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# The ERASMUS Impact Study

Effects of mobility on the skills  
and employability of students  
and the internationalisation  
of higher education institutions



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Luxembourg: Publications Office of the European Union, 2014

Catalogue number: NC-04-14-545-EN-N  
ISBN 978-92-79-38380-9  
doi: 10.2766/75468

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# The Erasmus Impact Study

Effects of mobility on the skills and employability of students and the internationalisation of higher education institutions



**CHE**  
Consult



Brussels Education Services



**CHE**  
Centrum für  
Hochschulentwicklung



compostela



**I\*ESN**  
INTERNATIONAL EXCHANGE  
ERASMUS STUDENT NETWORK

Service Contract signed with the European Commission  
EAC-2012-0545

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Such a large-scale study cannot be conducted without the support and help of numerous individuals and organisations which were not part of the original consortium. The team would like to take this opportunity to express its gratitude to those who, through their engagement, made this study possible.

### **Advisory board:**

The EIS team is very grateful to all who agreed to accompany the project as advisors. The members of the Advisory Board were:

*Hans de Wit*, who not only acted as a very active member of the Advisory Board, but also gave intensive and substantial feedback on the final report;

*Patricia De Clopper* from Utrecht Network;

*Jonathan Hooley* from the Centre National des Études Pédagogiques (CIEP);

*Linda Johnson* from the International Institute for Social Studies (ISS);

*Erich Thaler* from the University of Basel;  
and *Wioletta Wegorowska* from the Santander Group of Universities.

### **Supporting organisations and individuals:**

The EIS team is very grateful to the following organisations for supporting EIS by distributing information:

Cámara de Comercio de Santiago de Compostela (Isabel Garrido)

EMUNI (Denis Curcic), London Chamber of Commerce and Industry (Jodie Leon)

Helsinki Region Chamber of Commerce (Tuomas Kemppi)

HEURO (Association of UK Higher Education European Officers) (Joan-Anton Carbonell)

UNEECC (University Network of the European Capitals of Culture).

Furthermore, the following people acted as contact persons for the site visits or as rapporteurs and, by doing so, strongly supported the study:

Rossica Betcheva	Dave Lochtie
Dr. Dietmar Buchmann	Beatriz Marín Noriega
Adriana Lago de Carvalho	Kristen Pilbrow
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	and Martin Vasek.

## Abbreviations

CIMO	Center for International Mobility
DG EAC	Directorate General Education and Culture
EIS	Erasmus Impact Study
ESN	Erasmus Student Network
HEI	Higher Education Institution
IaH	Internationalisation at home (IaH)
IP	Intensive Programme
Memo©	Monitoring Exchange Mobility Outcomes
SD	Standard deviation
SMS	Student mobility for studies
SMP	Student mobility for placements
STA	Staff mobility for teaching assignments (the former 'TS')
STT	Staff mobility for training
WP	Work placement

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## Executive Summary

### Key findings



## **The Erasmus Impact Study analyses the effects of mobility on the employability and competences of students and the internationalisation of HEIs.**

The Erasmus Impact Study (EIS) aims to answer two major questions. Firstly, it analyses the effects of **Erasmus student mobility** in relation to studies and placements on individual skills enhancement, employability and institutional development. Secondly, it examines the effects of **Erasmus teaching assignments/staff training** on individual competences, personality traits and attitudes, as well as the programme's impact on the internationalisation of Higher Education Institutions (HEIs).

## **EIS uses an innovative methodology by introducing a psychometric related tool and relating facts, perceptions, personality traits and attitudes.**

In order to answer the research questions posed, a quantitative and a qualitative study were conducted. The basic design of the quantitative study was a mixed-methods approach, offering for the first time ever the opportunity to compare perceived development with the real development of students with regard to skills related to employability. To produce sufficient quantitative data, the research team launched five online surveys in 2013, resulting in the participation of 56,733 students (includes mobile students with and without Erasmus experience and non-mobile students), 18,618 alumni (83% mobile with and without Erasmus), 4,986 staff (academic and non-academic, mobile and non-mobile), 964 higher education institutions and 652 employers (of which 55% were SMEs) across the 34 countries participating in the programme (see Annex 1). **In total, the sample for the study comprises 78 891 individual responses.**

To measure **real developments** in the skills of students and staff after their stay abroad, the EIS used six 'memo© factors' developed by CHE Consult which are most **closely related to employability: Tolerance of Ambiguity (acceptance of other people's culture and attitudes and adaptability), Curiosity (openness to new experiences), Confidence (trust in own competence), Serenity (awareness of own strengths and weaknesses), Decisiveness (ability to make decisions) and Vigour (ability to solve problems).** These six memo© factors are characteristics of personality traits.

The EIS student survey that targeted students who were internationally mobile during the course of this study consisted of an *ex ante* and an *ex post* survey. It was therefore possible to assess the direct outcomes of the experience of mobility and compare the measurable short-term *ex ante* effects to long-term *ex post* effects by using the psychometric data from the survey among mobile alumni.

In addition to the innovative memo© approach of measuring the real effects of mobility, EIS also used the more traditional method of measuring perceptions. This is important for a number of reasons: firstly, it allows for a comparison with former studies; secondly, it offers the possibility of comparing the perceptions of groups which could be analysed using the memo© factors (students, alumni and staff) and others who could not (HEIs and employers); and, thirdly, it allows for a direct comparison between the real and perceived development of students.

EIS also went beyond the classic perceptual surveys of staff mobility by introducing a psychometric analysis of the memo© factors for academic and non-academic staff and comparing the results to the perceptual data (especially those provided by the HEIs in the institutional survey).



The results from the quantitative study then provided the basis for the qualitative study, which aimed to provide more insights into questions that arose from the quantitative study and to confirm or reject the quantitative findings. For this purpose, focus group meetings were held in eight countries: Bulgaria (BG), Czech Republic (CZ), Finland (FI), Germany (DE), Lithuania (LT), Portugal (PT), Spain (ES) and the United Kingdom (UK). The team had designed an innovative methodology that combined various qualitative methods for the various target groups. The qualitative study was conducted through a series of site visits to each of the selected countries, supplemented by online, telephone or face-to-face interviews.

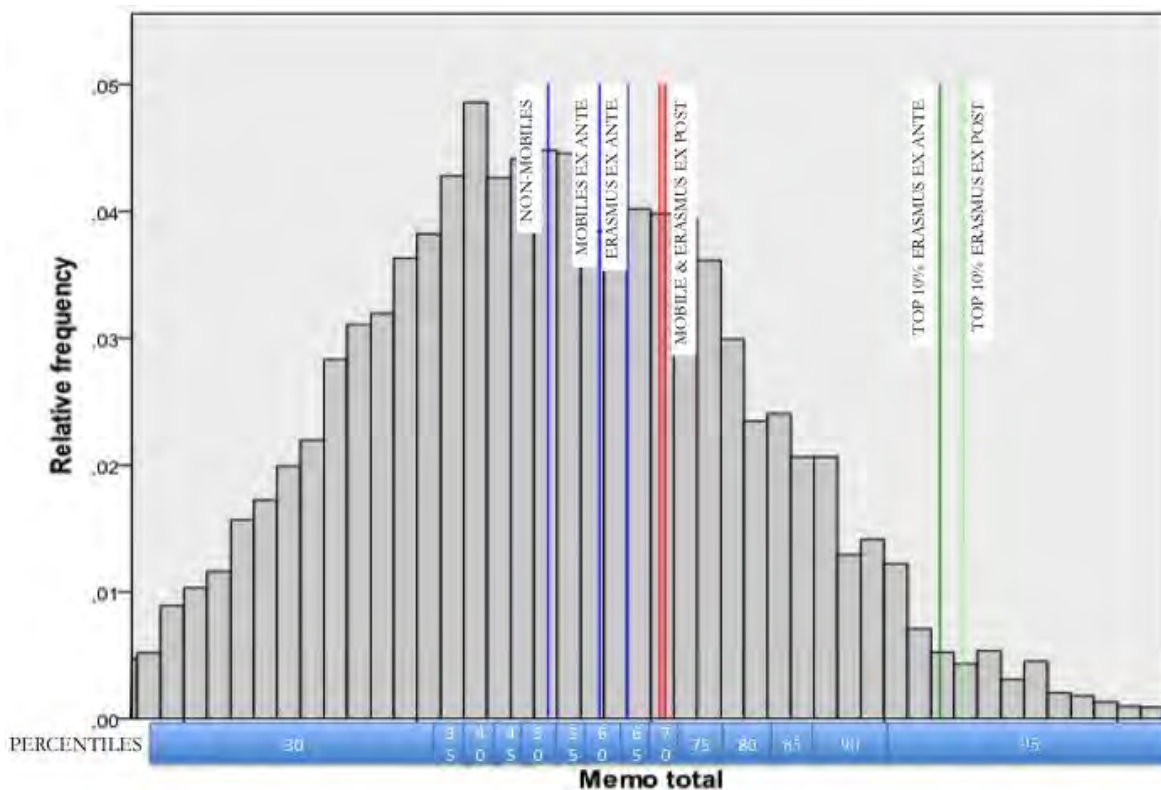
### **Employability and competences of students greatly benefit from mobility, often more than what they had expected, but sometimes less than they might have thought.**

The analysis started by exploring the reasons that students gave for going abroad, as well as the main reasons for deciding against a mobility experience. Over 90% of the mobile students wished to experience living abroad, to develop skills such as adaptability, and to improve their language abilities. All of these aspects played a major role when analysing the skills and the career development of mobile students. On the other hand, only 14% of non-mobile individuals did not go abroad because they were not selected by the programme; in other words, Erasmus is a rather **non-selective** mobility programme. For more than 50% of non-mobile students, the reasons for not going abroad were uncertainty about additional costs, personal relationships and lack of financial resources. This could be explained partially by the fact that 62% of the non-mobile students are from a non-academic family background, while this applied to 46% of Erasmus students.

