

FRANCE – TURKEY

**Scientific impact of the program BOSPHERE
(2006-2020)**

MESRI-DAEI / MEAE

2021

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

GENERAL PRESENTATION OF THE PROGRAM

Creation : 2004

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

Total budget (France + Turkey) : around 270 000 € / year

>> French budget : around 55 000 € / year

>> Turkish budget : around 216 000 € / year

Average budget per project (France + Turkey) : around 45 000 € / for 2 years

Number of new funded projects per year : around 6

From 2006 to 2020 :

337 applications submitted

76 projects funded

DATA SOURCES

Campus France (2006-2020)

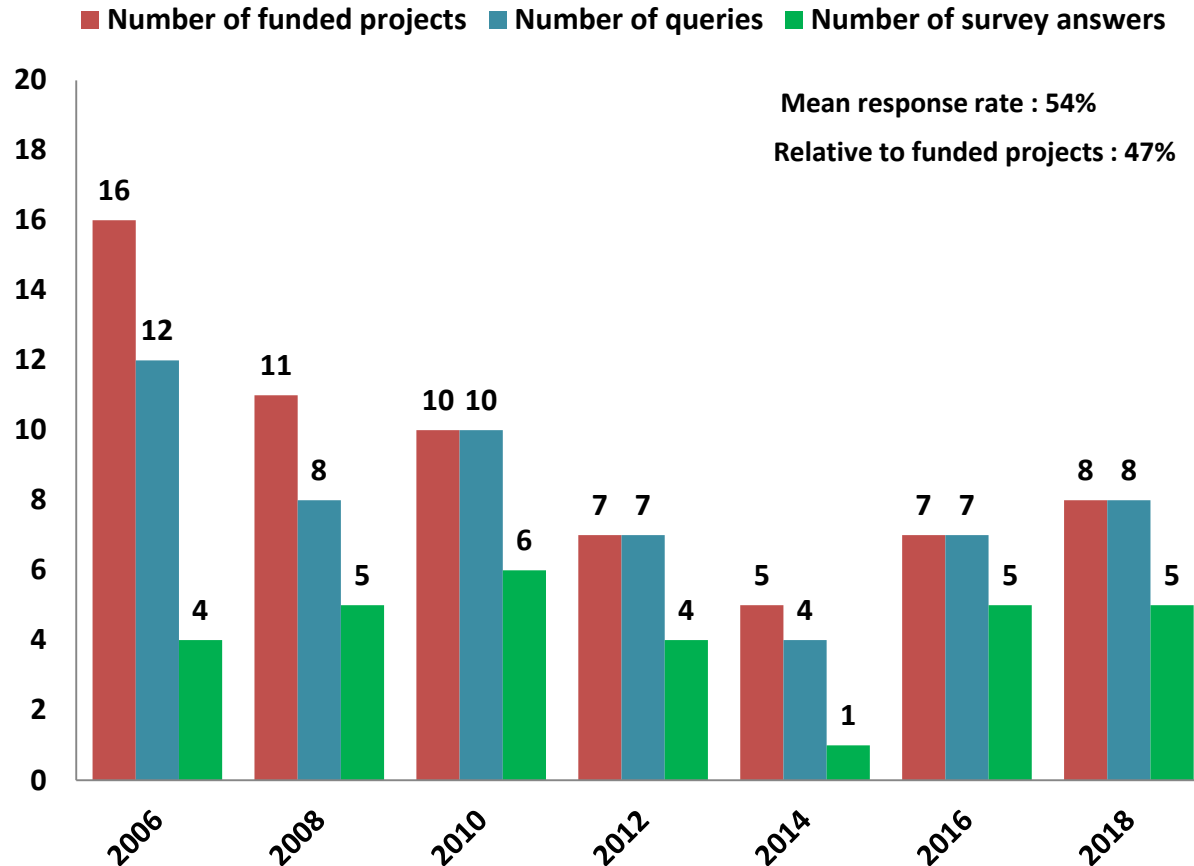
- Information about the PHC Bosphore applications
- List of mobilities (from France to Turkey and from Turkey to France)

Survey (2006-2018)

- Target : French Principal Investigators of selected projects between 2006 and 2018
- Survey duration : 7 weeks between November and December 2020
- **54%** response ratio (30 respondents for 56 queries)

ANSWERS TO THE SURVEY

Average response rate to the survey : **54 % (30 answers)**



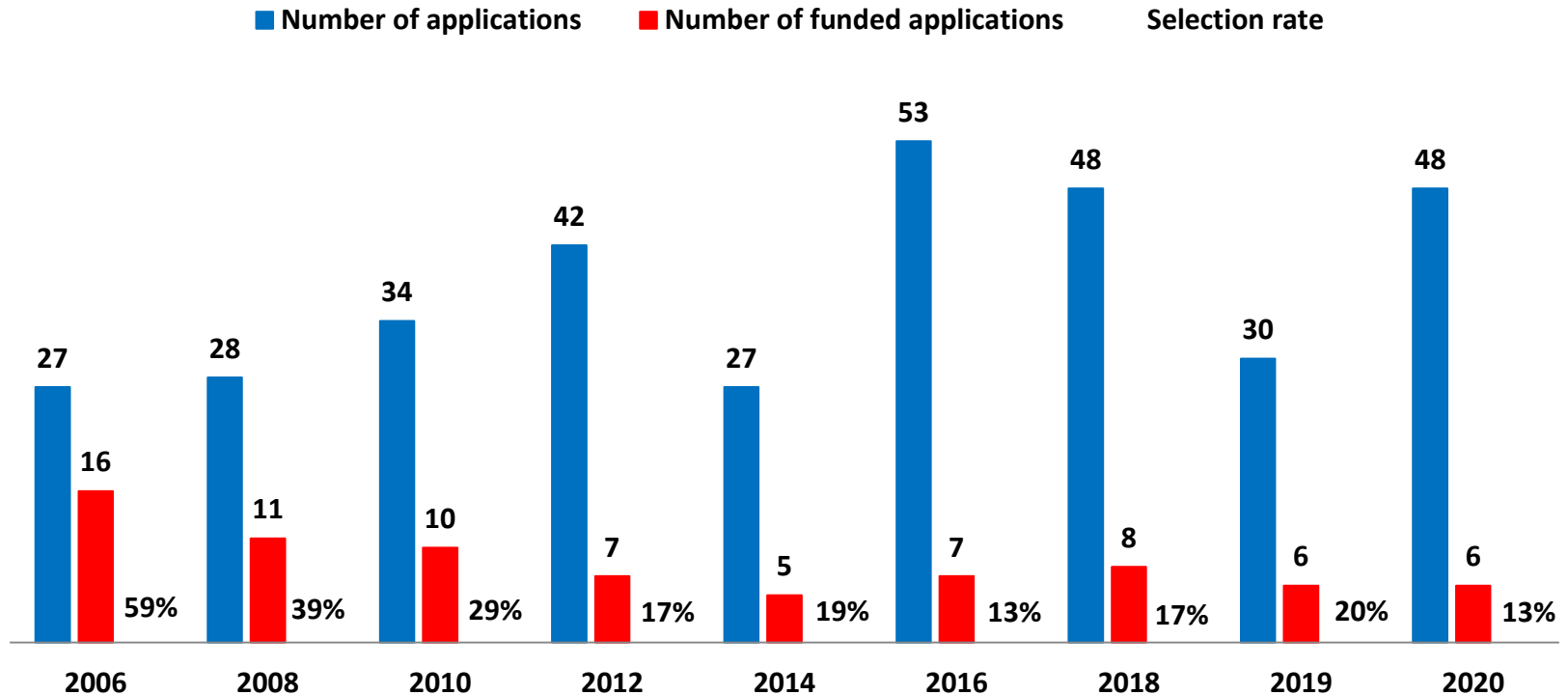
64 funded projects between 2006 and 2018, 56 valid email addresses

2006-2020

Key Points

NUMBER OF APPLICATIONS AND SELECTION RATE

Average selection rate from 2006-2020: **23%**



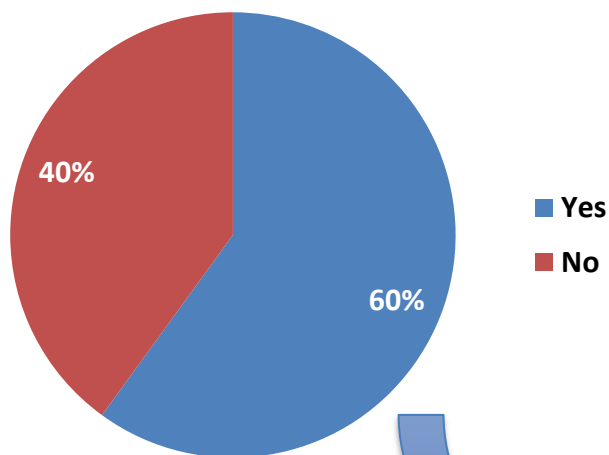
Rather constant number of applications since 2016



Low selection rate

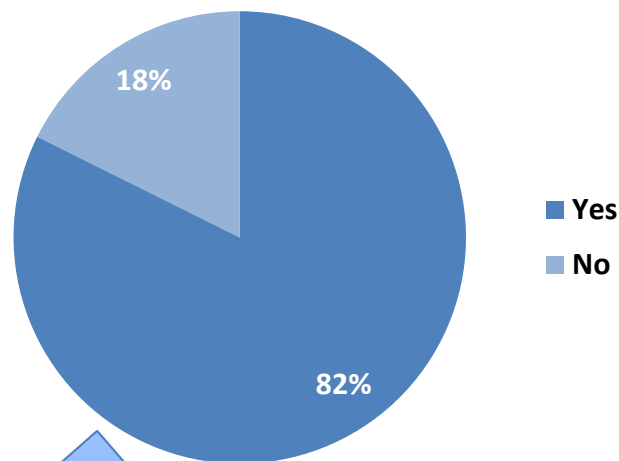
BEFORE THE BOSPHORE PROJECT (1/2)

Did you already cooperate with Turkey in the past ?



