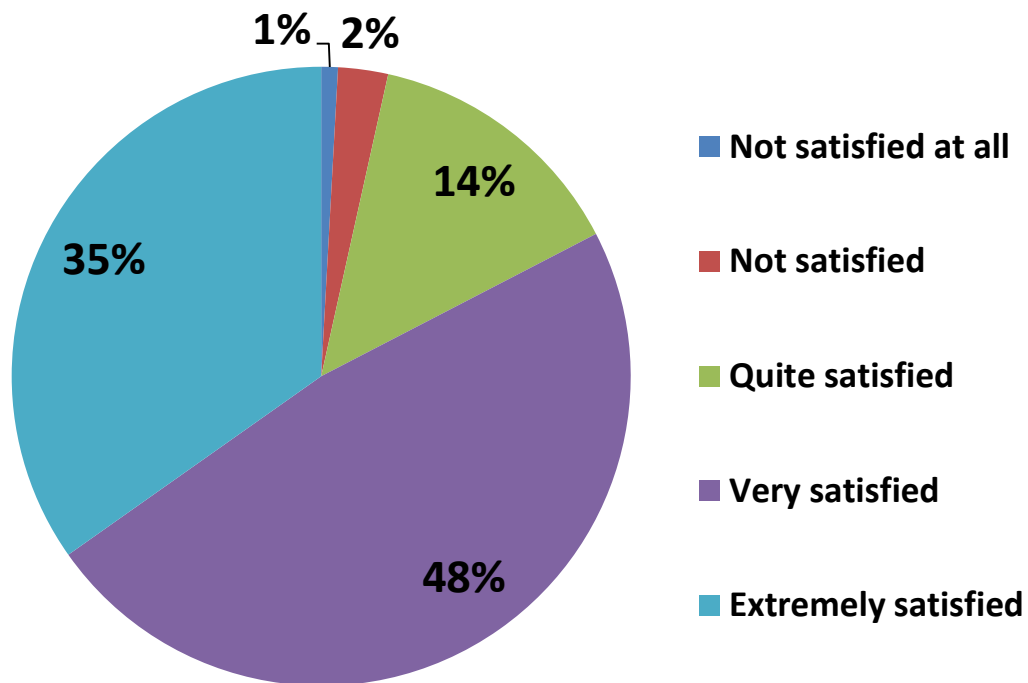
IMPACT ON YOUNG RESEARCHERS' CAREER (2/2)

Type of impacts



GENERAL OPINION OF FRENCH PIS ON THE PROGRAMME

97% of French principal investigators are satisfied



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

SURVEY OF 115 RESPONSES

Strengths of this program	Number of occurrences (out of 115)	% (out of 115)
Allows the mobility of the researchers	97	80%
Allows an international scientific collaboration	94	78%
Simplicity of the application process	87	72%
Easy implementation (administrative flexibility)	73	60%
Allows the training of the young researchers	72	60%
Allows exchanges which allow a scientific production	70	58%
Financial means sufficient for the expenditure of mobility	52	43%
Good scientific appreciation compared to the financial investment	41	34%
Allows a knowledge of the country partner	39	32%
Is used as starting for raising other funds	31	26%
Duration of mobilities adapted to the needs	25	21%
Transparency of the methods for selecting the projects	21	17%
Sufficiently long duration of the projects	15	12%
Others	4	3%
<i>Total number of occurrences</i>	721	

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

SURVEY OF 115 RESPONSES

Weaknesses of this program	Number of occurrences (out of 115)	% (out of 115)
No funding of the operation and capital expenditures	62	51%
Too short duration of the projects	40	33%
Lack of transparency on the methods of projects selection	38	31%
Difficult perpetuation of collaboration	26	21%
Insufficient communication on the evaluation's results	24	20%
Too short duration of mobilities	23	19%
Too low number of mobilities	16	13%
Other	13	11%
Financial means insufficient for the expenditure of mobility (per diem)	12	10%
Financial means insufficient for the expenditure of mobility (transport)	11	9%
Heaviness of the process of applications	11	9%
Administrative heaviness of the missions management	4	3%
Too long duration of mobilities	0	0%
<i>Total number of occurrences</i>	<i>280</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”.

- + French PIs young researchers represent 30 % of laureates
- + 88 % of the projects involve at least one PhD or post doc student
- = Average rate of scientific production per PhD/post doc (0,71) close to mean
- = 21 % of the collaborations were pursued through an European programme
- = Pessoa programme should be an opportunity to initiate new collaborations (only 40 %)
- = Too many applications to Pessoa programme after a Pessoa funding (24%)
- = Improve the communication towards the PI

PRELIMINARY RECOMMENDATIONS

RECOMMENDATIONS

- Promote REAL new cooperations
- Explore new financial supports after the Pessoa funding
- Promote co-publications (38% of projects with no co-publications)
- Promote number of co-publications per project
- Encourage the mobility of young researchers (35% of all mobilities)

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.

CONTACTS

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Thank you for your attention