We considered it especially important first and foremost to confirm the relevance of the six competences measured by the six memo© factors selected. On average, 92% of the 652 surveyed employers confirmed the importance of these competences with regard to employability. The **share of employers who considered experience abroad to be important for employability also nearly doubled between 2006 and 2013 from 37% to 64%.**

Having confirmed the relevance of the skills related to employability, EIS analysed the impact of mobility on these skills. One of the most striking findings was that mobile students, in general, and Erasmus students showed higher values for the six personality traits than non-mobile students - even before going abroad. In this respect EIS confirms previous research that claimed that individuals with predispositions such as openness and adaptability are more likely to go abroad. **Once, they had gone abroad, mobile students also increased their advantage on the memo© values over the non-mobile students by 118% for all mobile students and 42% for Erasmus students.** On average, the gain of mobile students might look rather small to non experts in terms of absolute memo© values. Previous research, however, shows that personality traits are generally rather stable and subject to little and slow change. The absolute changes observed for Erasmus students were of the same intensity as other major life events, such as leaving their parents, which is quite remarkable, and in line with changes observed in comparable research. However, more important than absolute values, the most important conclusions that could be drawn from such analysis related to the trends observed when comparing groups before and after mobility. After their stay abroad, **the average Erasmus student showed higher memo© values than 70% of all students** and the top 10% of Erasmus students had higher average values than the top 95% of all students.

**Figure 0-1 Distribution of memo© total averages for Erasmus students versus all mobiles and non-mobile students over the extrapolated entire student population**



Moreover, the majority of students increased the employability skills as measured by the memo© factors for 51% of all mobile students and 52% for Erasmus students. On the other hand, approximately 81% of Erasmus students were of the opinion that they had experienced an improvement in relation to these factors. This also shows the value of comparing perceptions with real measurements when analysing the impact of mobility.

EIS also observed the impact of mobility on other skills related to employability that could only be analysed based on the statements of respondents. More than **90% of the students** reported an improvement in their **soft skills**, such as knowledge of other countries, their ability to interact and work with individuals from different cultures, adaptability, foreign language proficiency and communication skills. In addition, **99% of the HEIs** saw a **substantial improvement in their students' confidence and adaptability**. Given the observed difference between perceived development on the memo© factors and the measurable difference, these results have to be considered, however, with some caution.

In the interviews during the qualitative study, students first and foremost perceived Erasmus mobility as a defining period in their personal and professional development, leading to greater maturity and personal enrichment, not least due to the challenges they experienced. Teamwork skills and attributes such as self-confidence and resilience were felt to have improved significantly after exchanges, as had communication skills, language and presentation skills, interpersonal and intercultural competences, problem-solving skills, planning and organisation skills, critical thinking, openness, creativity, cultural and ethnic tolerance, self-understanding, better understanding of others, responsibility and adaptability. Moreover, job placements were especially highly valued by students, alumni and employers because they enabled further professional development and the acquisition of a relevant work experience.

## **Mobility strongly influences one's career as well as one's social life.**

In addition to skills, the EIS also analysed the impact of mobility on working life and career. Job placements seem to have a specifically direct effect in that more than **one in three students who did an Erasmus work placement was offered a job** by their host company and they also seem to foster **entrepreneurship: almost 1 in 10 students on a job placement started their own company**, and more than 3 out of 4 plan to or can envisage doing so. Mobility also affects employment rates. Former mobile students are half as likely to experience long-term unemployment compared with those not going abroad. Even five years after graduation, **the unemployment rate of mobile students was 23% lower** than for non-mobile students. Of the employers questioned, 64% report that graduates with an international background are given greater professional responsibility more frequently, a proportion that has increased by 51% since 2006. Of the Erasmus alumni surveyed, 77% held positions with leadership components 10 years after graduation, and Erasmus alumni were 44% more likely to hold managerial positions than non-mobile alumni 10 years after graduation. This difference was restricted to the lower and middle-management levels, while at the top management level no differences in favour of mobile alumni could be observed.

Student mobility also promotes job mobility in the future. Of the mobile students, 93% (compared with 73% of the non-mobile students) could envisage living abroad and 95% of mobile students (compared to 78% of non-mobile students) wished to work in an international context. 40% of mobile alumni had changed countries at least once since graduation, 18% more than among non-mobile alumni. Former Erasmus students are also more than twice as likely to change their employer as non-mobile alumni. Additionally, mobility is linked with attitudes towards Europe. More than 80% of the Erasmus students felt a strong bond with Europe.

Mobility also affects the social life of students. At the time of the survey, 32% of all mobile alumni and **33% of the Erasmus alumni had a life partner of a different nationality** than their own, nearly three times more than among the non-mobile alumni (13%), and 24% of mobile alumni and **27% of Erasmus alumni had met their current life partner during their stay abroad.**

## **The internationalisation of HEIs benefits substantially from mobility, but services and recognition can still be improved.**

Apart from the effects on individual students, EIS also analysed the possible impact of mobility on the HEI itself, its **staff**, teaching and curriculum, its cooperation, its services and the strategic aspects of internationalisation. In general, a majority of HEIs consider Erasmus to be the most relevant strategic asset of any educational programme offered to students. Of the various Erasmus actions, **study mobility is considered the most important** in relation to internationalisation by 83% of HEIs and for their international profile (80% of HEIs). The participants in the group meetings and interviews confirmed that the Erasmus programme made a valuable contribution to the internationalisation of students, staff and HEIs themselves. This became even more evident in the case of new or private universities, for which Erasmus was the "umbrella" strategy which supported and encouraged their internationalisation.

With regard to the impact on the staff of HEIs, mobile staff had statistically significant higher values than non-mobile staff for five out of six memo© factors. They were also found in a 10% higher quantile than the non-mobile staff, indicating a relevant difference between both groups. Moreover, 85% of mobile staff felt a strong bond with Europe, compared to 69% of the non-mobile sample. This seems to indicate that **an international mindset is strongly linked to the experience of mobility itself.** Moreover, staff mobility also seemed to have an influence on the development of competence, as 78% to 96% of staff with experience of Erasmus staff mobility actions

claimed to have improved in all areas of competence, with social competences benefitting most from experience of mobility (93% to 96%). More than 70% of the staff agreed that the most important aspect of mobility was the increase in their knowledge of **good practices and skills** to the benefit of their home HEI. Of the academic staff, 81% observed beneficial effects on the **quality of teaching** and on multi-disciplinary and cross-organisational cooperation in teaching, **92% saw effects on international cooperation**, and 69% observed a positive impact on research opportunities.

The perception of HEIs' top management strongly coincided with the staff perspective: more than 90% regarded staff mobility as an effective means of achieving major objectives, such as the motivation of students to go abroad, internationalisation at home, the promotion of new pedagogical methods, motivating other staff to go abroad and the enrichment of their course offerings. In this context, Intensive Programmes were considered to be a particularly effective instrument by HEIs and staff (both more than 90%), especially with regard to the internationalisation of the curriculum, raising awareness of internationalisation and increasing research cooperation.

The qualitative study largely confirmed these findings. In many countries, the Erasmus programme currently seems to represent the only possibility for teachers to travel abroad. There was strong consensus among interviewees confirming the **positive impact of the Erasmus programme on the development of teaching methods** and cooperation in research. Several academic staff members stated that their stay in a different national and academic context forced them to reflect on, revise and further develop their teaching methods. However, **academics also voiced a general complaint concerning the lack of academic, institutional and curricular recognition of staff exchanges**.

As the qualitative study also showed, it was commonly understood among all interviewees that the impact of academic staff mobility was likely to be higher than that of student mobility with regard to the outreach that could be achieved, both in relation to students and staff, abroad and at home.

Another aspect of the analysis was the effect of mobility on the activities of HEIs in the area of cooperation. Of the HEIs surveyed, 98% expected that collaboration with partner institutions would be improved. Furthermore, 54% agreed that cooperation structures within the Erasmus programme depended on personal relationships. Of the staff, 81% also saw an impact on multilateral Erasmus projects and 77% observed an effect on the initiation of and 73% on participation in research projects, while the HEIs also observed positive effects on joint courses.

Mobility depends on the accompanying services, but may also have an impact on such services. EIS therefore analysed this sector as well. The most important aspects in this regard were mobility windows and 90% of the HEIs estimated that such windows were important, while 69% had yet to implement them. Moreover, 72% of mobile students considered the existing study structures/programmes to be suited to international mobility. In addition to this, for 96% of the HEIs, recognition of ECTS was the most important aspect of the organisational framework with regard to student mobility. Of HEIs, 90% declared that they recognised credits from host institutions abroad and 86% of mobile students were convinced that their study programme recognised ECTS credits from a host HEI abroad. With regard to pre-departure information, a substantial discrepancy between the institutional and individual perspectives could be observed. Only 68% of mobile students in relation to study abroad and 49% in relation to job placements abroad stated that every student interested in studying abroad received adequate information and guidance.

The focus group meetings and interviews confirmed that the large number of outgoing and incoming Erasmus students created a critical mass of demand for new and improved support services in many institutions. While the Erasmus programme undoubtedly led to the development of an internationalisation infrastructure at many universities,

expectations with regard to the type and quality of HEI support services still differed vastly between countries.

While support services for students were considered very relevant to HEIs, in general the organisational framework for staff mobility seems at present to be less developed. Although 89% of HEIs considered financial support for academic staff mobility important, only 67% had implemented such support and a minority of HEIs had more concrete incentives in place the moment that the survey was held. A third of the HEIs claimed that a reliable substitution of teaching staff abroad was ensured and only 25% stated that they provided a top-up grant. The qualitative study again confirmed these findings. Many teaching staff expressed the feeling that their involvement in such activities would not be highly valued at their home HEI. In some countries, the lack of capacity for support services may even be a bottleneck in the further expansion of mobility programmes.

The main challenge in reaching the target that 20% of higher education students should be mobile during their studies by 2020 will be to motivate the students who are less likely to go abroad. As the memo© factors showed, the willingness to go abroad is predetermined by the predispositions of the individuals. In order to make more non-mobile students become mobile, a change of their mindset will therefore be necessary. For this internationalisation at home will be essential and this will depend on the experience and knowledge of academic and non-academic mobile staff. It is therefore of the utmost importance that staff mobility will be included among the top priorities of the internationalisation strategies of HEIs.