Data from 30 responses

If yes, was it with the same partner?



Data from 14 responses

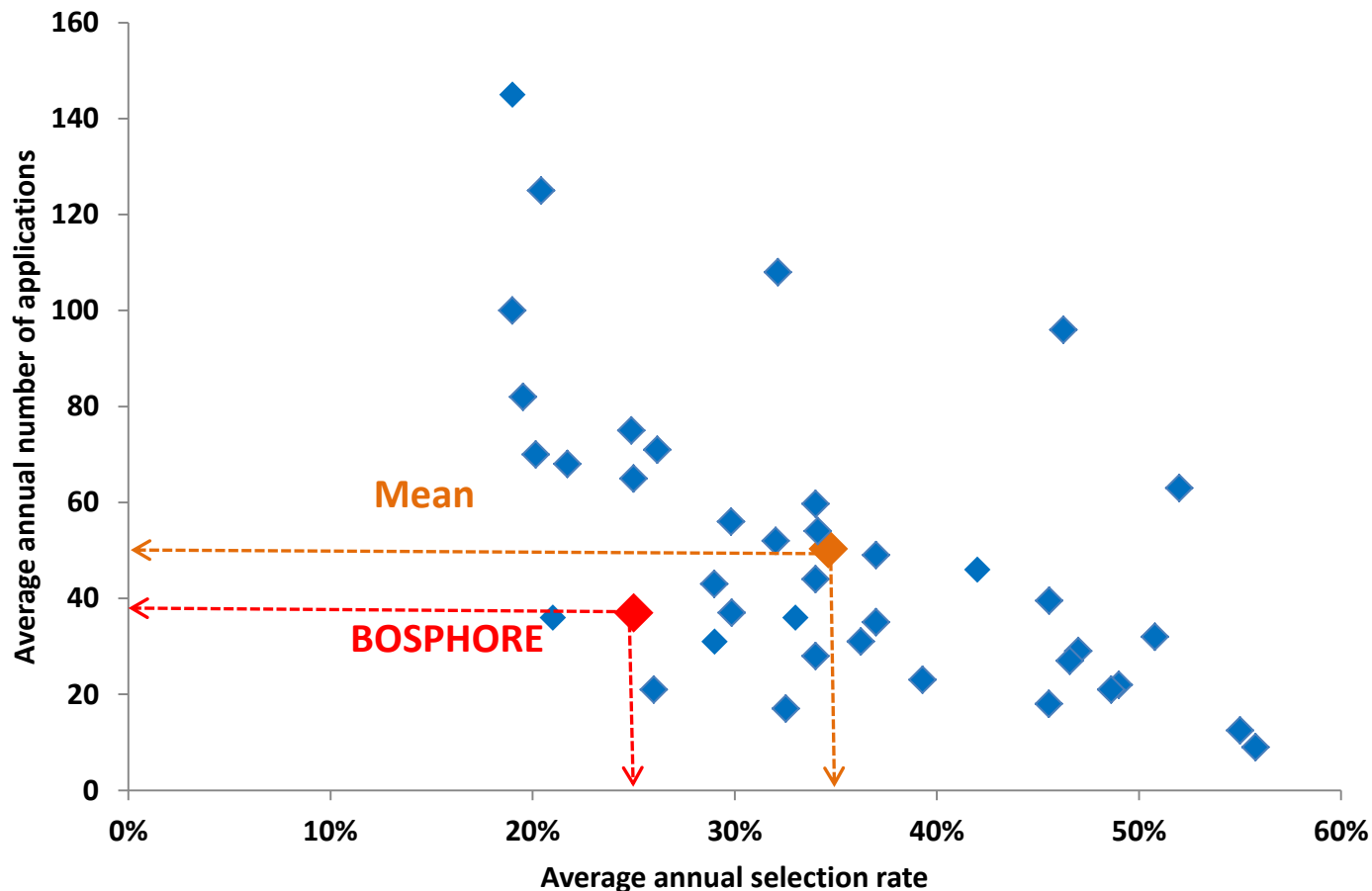
BEFORE THE BOSPHORE PROJECT (2/2)

With which scientific collaboration program ?	
PHC BOSPHORE	38%
CNRS programs (PRC, PICS)	16%
French Government Grants	12%
European programs (7th PCRD, H2020)	12%
Private sector funding	4%
Other	19%

Plus 36 previous cooperations based on other exchanges (co-publication, meetings, joint PhD...)

Data from 30 responses

NUMBER OF APPLICATIONS VS SELECTION RATE (COMPARISON BETWEEN 40 DIFFERENT BILATERAL PROGRAMS)

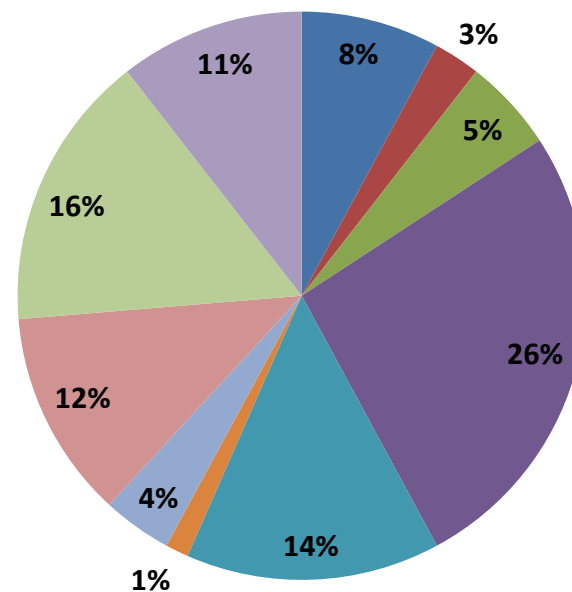
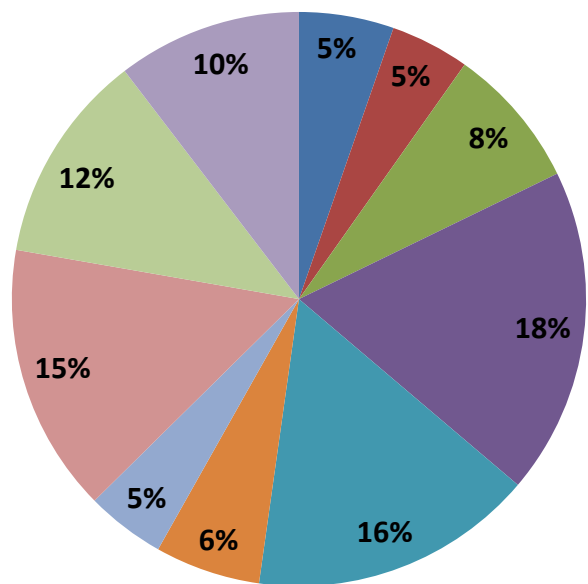


Average selection rate for 2006-2020 : 25% vs 35% mean
Average annual number of applications 2006-2020 : 37 vs 50 mean