### **Measuring effects and competences requires other methods in addition to satisfaction surveys.**

The study, in general, and the differences between the self-perception of students and the memo© findings, in particular, showed the extent to which the memo© approach based on the combination of facts, perceptions, personality traits and attitudes is superior to other traditional surveys and simple inquiries on perceptions and opinions when it comes to measuring outcomes and the impact of mobility. The results also suggest that an annual assessment of the memo© values would allow for a deeper analysis and a proper comparison of different lengths of stay, as well as a monitoring of the new approaches implemented by the Erasmus+ programme. It seems advisable also to produce country analyses analogous to the European-wide analysis.

Overall, the impact of the Erasmus programme on students, staff, curricula and the entire academic community is substantial at both individual and institutional levels. The study highlights the potential of the Erasmus programme and consequently the respective potential of its successor, Erasmus+, as a contributor to social equality within countries, especially through its positive impact on the employability of young graduates.

In the qualitative study, many participants, however, stated that the bureaucracy surrounding the programme could be improved. In summary, students asked for more money, more job placement opportunities and more integration. Academic staff asked for more formal recognition and better support for their mobility. HEIs were keen to achieve greater homogeneity in the processes and to reduce the bureaucracy. However, all the stakeholders made a common request: Erasmus should be expanded and more attention should be paid under Erasmus+ to the quality of mobility, rather than to its sheer quantity.

The main challenge of Erasmus+ will be to maintain the momentum of the Erasmus programme while dealing with the aspects of improvement that need to be addressed.

## 1. Introduction

In the wake of economic crises and a challenging employment context throughout the world, Europe needs to create jobs and prosperity. To achieve this, higher education with its links to research and innovation can play a crucial role in personal development and economic growth by providing the highly qualified people and articulate citizens that Europe needs.<sup>1</sup> The European Union, through its Modernisation Agenda (2011), therefore identified various key issues for Member States and Higher Education Institutions with a view to achieving economic growth and creating jobs, such as raising attainment levels to provide the graduates and researchers Europe needs; improving the quality and relevance of higher education; strengthening quality through mobility and cross-border cooperation; making the knowledge triangle work: linking higher education, research and business to achieve excellence and bring about regional development; and improving governance and funding.<sup>2</sup>

Higher Education Institutions (HEIs) are seen as crucial partners in realising the European Union's strategy to maintain economic growth and achieve prosperity. There is no doubt that globalisation, international mobility and demographic change have radically altered the face of higher education in Europe and internationally. Erasmus mobility and Intensive Programmes (IPs) for students and staff also contributed to this change and are seen as a way to achieve the internationalisation of European higher education, as well as to equip European citizens with the skills needed to increase their employability and **thus contribute to Europe's economic growth**.<sup>3</sup> On the whole, however, empirical studies and data on Erasmus mobility and its effects on individuals and HEIs do not abound and there is a particular shortage of reliable data and research that goes beyond perception analysis and into the measurement of real effects and outcomes.

The **Erasmus Impact Study "Effects of Mobility on the skills and employability of students and the internationalisation of Higher Education Institutions"** is designed to fill these gaps with regard to the effects of such mobility on both individuals and HEIs. The study is based on a mixed-methods approach to research, merging large-scale quantitative surveys with qualitative surveys of various target groups and control groups of mobile and non-mobile individuals. Empirical, perceptual and attitudinal items were combined to explore the effects of Erasmus mobility and IPs. The study also explores the differences in individual and institutional achievements through the Erasmus programme across the eligible countries.

At the individual level, the study focuses on the effects of Erasmus mobility on skills development and the employability of students. To conduct this analysis, EIS focuses on the effects of different types of mobility on the development of individual competences and skills of students (which have an impact on employability). All these aspects are covered in Chapter 3. At the institutional level, the study pays attention to the effects of Erasmus mobility and IPs on competences of staff, institutional development and the internationalisation of HEIs. To conduct this study, EIS concentrates on the effects of the types of mobility on institutional development (internationalisation) and the international profile of the HEIs, i.e. the aspects that make an HEI international, including the possible effects on the staff. These aspects are analysed in Chapter 4.

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<sup>1</sup> European Commission (2011a, 1).

<sup>2</sup> *ibid.*, 1–9.

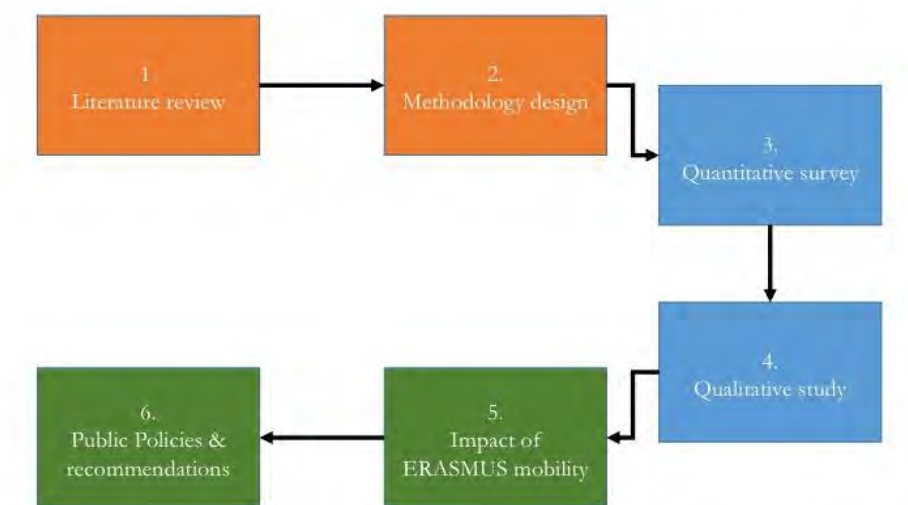
<sup>3</sup> *ibid.*, 6.

## 2. Methodology and design

### 2.1. General design

In order to analyse the impact of Erasmus mobility on skills development, employability, the internationalisation of HEIs and institutional development, EIS was based on a mixed-methods approach, sequentially applying a combination of research methods to various samples of students and staff from HEIs, as well as alumni, HEIs and employers in countries eligible for the Erasmus programme.

**Figure 2-1 Research phases**



### 2.2. The quantitative study

A systematic framework was developed as a basis for designing the surveys. This was necessary to generate questions relevant in each survey and to be able to compare the results at a later stage. In addition, questions from other studies were introduced to make comparisons of the results possible.

#### Systematic framework for designing the surveys

The quantitative study is based on five quantitative surveys: students, alumni, staff, HEIs and employers. In addition to a substantial number of perceptual questions, designed specifically for EIS, the surveys also incorporated numerous questions from previous studies to make the EIS results directly comparable to those of these former studies and thus allowing for timeline development analysis. With this in mind, we included the following previous studies:

1. the 2010 European Parliament study on improving the participation in the Erasmus programme, hereinafter referred to as the “CHEPS study”;<sup>4</sup>
2. the 2006 “Professional Value of Erasmus Mobility” study by the International Centre for Higher Education Research (INCHER-Kassel), presented to the European Commission, hereinafter referred to as the “VALERA study”;<sup>5</sup>

<sup>4</sup> [http://www.europarl.europa.eu/meetdocs/2009\\_2014/documents/cult/dv/esstudyerasmus/esstudyerasmusen.pdf](http://www.europarl.europa.eu/meetdocs/2009_2014/documents/cult/dv/esstudyerasmus/esstudyerasmusen.pdf)

<sup>5</sup> [http://ec.europa.eu/education/erasmus/doc/publ/evalcareersum\\_en.pdf](http://ec.europa.eu/education/erasmus/doc/publ/evalcareersum_en.pdf)

3. the 2010 “Employers’ perception of graduate employability” Flash Eurobarometer study by the Gallup Organization, requested by the European Commission, hereinafter referred to as the “Flash Eurobarometer study”.<sup>6</sup>

The Erasmus programme, in general, and the student mobility programmes for studies and placements, in particular, have three different aims: they wish to offer individuals personal experience, but in addition they are meant to have an economic as well as an academic impact. International experience is seen as a means of improving skills that are important for employees as well as employers and increase the internationalisation of the HEI. For this reason, we carried out the surveys amongst various target groups.

In designing the surveys, we differentiated between the following levels:

**Background:**

***Personal:*** relevant to students, alumni and staff, including aspects like language proficiency, gender and academic background (only students).

***Institutional:*** with reference to the respective HEI and relevant to all surveys, including aspects like the country of the HEI, and its size and profile.

***Mobility:*** with reference to the prevailing mobility formats, thus relevant to all the surveys.

***Company:*** with reference to the companies participating in or profiting from international mobility, relevant to employers, but also students (who participated in placement mobility), staff (who participated in staff mobility) and alumni (with reference to their current career environment).

**Measurable effects:**

On the basis of the memo© approach<sup>7</sup>, EIS identified six factors which are closely linked to employability skills (see below) which can be presented as personality traits, but are affected by experience. By measuring these factors before and after the **students’ stay abroad, EIS could assess change facilitated by international experience.** The factors were used to compare mobile and non-mobile groups of respondents, also for alumni and staff.

**Perceived effects:**

***Individual:*** with reference to different types of intercultural interest and motive for mobility, as well as assessments of the skills gained by international experience, closely related to employability skills, and relevant to all the surveys; various types of effects on careers, as well as identification with Europe, and relevant to all the surveys.

***Institutional:*** relevant mostly to the institutional survey, but also to the staff survey, with reference to various types of institutional impact, such as international cooperation and networking, as well as effects on research and institutional profile.

The results for these different dimensions were then used in the relevant chapters of the EIS. The surveys relating to specific target groups were meant to provide comparable data, not only for a comparison of the EIS surveys of the various target groups (students, alumni, staff, employers and institutions), but also for a comparison of the various groups per survey: groups which are mobile through the Erasmus programme or some other experience, and non-mobile groups.

<sup>6</sup> [http://ec.europa.eu/public\\_opinion/flash/fl\\_304\\_en.pdf](http://ec.europa.eu/public_opinion/flash/fl_304_en.pdf)

<sup>7</sup> See <http://www.memo-tool.net>



## Country perspectives

The analysis of the data normally focuses on the target groups, as set out in the tender specifications. However, this analysis provides the reader only with overall averages across Europe. For more or less every item, the data shows variances between the countries if one departs from the European perspective. We have therefore provided two perspectives on the aspect of diversity by country. Firstly, we provided a country report for each country in the study, which includes the aggregated participation data. Due to the amount of data, these reports are displayed in **Annex 1**. Secondly, where applicable, we included some cross-country comparisons in the analysis using Easymaps.<sup>8</sup> Technically such representation could be done for any item under scrutiny, but this would have increased the length and complexity of the report to an unacceptable extent. We have therefore restricted ourselves to aspects for which such representation had a specific explanatory value.

## The MEMO© factors in EIS

Furthermore, the EIS student survey that targeted students who were internationally mobile during the course of this study consisted of an *ex ante* and an *ex post* survey. It was therefore possible to assess the direct outcomes of the experience of mobility and compare the measurable short-term *ex ante* to *ex post* effects to long term effects by using the psychometric data from the alumni survey.

In addition and for the first time, EIS also went beyond the classical perceptual surveys of staff mobility by introducing a psychometric-related analysis of the memo© factors for academic and non-academic staff and comparing the results to the perceptual data (especially those provided by the HEIs in the institutional survey). Consequently, for the first time EIS compares the real effects of mobility on students and staff. The most important innovation of EIS lies in this introduction of memo©. Memo© originally consists of ten factors. For EIS, those factors, which bore no relation to employability, were excluded. For the remaining six factors, their relevance to employability was tested through a survey amongst employers and alumni, which confirmed the relevance of those factors for the skills related to employability (see chapter 3). The surveys of students, alumni and staff each then contained a specified psychometric-related questionnaire, consisting of 49 items and referring to the following six factors:<sup>9</sup>

**Confidence:** High values for this factor point to a high degree of self-sufficiency and a **strong conviction regarding one's own ability** - aspects that may positively impact academic or professional success. Individuals with high values for this factor may, however, also be inflexible and set in their ways. Low values show doubt about one's own ability and perseverance, grounded, for instance, in negative experience or personal insecurity.

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<sup>8</sup> Easymaps is visualisation software for displaying trends and differences over regions. See <http://www.easymap24.de>

<sup>9</sup> For a description of the factors, see Table 2-2.

**Curiosity:** High values for this factor indicate that a person is not only open to new experience, but actively seeks to broaden his experience. This also applies to new academic or professional challenges. Low values point to a much more reluctant attitude towards new experience and a greater appreciation of that which is familiar.

**Decisiveness:** High values point to an active and decisive individual, who may have a rather critical attitude towards others. Low values suggest that the individual is more likely to reconsider his or her decisions to accommodate the opinions of others.

**Serenity:** High values for this factor indicate that a person knows his or her strengths and weaknesses. This positive self-assessment not only leads to a more relaxed relationship to other individuals or new demands, but might also help to prevent disappointments. Low values, on the other hand, suggest a much higher stress level **that can be caused by a misjudgement of one's own abilities, accompanied by difficulty understanding the given demands and requirements.**

**Tolerance of Ambiguity:** High values for this factor mean that a person is capable of tolerating the behaviour and values of other individuals without compromising his or her own values. This is also closely related to adaptability, as students with a high level of tolerance of ambiguity can adapt much easier to new situations. Low values mean that a person feels very uncomfortable if confronted with different values and ways of life of other people. Such individuals may espouse a more traditional view of things, based on their own perspective and experience, as influenced by family, society and established norms and values. Deviation from what is conceived as "normal" is perceived to be threatening or at least a cause of discomfort.

**Vigour:** High values reflect a "problem-solver" who does not like to delve into the unsolvable aspects of a task, but focuses on the doable, and also likes a challenge. Low values reflect an individual who is well aware of problems or problematic aspects of a situation and who might be more concerned with identifying the problem than with solving it. Accordingly, such an individual would be less goal-oriented.

**Memo© total:** The total value represents an average of all items.

The memo© approach showed that, in addition to self-assessments of the competences and skills gained, it is also necessary to have data that is less subject to a social **desirability response set (see Paulhus 2002) and is based on the participants'** assessment of their own behaviour, rather than subjective assessments at the level of competences. For the memo© factors within the survey, answers were normalised to a scale of 0-10. The standard deviation was 0.88.

The quantitative team controlled for alternative explanations which could influence the change in memo© values from **ex ante** to **ex post**. Especially the team controlled for maturation effects to make sure that the memo© change results were not distorted by the age of the participant. The analysis showed no detectable systematic distortion.

A second important methodological decision was to take the **ex ante** memo© values of the non-mobile students as a one-off factor for comparison and not consider **ex post** values. The main reasons for this were that on the one hand, a maturation effect could be disregarded. Therefore, to take a snapshot of the non-mobile group was sufficient to display the attitudinal status of a non-mobile student. Moreover, the large sample of 4,906 non-mobile students gave strong confidence to the values for this group as a snapshot in time. This was not the least proven by the fact that nearly all differences shown in the study between mobile and non-mobile respondents were statistically significant, i.e. the differences were not coincidental.

For staff, EIS calculated a snapshot of memo© values. The reason for this was that this group had generally experienced mobility, or more often various cases or incidents of mobility, in the past. Therefore, the value of the memo© results for this group mainly lay in their power to show long-term effects of mobility and the predisposition of staff for mobility and their international orientation which, as we show, both have strong impact on their perspectives and opinions. These results were also confirmed in the qualitative interviews.

For analysis of the memo© values, three different aspects were considered.

### Significance

The most widely spread measurement of effect as such is significance. For memo© values in EIS, a significance level of 0.01 could be defined, i.e. for 99 out of 100 cases the change between *ex ante* and *ex post* as well as between mobile or Erasmus and non-mobile students was an effect of the factor that differentiated the groups, namely mobility. Moreover, as was stated above, the team could rule out other alternative explanations (especially maturation) and therefore systematic errors. The large size of the samples made most of the differences significant.

However, significance, as mainstream as it may be, does not necessarily say anything about the size of the effect. For this reason, other approaches were included.

### Effect sizes and their interpretation

In order to assess the importance of differences between groups (in this case: non-mobile students, Erasmus students and mobile students), one needs to attach a value to their differences in memo© values. In statistics, different measures are used to estimate such effect sizes. A common method for measuring and gauging effect sizes often used in psychometrics is Cohen's *d* (Cohen 1988). Cohen's *d* represents the mean difference between two groups, divided by a standard deviation<sup>10</sup> for the data, i.e.  $d = \frac{\mu_1 - \mu_2}{\sigma}$ .

Cohen himself introduced the following cut-offs to gauge the "practical significance" of differences:

- $d > 0.2$  = small effect (1/5 of a standard deviation)
- $d > 0.5$  = moderate effect (1/2 of a standard deviation)
- $d > 0.8$  = large effect (8/10 of a standard deviation unit)

While such standardized points of reference for effect sizes should be avoided if possible (Baguley 2009), they are considered by some researchers to be valid when typical effect sizes for specific measures are not available from previous work in the field. Still, even Cohen was concerned with the limitations of constructs such as "small", "moderate" or "large":

*The terms 'small,' 'medium,' and 'large' are relative, not only to each other, but to the area of behavioral science or even more particularly to the specific content and research method being employed in any given investigation ... In the face of this relativity, there is a certain risk inherent in offering conventional operational definitions for these terms for use in power analysis in as diverse a field of inquiry as behavioral science. This risk is nevertheless accepted in the belief that more is to be gained than lost by supplying a common conventional frame of reference which is recommended for use only when no better basis for estimating the ES index is available.*

(Cohen 1988, 25)

<sup>10</sup> The 'standard deviation' is a measure of the spread of a set of values.

In the case of personality traits, however, the situation is even more difficult. Personality traits such as those measured in memo©, are quite stable (Costa & McCrae 1980). Changes that do occur, generally occur over relatively large time-spans (Ardelt 2000). Any changes which occur over relatively short periods of time, even with small effect sizes, should therefore be considered substantial and meaningful.

Additionally, research into personality traits found that inter-human differences especially across the Big Five<sup>11</sup> (which measure comparable aspects) could be explained for approx. 50% by influence of the genes, i.e. the heritability of the Big Five is around 0.5 (Bouchard and McGue 2003). The other 50% are therefore factors influenced by the environment. Newer studies on twins even suggest that up to 2/3 of the measurable personality traits could be traced back to genetic influence (Kandler et.al. 2010). This as a consequence also means that any intervention such as mobility can only influence half of the respective personality trait and therefore an **ex ante** to **ex post** change would only be small. All this means that changes in personality traits are very likely to be difficult to achieve. This was also confirmed by a recent study (Specht *et al.* 2011) into affects on the Big Five due to age and especially events in life. This research found Cohen d values for the Big Five between -0.17 and 0.1. These were smaller or at the same level as the Cohen d values for the memo© values which will be displayed in chapter 3 and 4. (Specht *et al.* 2011) **concluded that "individuals differ systematically in the changeability of their personality. (...) Personality predicts the occurrence of specific major life events and changes as a result of experiencing them. (...) Personality changes, but changeability differs across the life course - and this change is not due only to intrinsic maturation, but also to social demands and experiences"** (Specht *et al.* 2011, 38-39). (Zimmermann and Neyer 2013) found Cohen d values for change on the Big Five with absolute values around 0.12 to 0.27 (some negative) which they referred to as „considerable“.

Additionally, the **ex ante** memo© averages were fairly high on the scale (0-10) with values beyond 6.5. This additionally meant that it would be rather unlikely to achieve large **ex post** values because of the necessity to have substantial amounts of respondents with values of 9 or higher. Given that the standard deviation was around 0.88 for all groups under assessment, 68% of all responses would be found in a small range of approximately 5.5 to 7.5, depending on the group. Therefore, one could not reasonably expect large changes.

Despite these caveats, the team wished to use the Cohen d values as a widely accepted means of displaying effect sizes. EIS will also provide further support for interpreting the data against the background of the limitations to the effect size approach discussed here.

### Percentiles distribution

Expecting small differences on Cohen d values, the team also used a different method to display difference. For both, students and staff, the team made use of percentile distribution. This method displays the averages of the various groups for the distribution of all cases across the entire scale. In order to avoid biases and distortions due to the different sizes of samples and especially their appearance within the overall population of students and staff, the team normalised the different target-group results (non-mobile students, mobile students, Erasmus students, mobile staff, non-mobile staff). In the case of students, according to the data from the official Erasmus statistics, Erasmus students counted for around 4.3% of all graduates in the countries participating in the programme and overall 10% of graduates had been mobile.<sup>12</sup>

<sup>11</sup> The Big Five are the most classical set of psychometric factors used in research. It comprises Neuroticism, extroversion, openness, agreeableness, and conscientiousness and consists of between 60 (the short version called NEO-FFI) and 240 items (NEO-PR-I).