SCIENTIFIC DOMAINS OF PROJECTS 2006-2020

Number of applications : 337

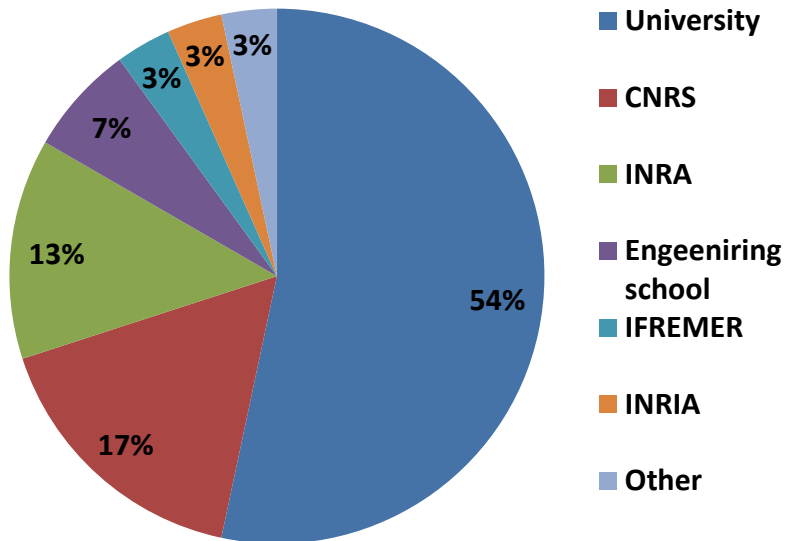
Number of funded projects : 76



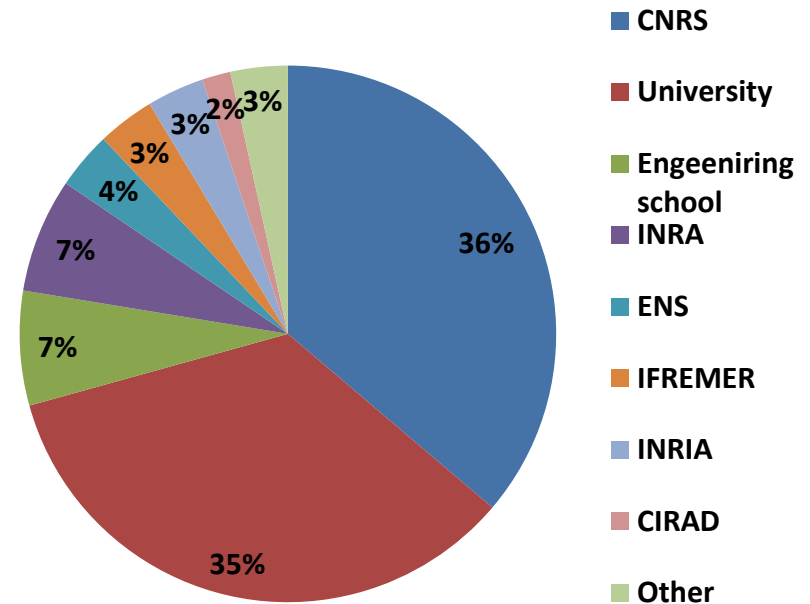
- Mathematics
- Marine/Earth/Planet Sciences
- Biology and Health
- Social Sciences
- Humanities
- Engineering Sciences
- Information Technology
- Agronomy/Ecology
- Physics
- Chemistry

FRENCH PARTICIPATING INSTITUTIONS 2006-2018

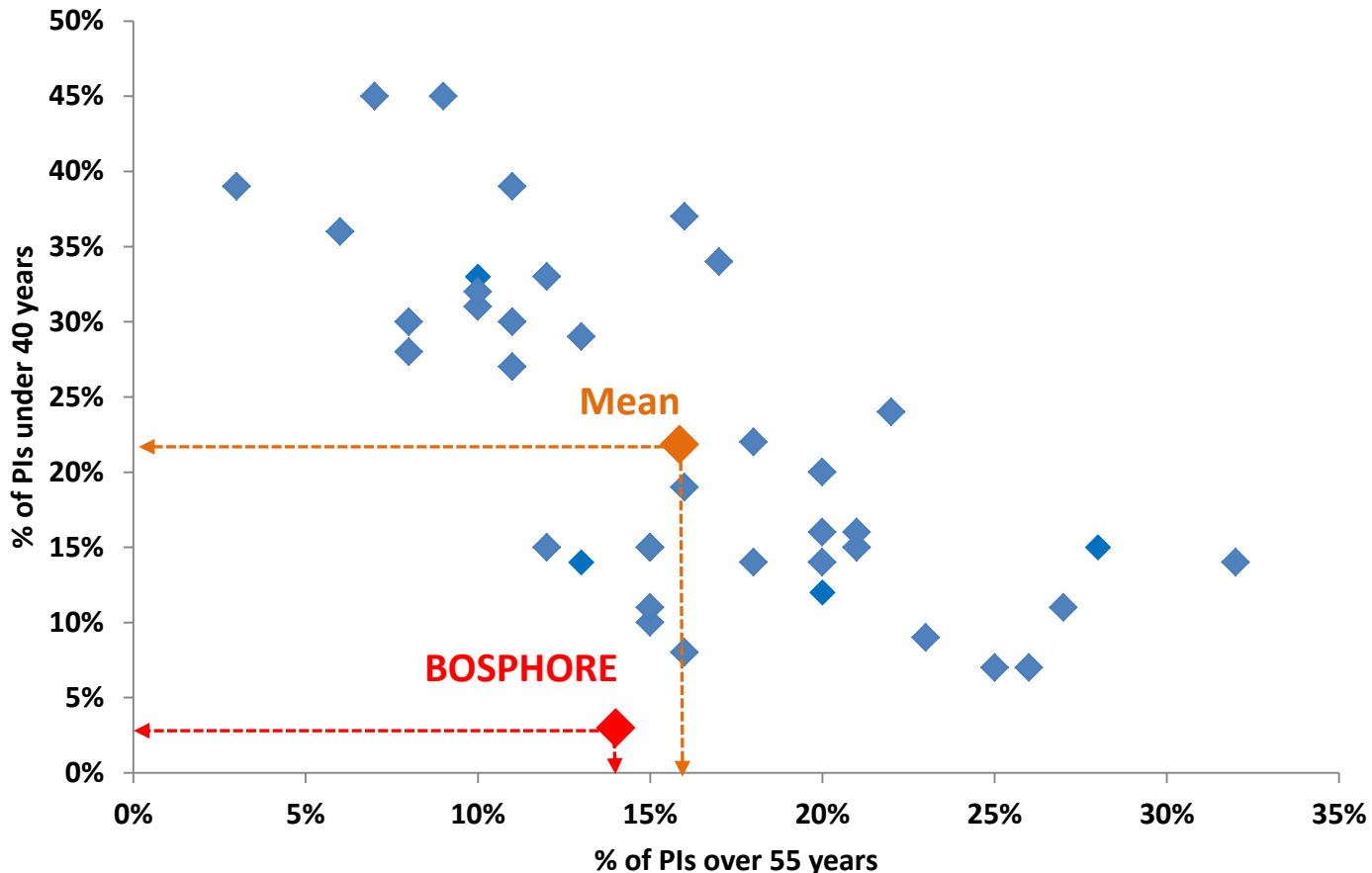
PI's employers



Laboratories authorities



AGE OF PRINCIPAL INVESTIGATORS (PI) (COMPARISON BETWEEN 40 DIFFERENT BILATERAL PROGRAMS)

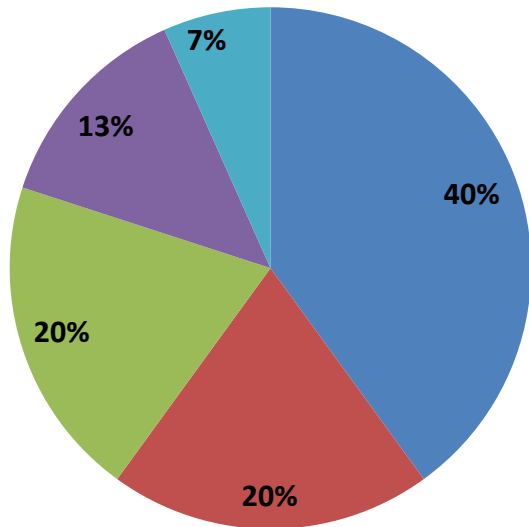


PIs under 40 years : 3% vs 22% mean
PIs over 55 years : 14% vs 16% mean
83% of the PIs are between 40 and 55 years

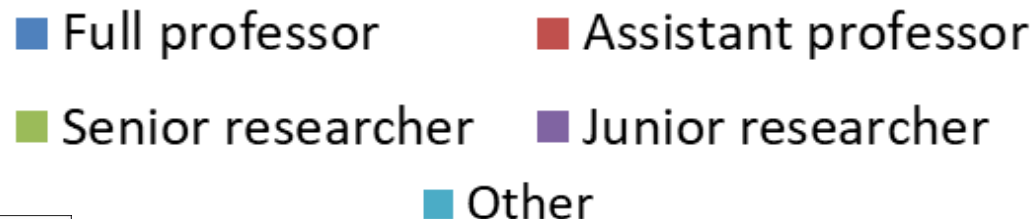
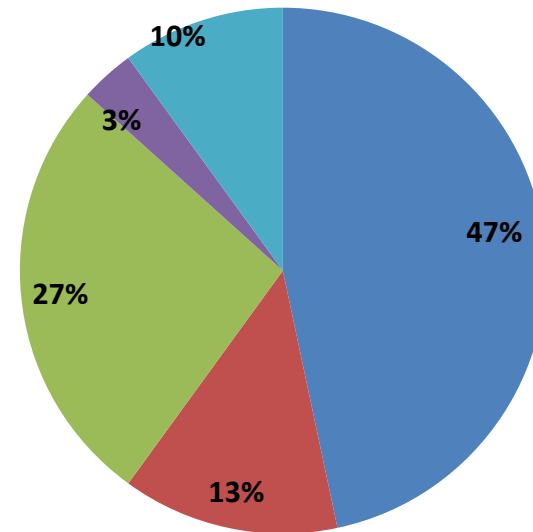
Data from 30 responses