<sup>12</sup> See [http://ec.europa.eu/education/library/reports/Erasmus1112\\_en.pdf](http://ec.europa.eu/education/library/reports/Erasmus1112_en.pdf) ,13

In the case of staff, 2.5% had participated in teaching assignments. The percentage for staff training was not provided but STT only accounted for 28% of all 46,522 cases of Erasmus staff mobility that took place in 2011-2012 and the percentage for STA was therefore used.<sup>13</sup>

The distribution then tells the reader something about the position of the various group averages within the overall population. For example, if the mean value of the non-mobile group lies in the 45% quantile, this would mean that 55% of the population had better values. If Erasmus students improved a step of one quantile (5%) on average, this would mean that they overtook 5% of the overall population of higher education graduates (in this case 5% of 5.35 million: 267,500 graduates). In a graph, however, the average, even that for an entire sample, does not have to be in the middle of the 50% quantile as percentiles are created using the median and not the mean average.

With this, EIS can show the differences that existed prior to departure as well as the difference the mobility made in positioning the mobile students within the overall population.

### **Final analytical framework**

In the analysis we focussed on the effects of the different types of mobility on two dimensions: **employability and internationalisation**. The concepts of “effects”, “employability”, “internationalisation” and “mobility” used in the EIS are described briefly below.

**Mobility** is understood as any activity in the context of an HEI that moves a person beyond a national border. The length of such a stay abroad is not defined, the minimum is set by the shortest possible length of an intensive programme (IP).

**Effects** are understood on the one hand, as impacts, as perceived from the perspective of the person or institution that experiences the respective impact; e.g. students may describe the effect mobility had on them *according to their own assessment* or HEIs can describe the effect student mobility or staff exchange had on their international profile *as perceived by them*. In neither case does this assessment contain impartial and objective proof of any effect. On the other hand, an effect can be defined as the difference in value of the same variable between two different points in time, which is the new and added value of the memo© factors included in the EIS report.

In order to assess the first type of effect, we analysed the responses given by the various target groups and compared them with assessments of other groups, previous reports and different sub-groups of the target groups. For the second type, we analysed those effects by different means. Firstly, the different results for the memo© factors were compared in a cross-group comparison. Using the results of the *ex ante* and *ex post* surveys and also the surveys of students and alumni (the latter by definition constituting a later point in time), we could compare the development at the level of personality traits. By then comparing non-mobile to mobile respondents and Erasmus respondents as well as different action types of Erasmus, we gained an insight into the effect of the various aspects of mobility. Secondly, we could compare changes in the evaluations/perceptions of respondents of the same or very similar aspects. Thirdly, we asked questions regarding the perceived change and could therefore compare these values, once again in relation to the various groups and types of mobility. Fourthly, we asked alumni, HEIs and staff about perceived changes amongst students due to mobility, which provided another perspective on the aspect of ‘effect’.

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<sup>13</sup> See <http://epp.eurostat.ec.europa.eu/portal/page/portal/education/data/database>, 35

**Employability** is understood to be a broad range of skills and competences necessary to function in a working environment and to enable one to succeed in the workplace. Employability is a major issue for HEIs today as well as a condition for economic growth, and international experience is regarded as a means to accomplishing aspects of this. In EIS, skills and competences are assessed on three different, but inter-related scales. For specific employability skills, the skills of the Flash Eurobarometer were applied in combination with the memo© factors. In some surveys, this list has been adapted in line with the suggestions made by the DG EAC.

**Table 2-1 Skills and competences**

<b>Employability skills based on Flash Eurobarometer</b>					
Teamwork skills	Sector-specific skills	Communication skills	Decision-making skills	Foreign language skills	Good reading / writing skills
Analytical and problem-solving skills	Planning and organisational skills	Ability to adapt to and act in new situations	Good with numbers	Computer skills	
<b>Employability skills based on the memo© factors</b>					
Confidence	Curiosity	Decisiveness	Serenity	Tolerance of Ambiguity	Vigour

For more general competences, viewed as social or, more specifically, intercultural competences, the EIS also drew on the memo© approach and the resulting factors mentioned above. These were used in two ways: firstly, in line with the memo© approach, by computing the factors out of the respective items, thus describing behaviour on an aggregated level as competences; secondly, by describing the competence assessed by the memo© factors and asking the participants to assess the degree to which this competence is attributable. This was particularly useful since the respondents of the survey amongst employers considered all memo© factors to be of the utmost importance for employability.

**Table 2-2 Selected memo© factors**

Memo© factor, Confidence	to gain in confidence and have a stronger conviction of my own abilities
Memo© factor, Tolerance of Ambiguity	<b>to learn to be more tolerant towards other people’s values and behaviour and to adapt to new situations</b>
Memo© factor, Vigour	to be better able to solve problems
Memo© factor, Curiosity	to be more open and more curious about new challenges
Memo© factor, Serenity	to be more aware of my own strengths and weaknesses
Memo© factor, Decisiveness	to know better what I want and reach decisions more easily

**Internationalisation:** European universities always had a wide range of international contacts and academic collaboration with partner institutions around the world. However, the development of the European Higher Education Area (EHEA) led to accelerated Europeanisation, characterised by strategic and more structured networking and cooperation among European universities. With the consolidation of the EHEA came the realisation that Europe was increasingly attractive globally, both as a study destination and as a partner for exchanges.

Today, 'internationalisation' beyond Europe has become a strategic goal of European governments and universities, and practically all institutions and countries provide offerings for international students and reflect on their interaction with the wider global academic community. Step by step, the Europeanisation of national education systems became a reality due to genuine European cooperation in education and research, for instance through Erasmus, Tempus, Research Framework Programmes, and similar initiatives. Mobility, supported by Erasmus, promoted the internationalisation of the European Higher Education system, contributed to its modernisation and to improvements in quality and, finally, paved the way for the Bologna Process. This cooperation process, which started in 1999 with the goal of creating a European Higher Education Area (EHEA), made considerable progress in harmonising university degree structures and increasing the compatibility of higher education systems.<sup>14</sup> In its 2011 Modernisation Agenda, the European Commission specifically identified the aim of enhancing internationalisation and openness of higher education systems through the creation of effective governance and funding mechanisms in support of excellence.<sup>15</sup> It thus proposed a joint approach from a wide range of policy areas and stakeholders to attract the best students, staff and researchers from around the world, to increase internationalisation and visibility, and to foster international networks for excellence. The proposals for a specific strategy for the internationalisation of higher education included promoting the EU as a study and research destination for top talent from around the world, by supporting the **establishment and development of internationalisation strategies by Europe's higher education institutions**; developing relations in the area of higher education with partners beyond the Union with the aim of strengthening national education systems, policy dialogue, mobility and academic recognition; making use of existing mobility partnerships to enhance and facilitate exchanges of students and researchers; considering proposing amendments to the directives relating to students and researchers to make the EU even more attractive to talent from non-EU countries; and strengthening the tracking of non-EU doctoral students as a percentage of all doctoral students to measure the attractiveness to the rest of the world of EU research and doctoral education.<sup>16</sup>

Although student and academic mobility are evidently the most observable features of internationalisation, they are not the only aspects. The internationalisation process comprises a whole range of educational programmes and activities that contribute to internationalised learning that vary from the internationalisation of the content and delivery of programmes to the mobility of students and scholars. In addition, there are also intermediate forms of transnational education, such as the cross-border mobility of HEIs and/or their programmes. Another major form of internationalisation relates to the growing convergence of tertiary education systems (e.g. the Bologna process) and curricula in some disciplines (Bennell and Pearce, 2003; Altbach, 2004).

The discussions about internationalisation and the excursus on the definition of internationalisation show the diversity of opinions and perspectives. Moreover, in contrast to the natural sciences, such definitions are not based on natural laws and undisputed paradigms. We therefore refrained from adhering to any specific definition. Nevertheless, we wish to reiterate our view that internationalisation is not a means in itself, but serves the purpose of increasing the quality of teaching, research and social engagement of the respective HEI. It does so by increasing the social and intercultural skills as well as skills and competences in relation to employability of the individuals participating in and benefitting from it. As such, internationalisation is a resource-intensive activity, requiring diligence and time to keep up existing networks, setting up new contacts, including them in joint activities and, last but not least, working with partners from abroad.

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<sup>14</sup> See European Commission (2012b).

<sup>15</sup> See European Commission (2011a).

<sup>16</sup> *ibid.*, 14.

**Excursus: defining internationalisation**

*The most common definition of internationalisation is that provided by Jane Knight (2003: 2-3) as "the process of integrating an international, intercultural or global dimension into the purpose, functions or delivery of tertiary education." Knight (1993) characterised the internationalisation of the higher education sector in four ways: 1) as a process; 2) as a resource; 3) as a means of aligning the higher education system with international standards; and 4) as a chance to create a system that is open to a globalised environment (separate from the globalisation process). However, new labels for internationalisation were recently introduced into the debate (e.g. the term "comprehensive internationalisation" of John Hudzik, 2011). However, these new labels do not include any new dimension of internationalisation, but instead relate back to Knight's well-established definition (De Wit, 2011). In their paper "The End of Internationalization?", Brandenburg and De Wit (2011) argued that the concept of internationalisation should be given new meaning, that its value be reinstated and furthermore that the means and activities utilised as part of the internationalisation of HEIs and, in particular, the reasons for their selection be subjected to scrutiny. According to them, the future of HEIs would doubtlessly have a global or, as the case may be, international character: "Called for is a common commitment at the institutional and personal level of how we and our students will be prepared to live and work in a global community" (Brandenburg and De Wit, 2011: 17). De Wit (2011) moreover argued that an instrumental approach towards internationalisation leads to major misconceptions about what internationalisation actually means. Accordingly, he proposed a shift from a more activity and motivation-based approach to internationalisation to a combination of a process and competence-based approach. In other words, he defended a more integral process-based approach to internationalisation aimed at achieving a better quality of higher education and improved competencies of staff and students.*

The study therefore links the intercultural competences and employability skills to internationalisation and the international profile of an HEI, affecting both the HEI (as long as the individual is part of the institution) and the international working environment outside higher education (when the individual has left the HEI). One specific aspect of internationalisation in Europe is that it aims at creating a common European identity. Even beyond that, European citizenship refers to a European identity, fuelled by a common history and common customs, and jointly constituting the European Union as a political entity. Among its other goals, Erasmus wishes to further the underlying ideas of European citizenship. This dimension was therefore included in the analysis. We used the following matrix to examine all the respective dimensions and perspectives.

**Table 2-3 Final analytical matrix**

Research topics	Target groups				
	Students	Alumni	Staff	HEIs	Employers
Effects	Analytical levels:			Analytical levels:	
Employability	1. mobile and non-mobile			1. perspective on mobile vs non-mobile	
Internationalisation	2. Erasmus actions (study, work placement, IP, STA, STT)			2. perspective on Erasmus actions (study, work placement, IP, STA, STT)	



## Students and alumni

### General data

The table distinguishes between the cases on the basis of mobility type. Due to cases of multiple experience of mobility, the number of individuals differs slightly. In the case of students, 56,733 respondents answered more than the first three questions. Of those, 38,676 students reached the page where we ask about their experience of mobility, therefore this is the number of students included in the analysis. Any further selection was not necessary as the sample represented the target group very well (see below). Of these, 4,906 students were non-mobile students. The remaining 33,770 students could not be clearly divided into Erasmus and other mobile students because of cases of multiple participation. In order to provide a full picture, we therefore looked at the student cases (which are by definition more than head counts) and could identify 19,736 cases of experience of Erasmus mobility programmes and 20,472 cases of other experience of mobility.

**Table 2-4 Participation data for students and alumni**

Students and alumni	Number
<b>Overall cases of participating students</b>	<b>56,733</b>
Of which, mobile students <sup>17</sup>	40,208
Of which, with Erasmus experience (study, placement, IP) *	19,736
Of which, with other experience of mobility*	20,472
Of which, non-mobile students	4,906
<b>Overall cases of participating alumni</b>	<b>18,618</b>
Of which, mobile alumni	15,556
Of which, with Erasmus experience*	10,490
Of which, with other experience of mobility*	5,066
Of which, non-mobile alumni	3,062

\*Multiple answers were possible

As in the case of students, the number of cases of alumni is not equivalent to the number of individuals. 18,618 cases who had reached the page of the questionnaire where the team asked for experience of mobility were analysed. Of those, 3,062 alumni did not go abroad during their studies. Of those with experience of mobility, some had been abroad numerous times. We therefore counted 10,490 cases of respondents with experience of Erasmus (9,748 individuals) and 5,066 cases of respondents with other types of mobility (3,781 individuals), again with a possible overlap of Erasmus and other forms of mobility.

We compared data from these two groups with regard to the differences between mobile and non-mobile cases. In the analysis, we included 40,208 cases students and 14,408 cases of alumni with experience of mobility, as some of the total of 15,556 cases were not valid. Among the mobile alumni, 67% made use of the Erasmus programme, compared to 49% of the sample of current students with experience of mobility.

<sup>17</sup> This refers to cases and includes students which were mobile or planned to go abroad during the period of analysis.

**Table 2-5 Types of mobility**

	Mobile students*	%	Mobile alumni*	%
<i>Erasmus actions</i>	19,736	49	10,490	67
Of which, Erasmus student mobility in relation to studies	16,389	41	9,014	58
Of which, Erasmus student mobility in relation to work placements/traineeships	1,835	5	1,272	8
Of which, Erasmus Intensive Programme (IP)	1,512	4	204	1
<i>Other types of mobility</i>	20,472	51	5,066	33
Of which, other student forms of mobility and study exchange programmes	5,369	13	1,971	13
Of which, other traineeships, work placements abroad	4,983	12	1,717	11
Of which, language training abroad	5,520	14	722	5
Of which, other summer schools and similar short-term formats with an international audience	4,600	11	656	4

\*Multiple answers were possible. Discrepancies are due to the rounding off of results.

Erasmus students were overrepresented in the mobile alumni group, which is not surprising given the fact that ESN, the largest network of mobile alumni, supported the study. We also see that among both, alumni and current students, the mobility in relation to study is the dominant activity. However, work placements were more strongly represented among alumni than among current students.

The EIS student survey differentiated between an *ex ante* and an *ex post* survey. All together there were 56,733 students in the *ex ante* survey,<sup>18</sup> and 4,771 mobile students filled in the *ex post* survey after their stay abroad. EIS consequently shows not only the differences between mobile and non-mobile students, but also the change from before a stay abroad to after a stay abroad. This relates not only to the self-assessment of skills, but also to different behaviour that results in new intercultural competences and competences with an impact on employability.

### Gender and Age

**Table 2-6 Proportion of female students among students and alumni (in %)**

	EIS sample						All Erasmus students according to EC statistics <sup>19</sup>
	All mobile	All Erasmus mobile	Erasmus actions			Non-mobile	
			Studies	Work placements	IP		
Students	65	67	67	67	65	59	61
Alumni	61	62	62	64	61	49	-

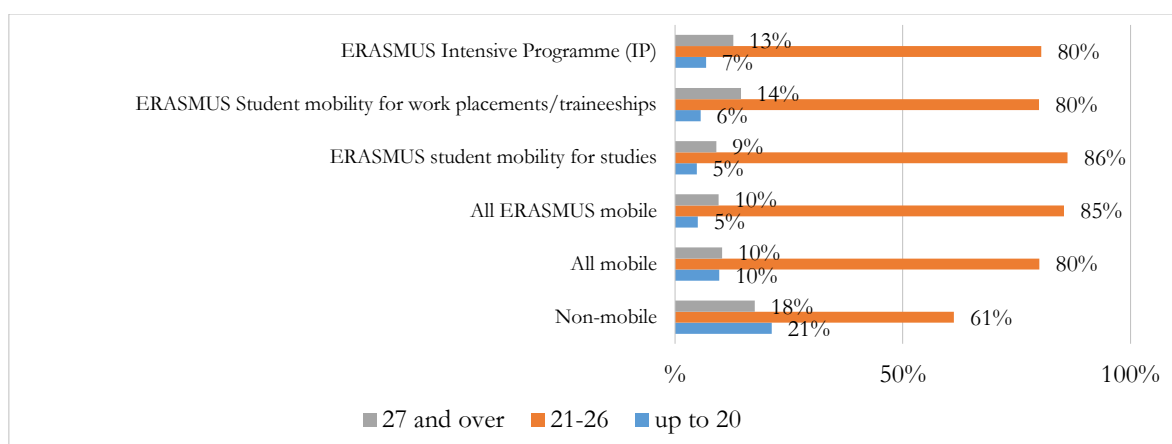
Female students accounted for 65% of all mobile students, 67% of Erasmus students and 59% of non-mobile students. The percentages for alumni were comparable (61% of all mobile, 62% of all Erasmus students), with the exception of non-mobile alumni with only 49% female respondents. Between the Erasmus actions, differences were minimal and the percentage of women was always above 60%. This is in line with the general Erasmus statistics that stated 61% female students.

<sup>18</sup> There are fewer answers to some questions as respondents did not have to answer all the questions. Furthermore, some students had a variety of experience and therefore for some questions there were more cases than individual respondents.

<sup>19</sup> See [http://ec.europa.eu/education/library/reports/erasmus1112\\_en.pdf](http://ec.europa.eu/education/library/reports/erasmus1112_en.pdf), 9

EIS covered a wide range of age groups and therefore also included the more mature students (with 11% of the overall sample belonging to the oldest segment). Only the non-mobile students showed a sizeable portion of students up to 20 years of age (21%). In all other cases, results for this age group varied between 5% and 10%. The group of students of 27 years and older was also the largest among the non-mobile students (18%), while it ranges from 9% to 14% for all other groups. Students between 21 and 26 years of age formed the largest group with 61% of the non-mobile students, 80% to 86% of the various mobile groups, and 78% of the Erasmus students in the official statistics for 2011/12.<sup>20</sup>

**Figure 2-2 Students in EIS distributed by age (in %)**



As EIS had acquired groups at both ends of the scale (“up to 20 years” and “27 years and above”), the average age was 23 years with a standard deviation of 0.3, calculated for the middle group of respondents between the ages of 21 and 26 years. As this was also the majority of respondents, it is a fair representation of the entire sample. This is in line with the official average age of all Erasmus students in 2011/12 (22.5 years).

**Graduation and level of study**

With regard to alumni, across all groups the sample of alumni of the last five years (2009-2013) was by far the largest, ranging among the mobile groups from 80% (all mobile students) to 92% (alumni of Erasmus programmes) in relation to work placements. This group was considerably smaller among the non-mobile sample (54%). In the latter group, the team also observed substantial representation of alumni who graduated between 2004 and 2008 (22%) and those who graduated in 2003 or earlier (25%). Among all mobile groups, the oldest group of alumni accounted for between 1% (alumni of Erasmus work placements) and 7% (all mobile students). The much smaller sample size for more mature alumni is in line with other surveys among alumni and is also comparable to the feedback which the Erasmus Student Network (ESN) usually receives.

<sup>20</sup> See [http://ec.europa.eu/education/library/reports/erasmus1112\\_en.pdf](http://ec.europa.eu/education/library/reports/erasmus1112_en.pdf), 12

**Table 2-7 Alumni in EIS distributed by year of graduation (in %)**

	EIS sample					
	All mobile	All Erasmus mobile	Erasmus actions			Non-mobile
			Studies	Work placements	IP	
2013-2009	80	85	84	92	89	54
2008-2004	13	11	12	7	7	22
2003 and earlier	7	4	4	1	4	25

Student participants were predominantly Bachelor's degree students, with percentages ranging from 47% (students on work placements) to 61% (non-mobile students). A fifth of the non-mobile students and around a third of the various categories of mobile students (ranging from 32% for students on IPs to 39% for students on work placements) were studying at Master's level. Short cycle degrees were represented less among the mobile students (between 4% and 7%) and were more prominent among the non-mobile group (16%), while 2% to 6% were on doctoral studies.