FRENCH PIS (PRINCIPAL INVESTIGATORS) : STATUS

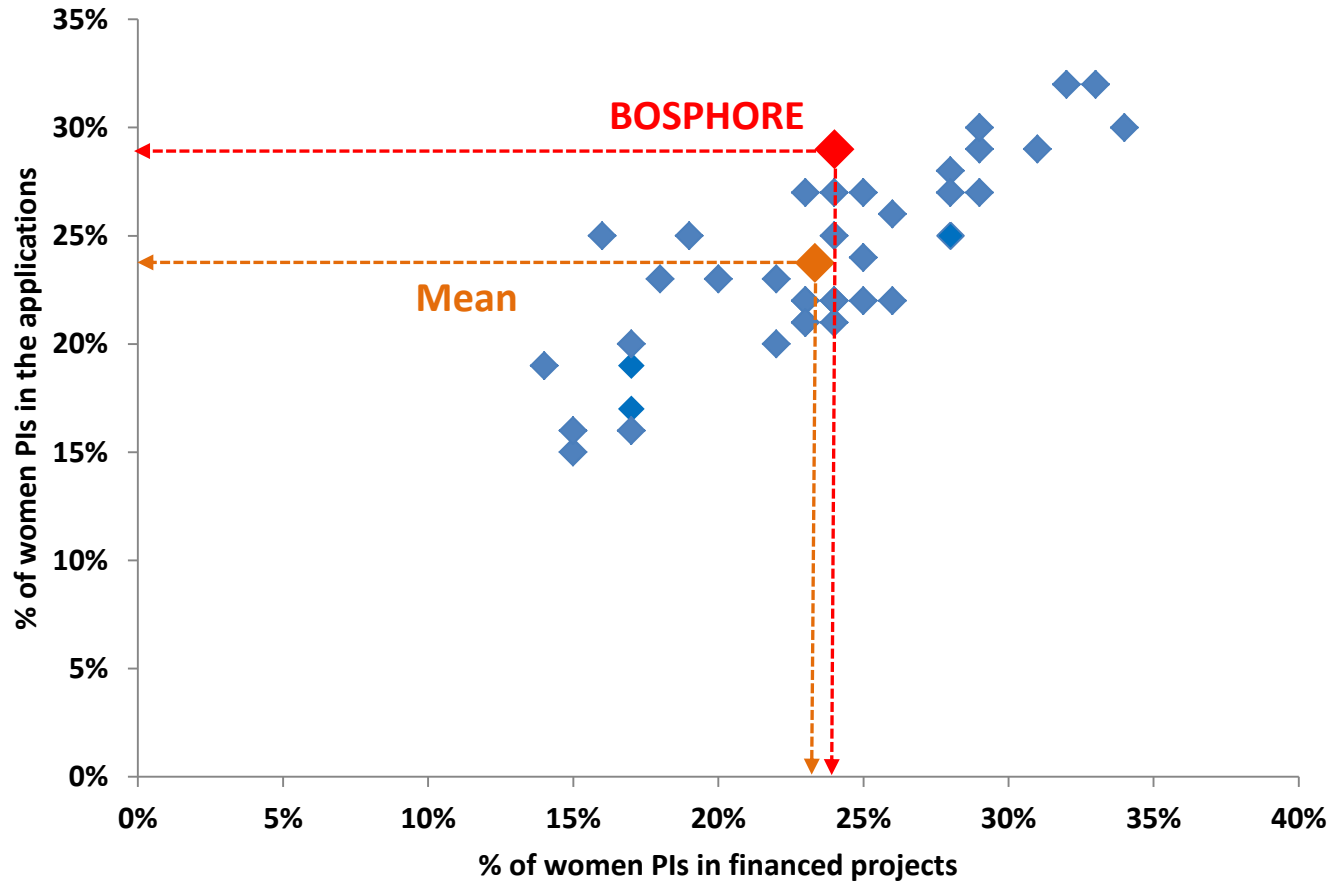
**Previous professional status
(at the beginning of the project)**



Current professional status



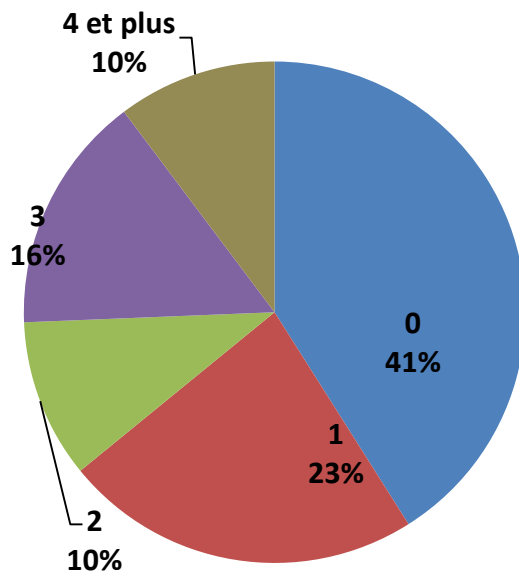
IMPLICATION OF WOMEN (FRANCE) (COMPARISON BETWEEN 40 DIFFERENT BILATERAL PROGRAMS)



% of women PIs in the applications : 29% vs 24% mean
% of women PIs in the selected projects : 24% vs 23% mean

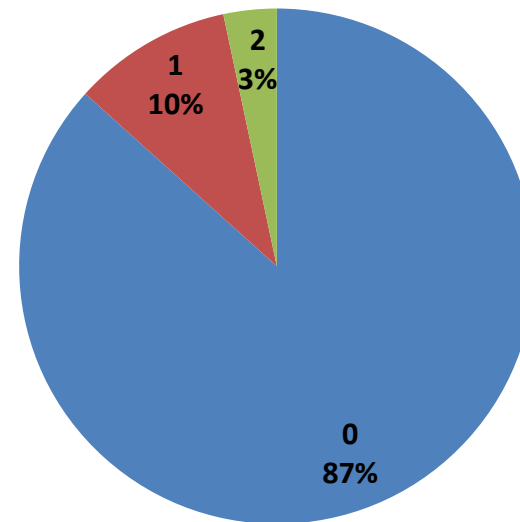
PARTICIPATION OF FRENCH YOUNG RESEARCHERS

Number of French PhD students



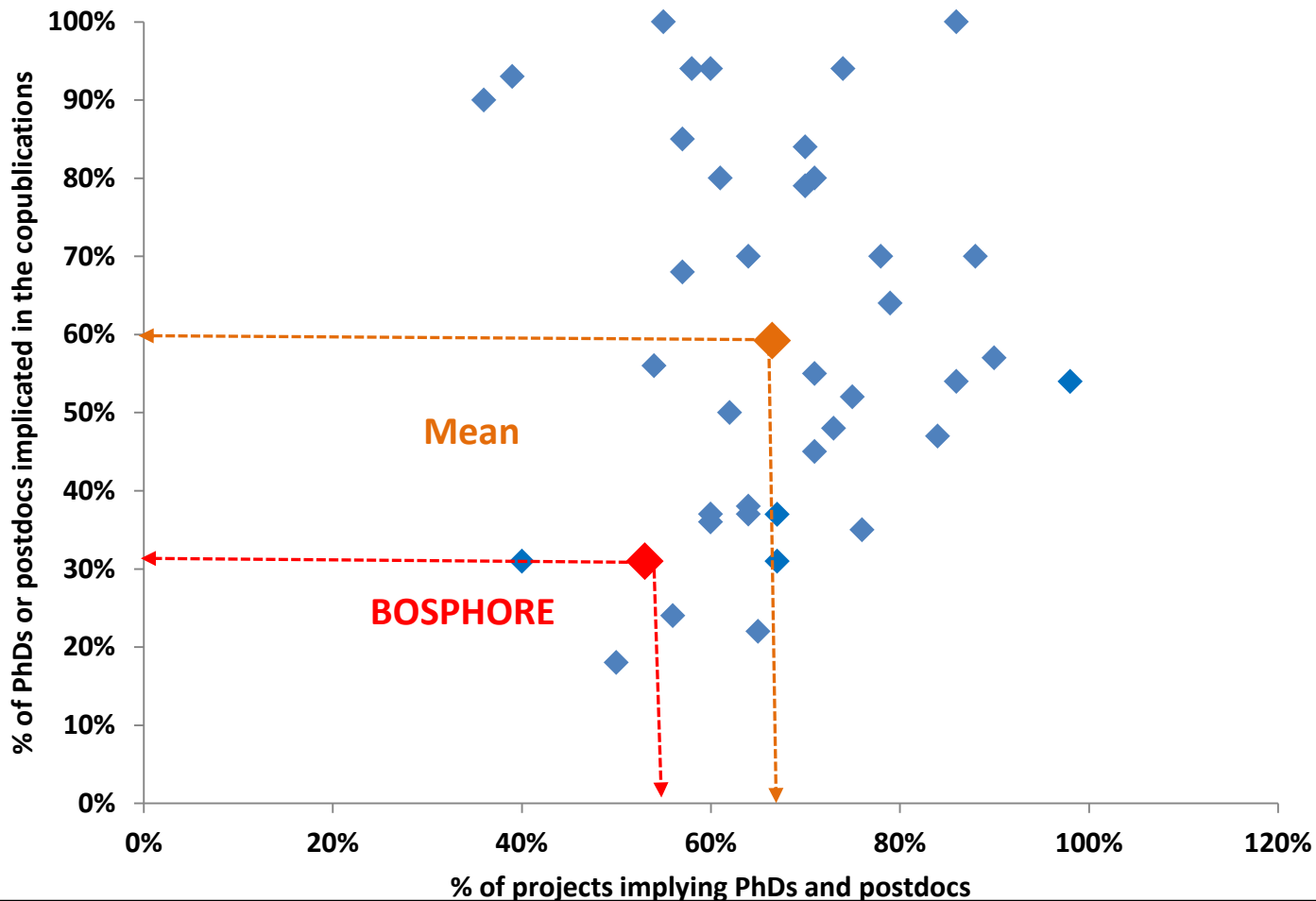
47% of projects involve at least one French PhD student