**Table 2-8 Students in EIS by level of study (in %)**

	EIS sample						All Erasmus students according to EC statistics <sup>21</sup>
	All mobile	All Erasmus mobile	Erasmus actions			Non-mobile	
			Studies	Work placements	IP		
Degree for a short cycle of one or two years	7	5	4	7	7	16	3
Bachelor's degree or equivalent	55	53	53	47	57	61	68
Master's degree or equivalent	34	38	38	39	32	20	28
Doctoral degree	3	3	3	6	3	2	1
Other	1	1	2	1	1	1	

**Table 2-9 Alumni in EIS by HE degree (in %)**

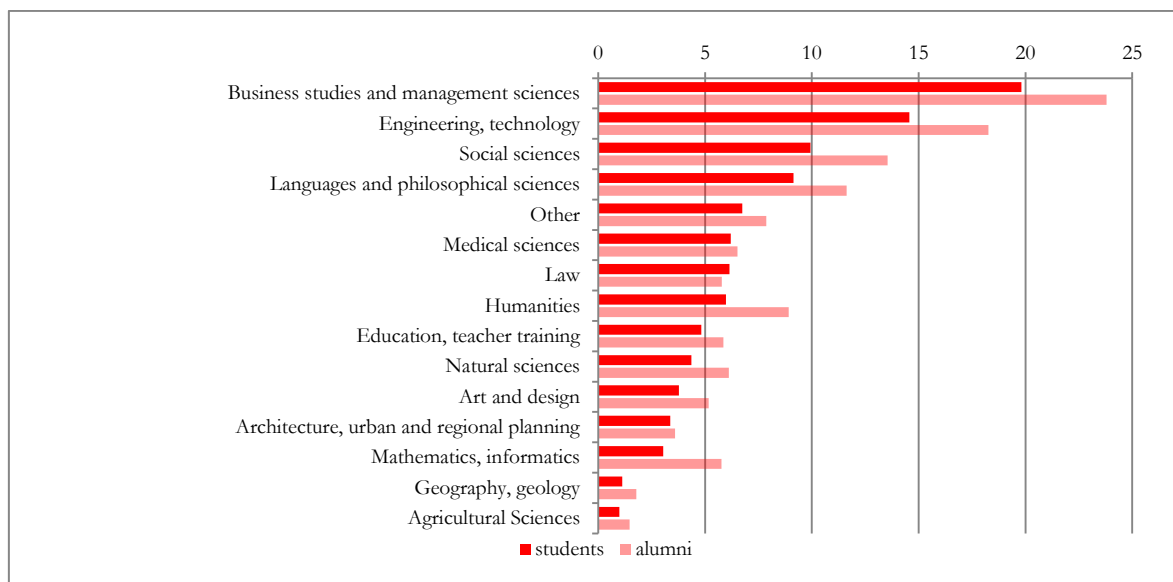
	EIS sample*					
	All mobile	All Erasmus mobile	Erasmus actions			Non-mobile
			Studies	Work placements	IP	
Degree for a short cycle of one or two years	3	4	3	10	2	3
Bachelor's degree or equivalent	32	34	34	34	35	35
Master's degree or equivalent	57	57	58	54	54	50
Doctoral degree	4	3	3	3	5	6
Other	4	2	2	1	4	6

\*Minor discrepancies are due to the rounding off of results.

<sup>21</sup> All data in this column from [http://ec.europa.eu/education/library/reports/Erasmus1112\\_en.pdf](http://ec.europa.eu/education/library/reports/Erasmus1112_en.pdf), 9

Among the alumni, Master’s degree alumni were predominant and accounted for 50% to 58% depending on the respective group. The second largest group were alumni with a Bachelor’s degree, representing 32% to 35%. Doctoral degrees and short-cycle degrees were only marginal.

**Figure 2-3 Field of study of students and alumni in EIS (in %)**



Small differences could also be observed in relation to the distribution of fields of study among respondents of the survey, with the largest group of students (20%) and graduates (24%) from business and management studies, followed by engineering and technology (15% and 18% respectively).

The top five fields of study among all mobile student and alumni groups were Business Studies and Management (21% to 25%), followed by Engineering and Technology, Languages and Philosophical Sciences as well as Social Sciences which occupied the second to fourth places with only marginal differences per student group, representing 10% to 14% of the various groups of mobile students and 12% to 19% of the mobile alumni groups. Law as the number 5 for the mobile student groups and Humanities for the mobile alumni groups showed much lower representation rates well below 10%. Among the non-mobile students and alumni, Engineering and Technology were most widely represented (18% and 24% respectively). Business Studies and Social Sciences, Law and Humanities are represented to a level comparable to the mobile groups, while Languages are substantially less represented. The data of the EC on Erasmus is not entirely comparable as the accumulation of fields of study is different. However, according to the statistics 41% were in Business Studies, Law and Social Sciences (for EIS the accumulated value for these three varies across mobile groups was between 37% and 44%), 22% in Humanities and Arts and 15% in Engineering (including Manufacturing).<sup>22</sup>

<sup>22</sup> See [http://ec.europa.eu/education/library/reports/erasmus1112\\_en.pdf](http://ec.europa.eu/education/library/reports/erasmus1112_en.pdf), 24

**Table 2-10 Top five fields of study for students and alumni (in %)**

	EIS sample					
	All mobile	All Erasmus mobile	Erasmus actions			Non-mobile
			Studies	Work placements	IP	
<b>Students</b>						
Business Studies and Management Sciences	21	22	22	24	22	15
Engineering, Technology	12	10	10	12	10	18
Languages and Philosophical Sciences	11	13	14	8	7	5
Social Sciences	10	11	11	10	12	10
Law	6	7	7	8	4	6
<b>Alumni</b>			Erasmus actions			Non-mobile
	All mobile	All Erasmus mobile	Studies	Work placements	IP	
Business Studies and Management Sciences	26	25	24	25	24	20
Engineering, Technology	17	16	19	19	19	24
Social Sciences	14	13	14	14	14	15
Languages and Philosophical Sciences	13	14	12	12	12	7
Humanities	9	9	9	9	9	9

### **Family background**

Students and alumni showed similar distributions with regard to academic family background<sup>23</sup>. **In the case of both target groups, half of the respondents' parents had attended university. The findings of previous studies on students' mobility revealed that even though participation in Erasmus programme widened increasingly in the past few years, mobile students still came from privileged socio-economic backgrounds and academic family background played an important role in determining education abroad.**<sup>24</sup> According to the EIS survey results, 62% of non-mobile students and 59% of non-mobile alumni reported no academic family background. On the other hand, individuals with no academic family background constitute almost half of the mobile students (47%) and alumni (46%) in EIS. The participation of students/alumni from non-academic backgrounds in Erasmus is comparable to the general mobile group, with students on and alumni of work placements (50% and 49% respectively) and students on IPs (51%) showing larger proportions of students without an academic family background.

<sup>23</sup> Academic background meant that at least one of the parents had completed an academic degree.

<sup>24</sup> CHEPS 2008, 34-35

**Table 2-11 Proportion of students with non-academic family background (in %)**

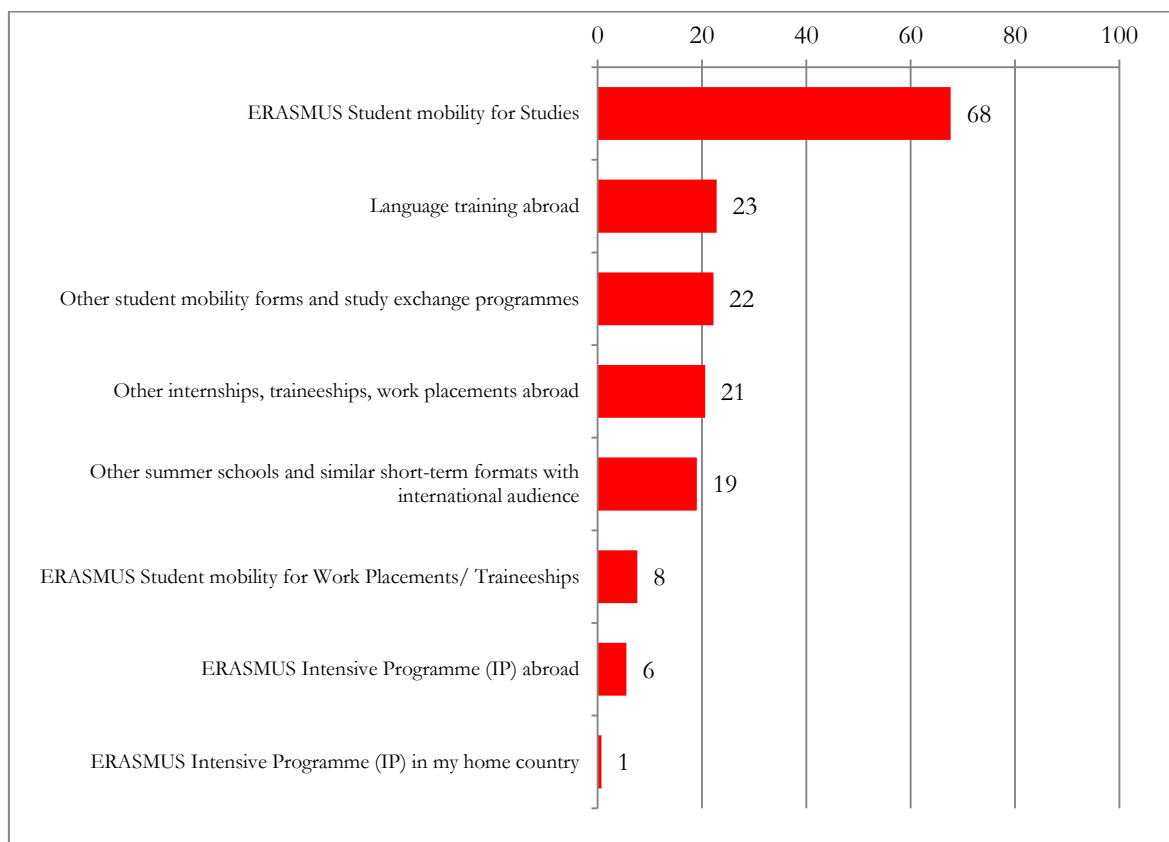
	EIS sample					
	All mobile	All Erasmus mobile	Erasmus actions			Non-mobile
			Studies	Work placements	IP	
Students	47	46	46	50	51	62
Alumni	46	46	46	49	46	59

**Types of mobility**

For the mobile sample amongst students and alumni, the EIS also covers a wide range of mobility formats. In both groups, Erasmus student mobility for studies is the prevailing mobility format (more than 60% of the mobile students). In the case of student respondents, around 20% had experience with another form of mobility, such as language training abroad, other mobility programmes for study/work placement and/or summer schools (around 20% for each format). Alumni, in general, had less experience with other mobility formats. Overall 83% of all mobile students participated in Erasmus actions.