Number of French post-doctoral researchers



13% of projects involve at least one French post-doctoral researcher

IMPLICATION OF YOUNG RESEARCHERS (COMPARISON BETWEEN 40 DIFFERENT BILATERAL PROGRAMS)



% of projects implying young researchers : 53% vs 66% mean

% of PhD or postdoc implicated in the copublications : 31% vs 59% mean



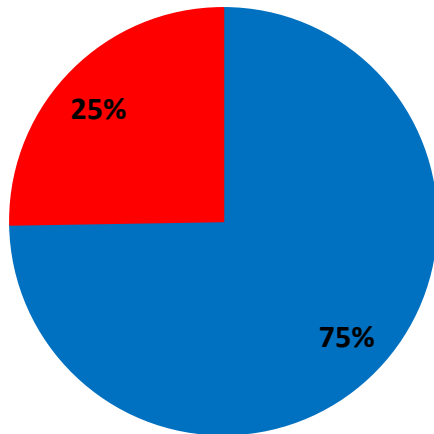
Data from 30 responses



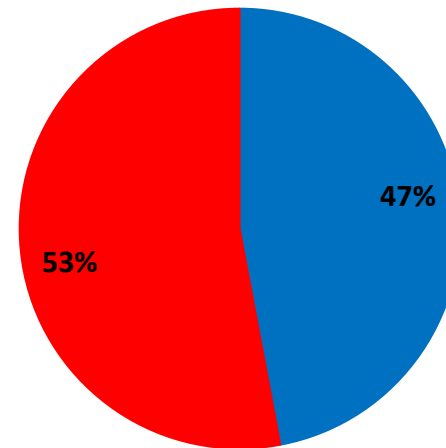
MOBILITY 2006-2020

MOBILITY : GENDER DISTRIBUTION

France → Turkey



Turkey → France

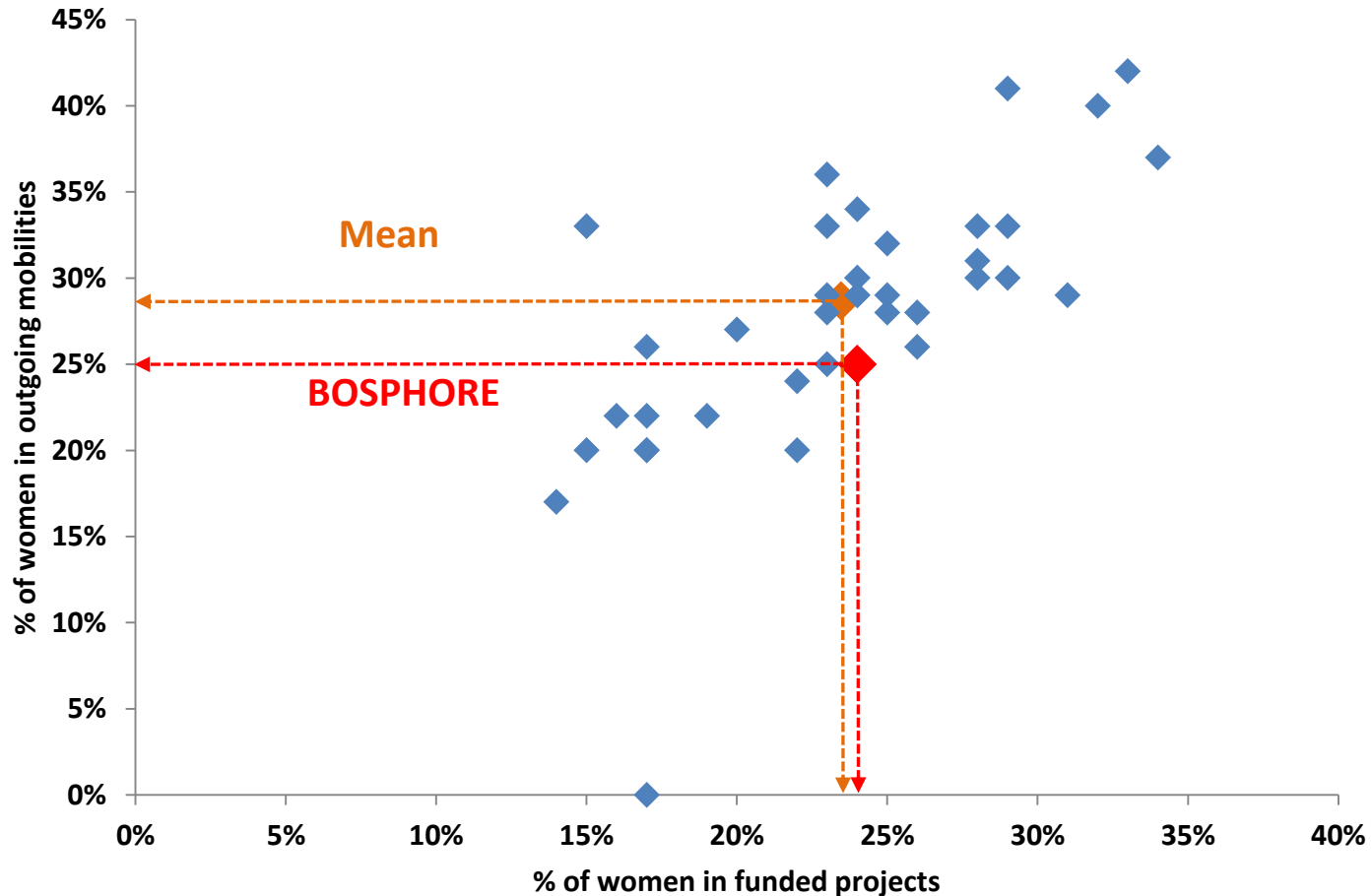


■ Men ■ Women

Data from 76 funded projects

WOMEN MOBILITY FRANCE – TURKEY

(COMPARISON BETWEEN 40 DIFFERENT BILATERAL PROGRAMS)

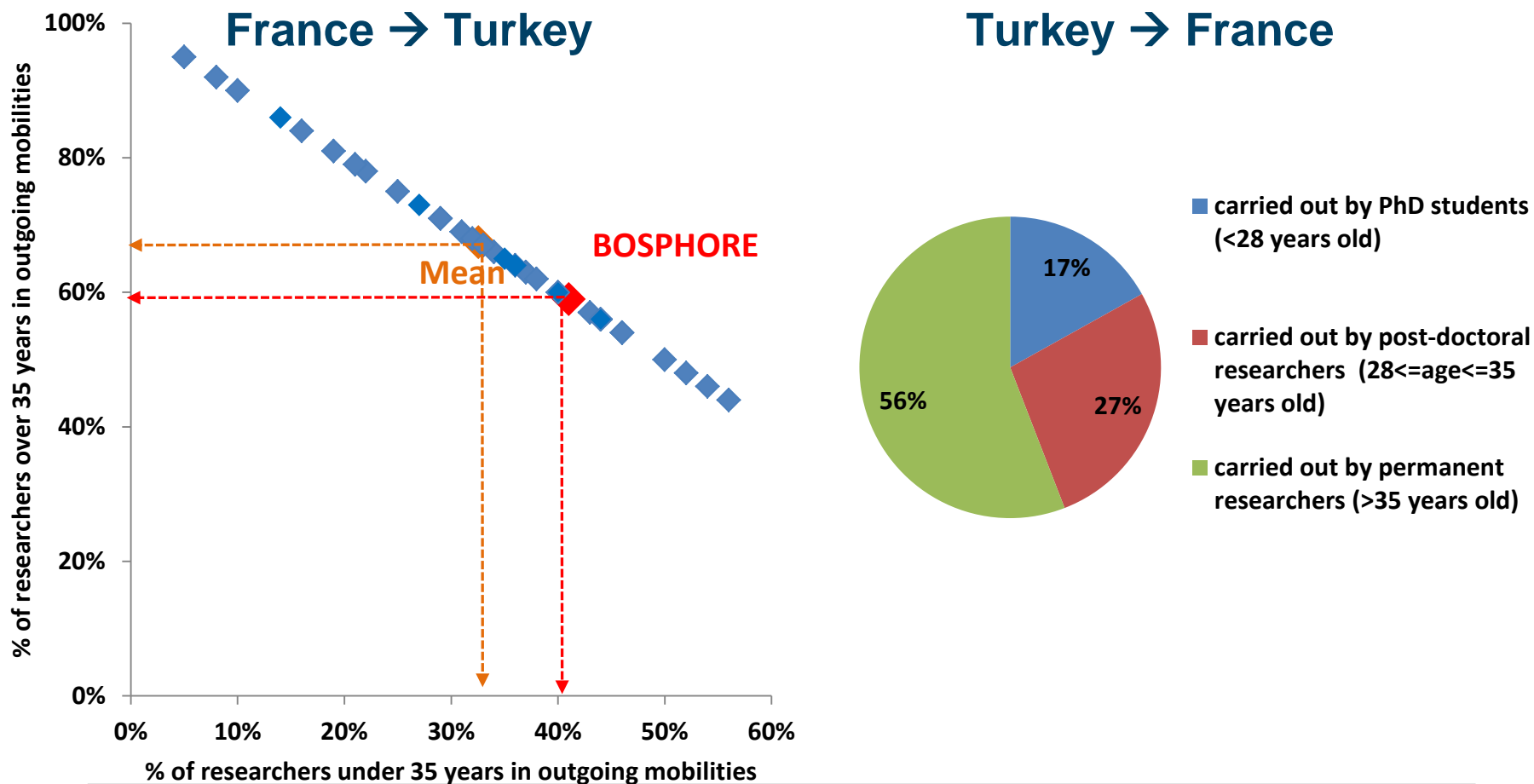


% of women researchers in the selected projects : 24% vs 23% mean

% of women researchers in outgoing mobilities : 25% vs 29% mean

YOUNG RESEARCHERS' MOBILITY

(COMPARISON BETWEEN 40 DIFFERENT BILATERAL PROGRAMS)

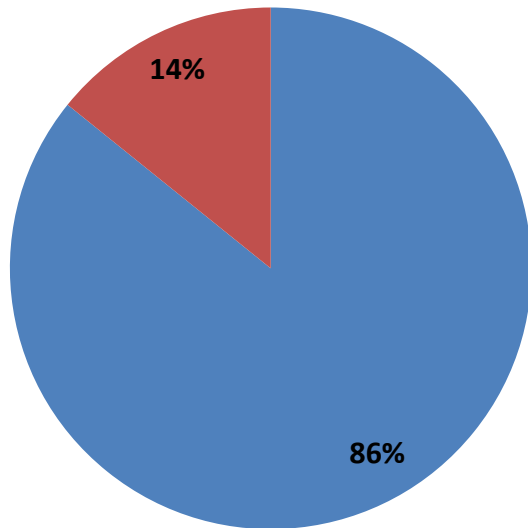


% of French young researchers in outgoing mobilities : 41% vs 33% mean

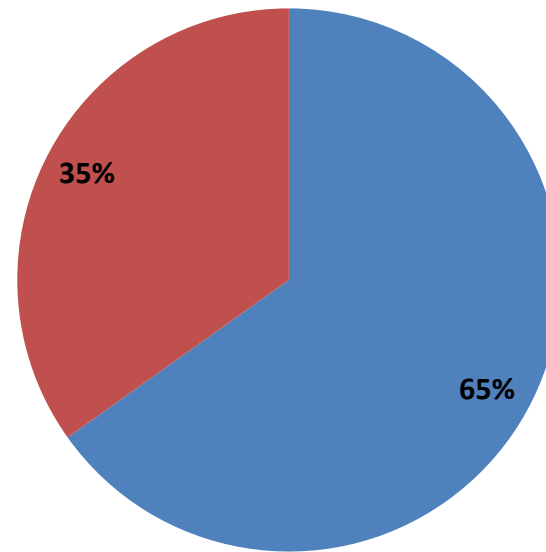
% of turkish young researchers in incoming mobilities : 44%

MOBILITY : DURATION

France → Turkey



Turkey → France



■ < 15 days

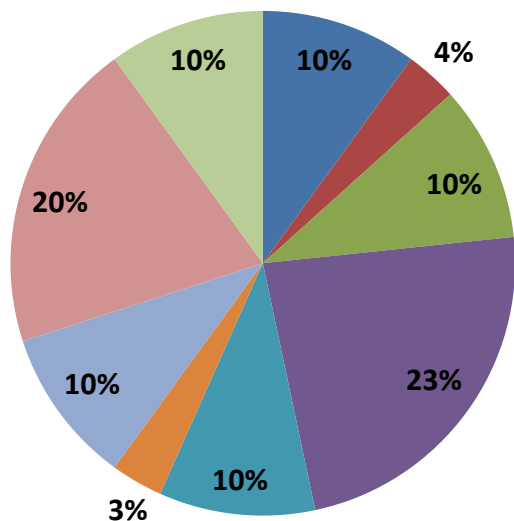
■ between 15 days and 3 months

SCIENTIFIC PRODUCTION 2006-2017

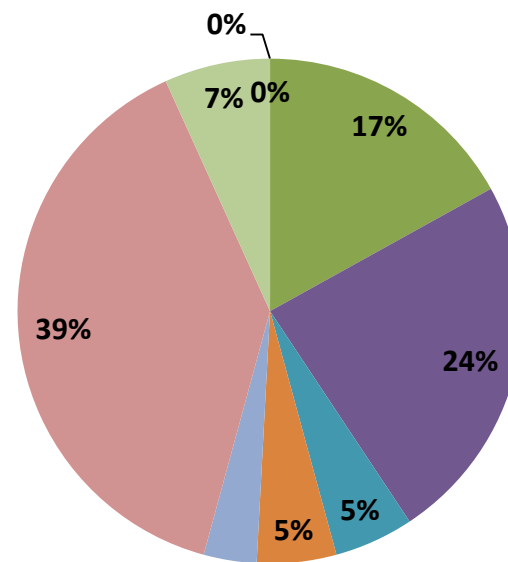


SCIENTIFIC OUTPUT (1/2)

Funded projects with responses to the survey (30)



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 30 funded projects

	Number of financed projects in the survey	Average number of co-publications per project
Mathematics	3	0
Physics	1	0
Marine/Earth/Planet Sciences	3	3,33
Chemistry	7	2
Biology and Health	3	1
Humanities	1	3
Social Sciences	-	-
Engineering Sciences	3	0,67
Information Technology	6	3,83
Agronomy / Ecology	3	1,33
TOTAL	30	1,97

Overall average **annual** number of copublications per project : **0,98 vs 0,93 mean**

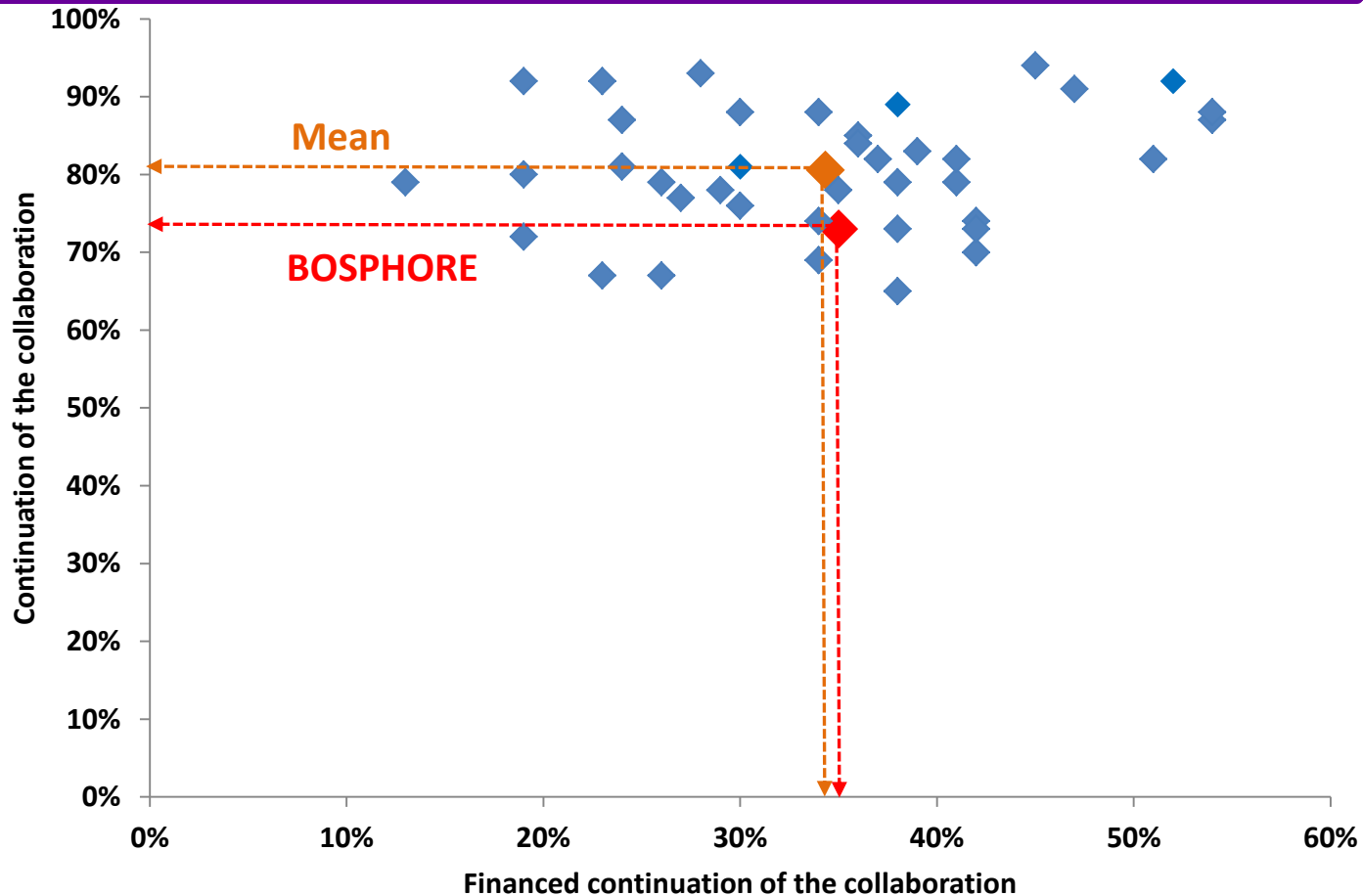
67% of funded projects led to one co-publication at least

29% of copublications include at least 1 PhD or PostDoc

The average annual rate of publication for young researchers involved in the projects is **0,30**

WHAT HAPPENS AFTER A BOSPHORE PROJECT ?

CONTINUATION OF THE COLLABORATION (1/5) (COMPARISON BETWEEN 40 DIFFERENT BILATERAL PROGRAMS)



Continuation of the collaboration : 73% vs 81% mean

Continuation of the collaboration with other sources of subvention : 35% vs 34% mean

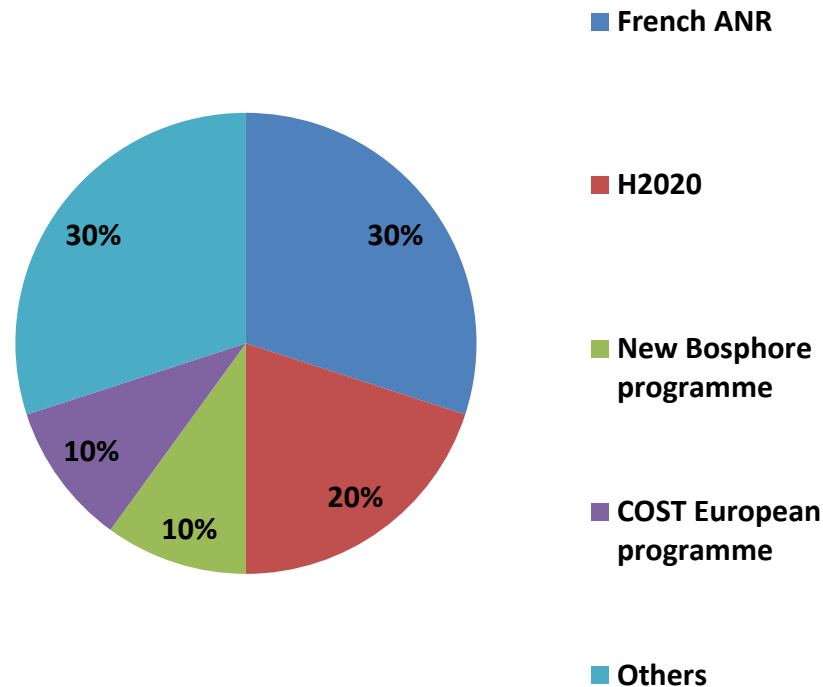
CONTINUATION OF THE COLLABORATION (2/5)

73% of the collaborations continued after the Bosphore project

Which activities?	
Co-publications	68%
Collaborative research	64%
Researchers mobility	55%
Joint participation to conferences	41%
PhD mobility	23%
Co-organisation of scientific events	18%
Joint participation to PhD thesis	14%
Joint diplomas (Master, PhD...)	5%
Other	5%

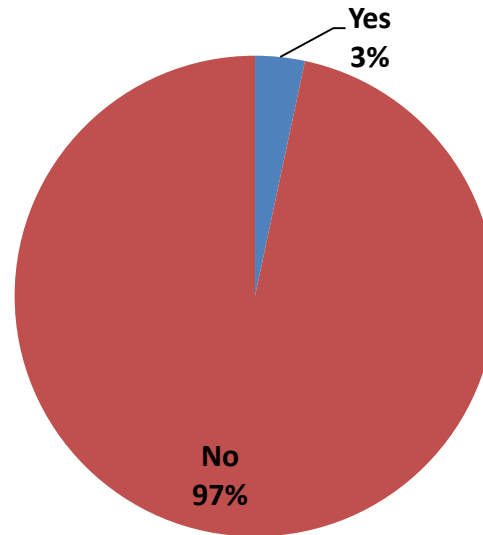
CONTINUATION OF THE COLLABORATION (3/5)

What kind of funded collaborations after the Bosphore project ?



CONTINUATION OF THE COLLABORATION (4/5)

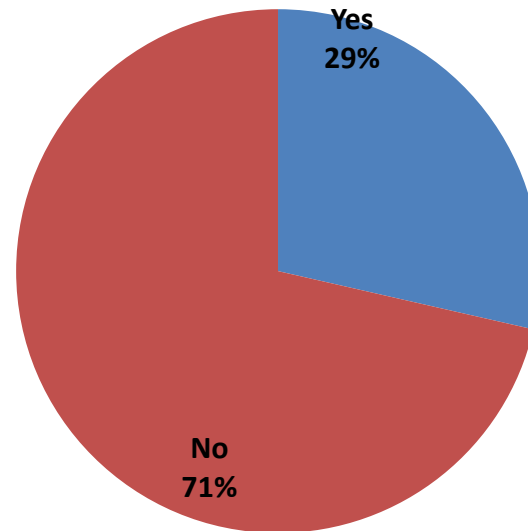
Has the Bosphore project led to the set-up of joint structures?



1 joint research group

CONTINUATION OF THE COLLABORATION (5/5)

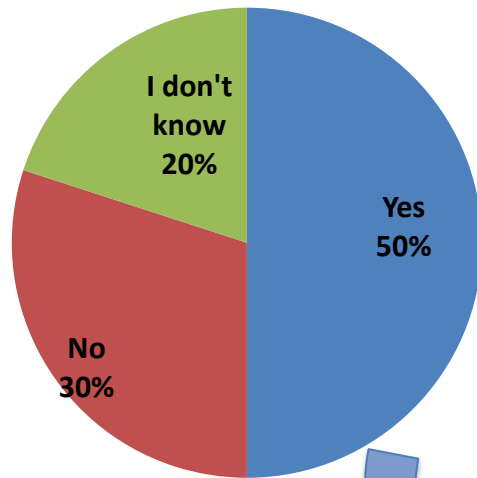
Has the France-Turkey collaboration involved new partners?



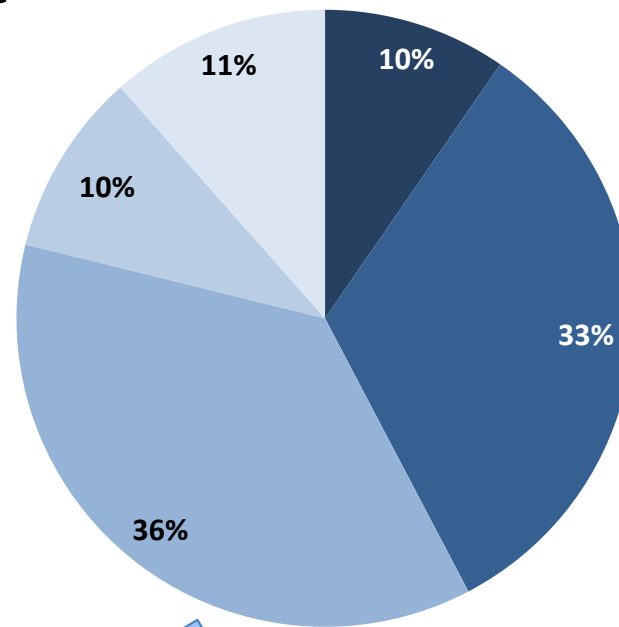
For a total of 7 new partners from 5 different countries

IMPACT ON FRENCH YOUNG RESEARCHERS' CAREER (1/2)

Was french young researchers' career impacted by the Bosphore program ?



Type of impacts



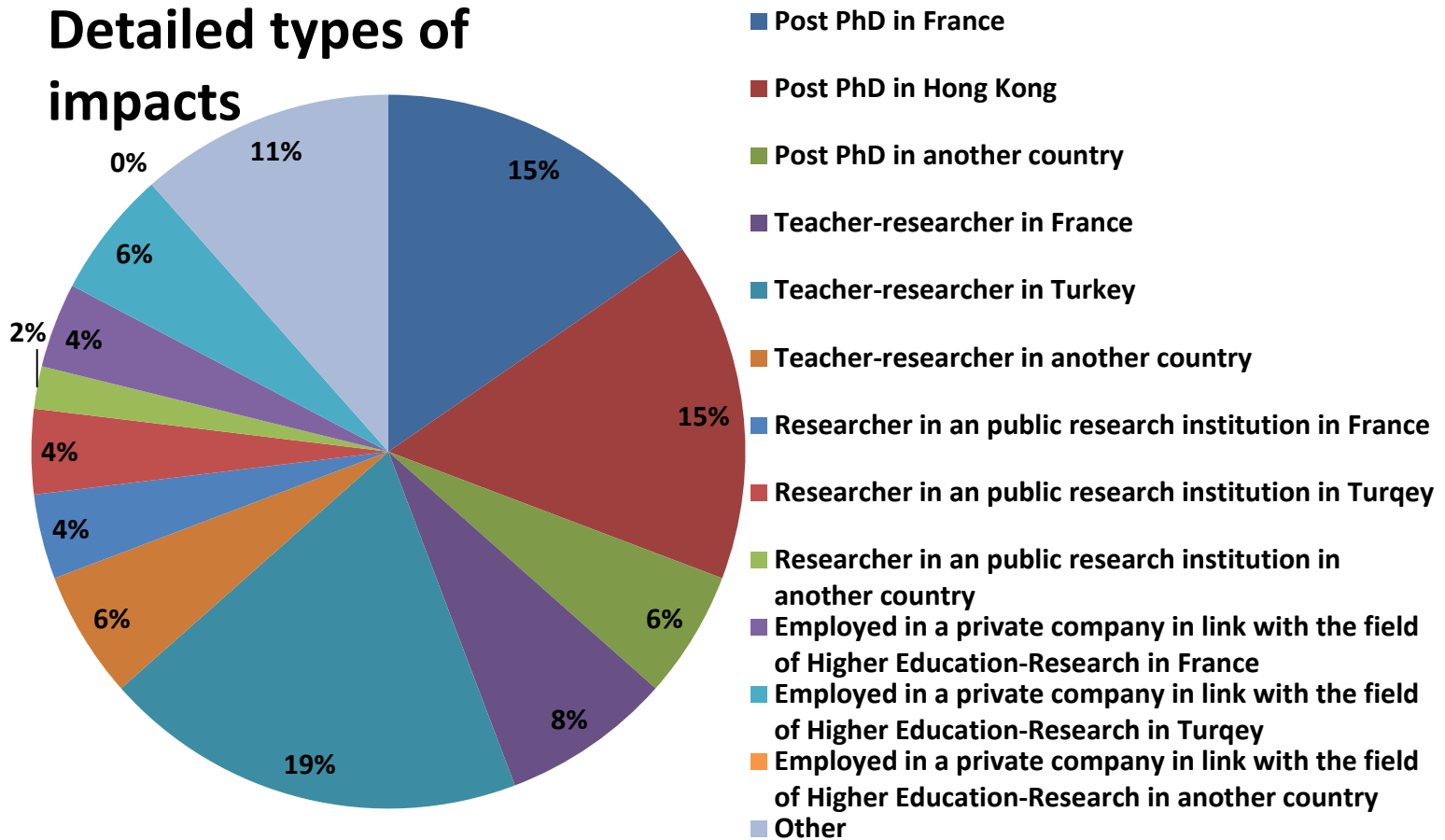
- Researcher in a public research institution (permanent position)
- Teacher/Researcher (permanent position)
- Postdoc/Teacher/Researcher (temporary position)
- Employed in a private company in link with the field of Higher Education - Research
- Other

Data from 30 responses

Data from 15 positive responses for a total of 52 french young researchers

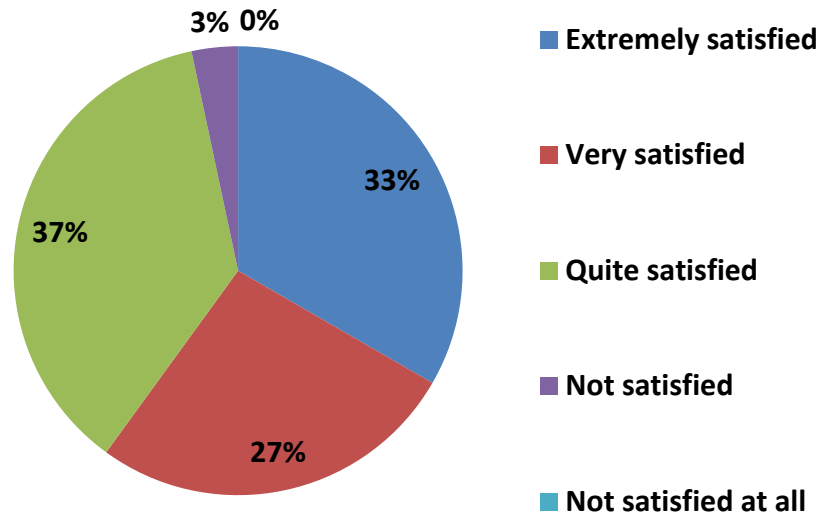
IMPACT ON FRENCH YOUNG RESEARCHERS' CAREER (2/2)

Detailed types of impacts



GENERAL OPINION OF FRENCH PIS ON THE PROGRAM

97% of French principal investigators are satisfied



Data from 30 responses

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

SURVEY OF 30 FUNDED PROJECTS



Strengths of this program	Number of occurrences (out of 167)	% (out of 30)
Fostering researchers' mobility	24	80%
Fostering an international research collaboration	22	73%
Fostering exchanges enabling scientific production	19	63%
Simplicity of the project application process	15	50%
Fostering the training of young researchers	15	50%
Helping to know the partner country	14	47%
Good scientific-added value on financial investment	10	33%
Sufficient amount of mobility time given to collaborate	9	30%
Easy implementation (administrative flexibility)	9	30%
Helpful to initiate other fundraising	7	23%
Financial autonomy towards your institution	7	23%
Financial means sufficient for the expenditure of mobility	6	20%
Sufficiently long duration of the projects	5	17%
Timetable for implementation	3	10%
Transparency of the selection process	1	3%
No strenght point	0	0%
Other	1	7%
<i>Total number of occurrences</i>	<i>167</i>	

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

SURVEY OF 30 FUNDED PROJECTS



Weaknesses of this program	Number of occurrences (out of 89)	% (out of 30)
Insufficient financial means to cover a project	17	57%
Difficult to continue the collaboration	12	40%
Length of support too short	12	40%
Lack of transparency in the selection process	8	27%
Financial means insufficient for the expenditure of mobility (per diem)	6	20%
Too short duration of mobilities	6	20%
Financial means insufficient for the expenditure of mobility (transport)	4	13%
Too low number of mobilities	4	13%
Heaviness of the process of applications	3	10%
Insufficient communication on the evaluation's results	3	10%
Administrative complexity	3	10%
Timetable for implementation	3	10%
Financial autonomy towards your institution	2	7%
No weakness	1	3%
Too long duration of mobilities	0	0%
Flexibility of the program for actions co-financed with the partner	0	0%
Other	5	17%
Number of occurrences	89	

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”.



Rather constant number of applications each year since 2016

29% of women PIs in the applications (vs 24% mean)

High implication of women PIs in the incoming mobilities (53%)

41% of french young researchers involved in the outgoing mobilities (vs 33% mean) and 44% of turkish young researchers involved in incoming mobilities

Annual number of copublications per project a little better than the mean (0,98 vs 0,93)

Continuation of the funding after the project through ANR (30%) and H2020 (20%)

Bosphore program initiates only 40% of new collaborations and 38% of the PIs have already benefited from a bilateral cooperation program with Turkey

Only 3% of PIs under 40 years (vs 22% mean)

Implication of young researchers in the projects lower than the mean (53% vs 66%)

Implication of young researchers in the copublications lower than the mean (31% vs 62%)

Percentage of co-publications implicating a young researcher under the mean (29% vs 42% mean)

33% of funded projects with no copublications



PRELIMINARY RECOMMENDATIONS

- **Promote newer cooperations between France and Turkey.**
- **Encourage French young researchers to apply**
- **Encourage French PIs to increase the implication of young researchers in the projects and the copublications**
- **Increase the number of projects leading to copublications**
- **Consider a “BOSPHORE +” program to help PIs at the end of their financing to apply to international programs ?**

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