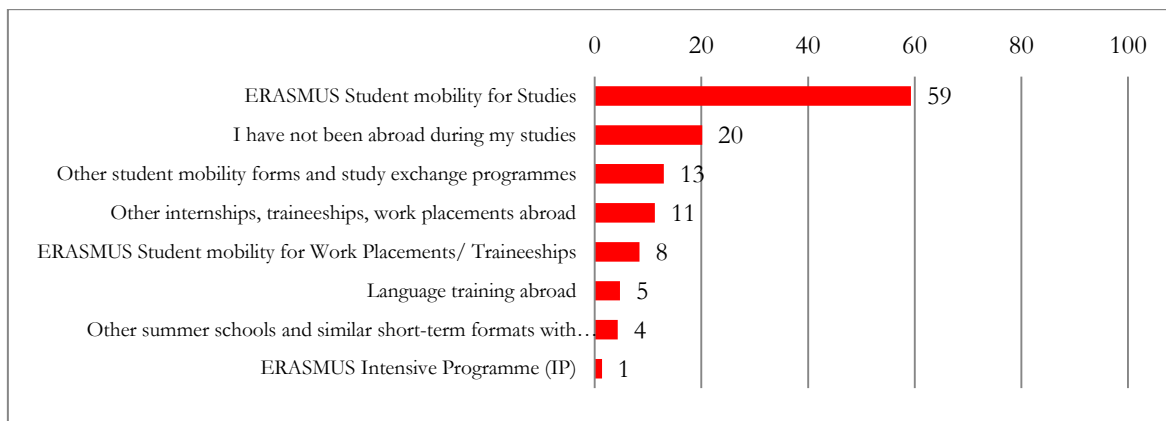
**...Of all mobile students, 83% participated in Erasmus actions**

Figure 2-4 Types of mobility of mobile students (in %)



\*multiple answers possible

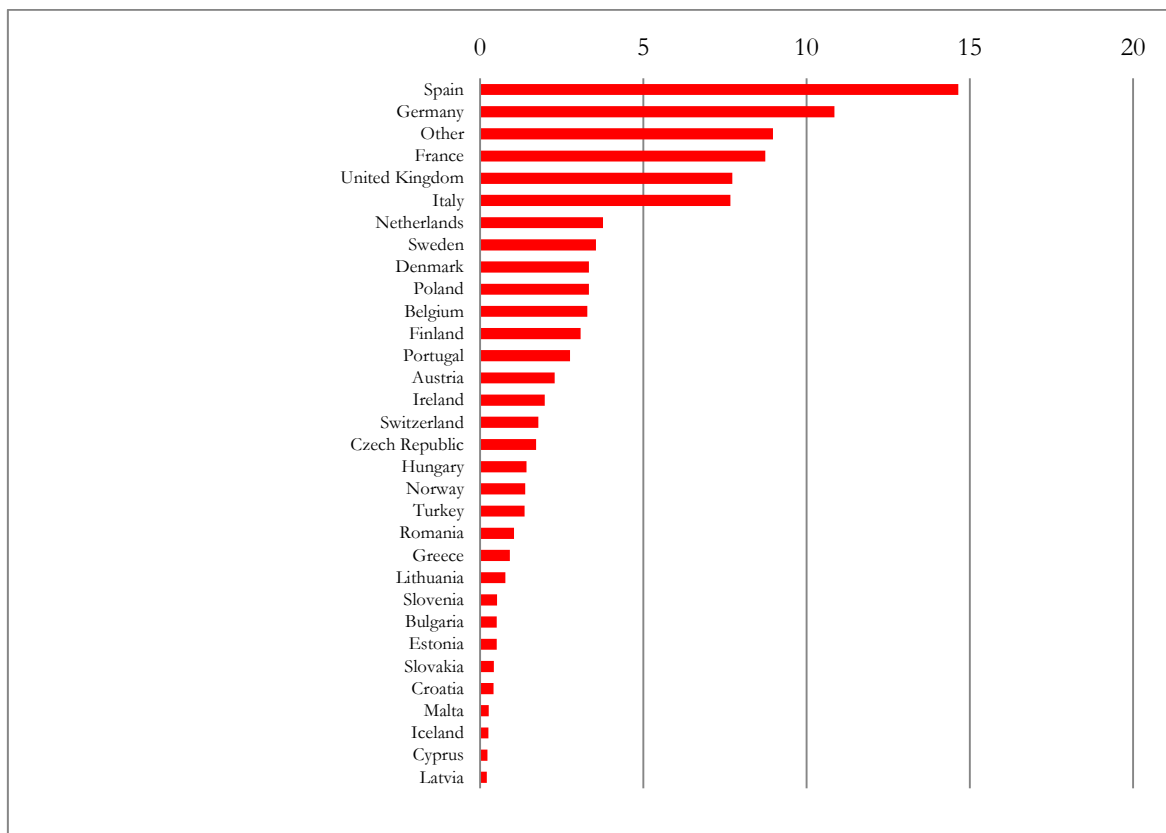
Figure 2-5 Type of mobility of alumni (in %)



### Destination countries

Spain (15%), Germany (11%), France (9%), United Kingdom (8%) and Italy (8%) were the most popular destinations for student outgoing mobility among the respondents of the survey, which is in line with the official statistics stating "Spain as the most popular destination in 2011-12 among European students with 39,300 inbound students (16% share of all inbound students), followed by France (12%), Germany (11%), the United Kingdom (10%) and Italy (8%)."<sup>25</sup>

Figure 2-6 Host country for mobility of mobile students, EIS (in%)



<sup>25</sup> See [http://ec.europa.eu/education/library/reports/erasmus1112\\_en.pdf](http://ec.europa.eu/education/library/reports/erasmus1112_en.pdf), 14



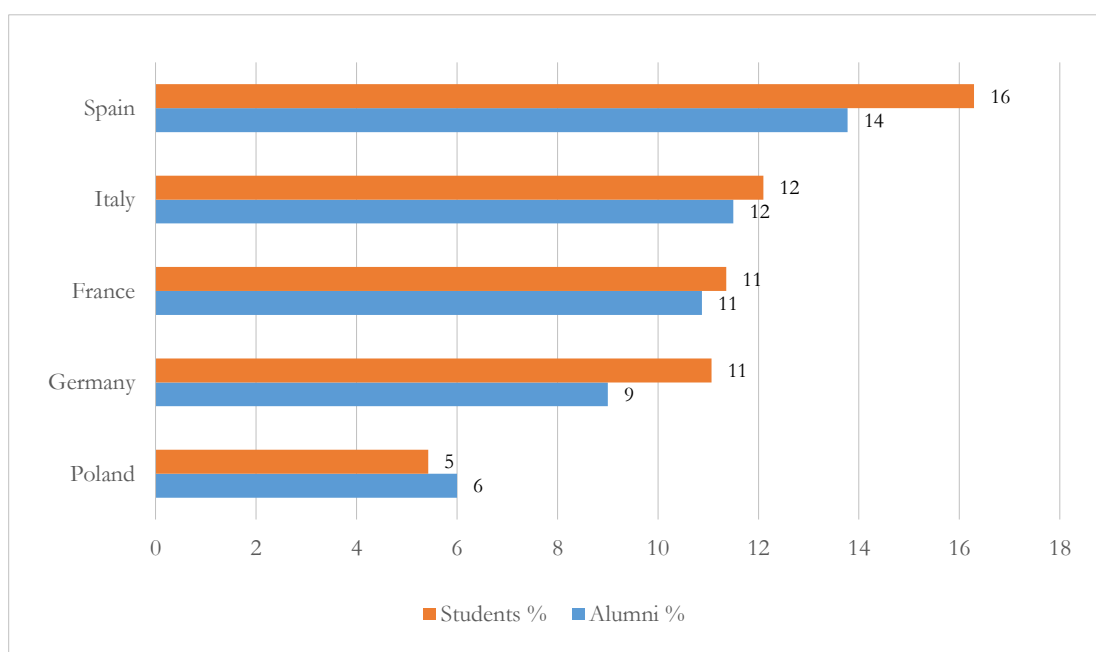
Among all destination countries, the top five combined 42% to 52% of the mobile students and 36% of the non-mobile students. In first place for all groups of students was Spain, with 9% of the non-mobile students and 12% to 16% of the different mobile groups, followed by Germany (in second place for all mobile groups), France, the United Kingdom and Italy.

**Table 2-12 Top five destination countries for mobile students (in %)**

	EIS sample					All Erasmus students according to EC statistics <sup>26</sup>
	All mobile	All Erasmus mobile	Erasmus actions			
			Studies	Work placements	IP	
Spain	15	16	16	13	12	16
Germany	11	11	11	11	10	11
France	9	10	10	9	6	12
United Kingdom	8	8	7	11	7	10
Italy	8	7	8	6	8	8
Total of Top five	52	52	50	42	50	47

The top five home countries for both mobile students and alumni were Spain (14% and 16%), Italy (12% and 11%), France (both 11%), Germany (11% and 9%) and Poland (5% and 6%). The order is comparable with the official Erasmus statistics, with Spain in the lead, followed by Germany, France, Italy, and Poland.<sup>27</sup>

Figure 2-7 Top five home countries of mobile students and alumni; EIS (in%)



<sup>26</sup> For all EC values in this table see [http://ec.europa.eu/education/library/reports/erasmus1112\\_en.pdf](http://ec.europa.eu/education/library/reports/erasmus1112_en.pdf), 4

<sup>27</sup> [http://ec.europa.eu/education/library/reports/erasmus1112\\_en.pdf](http://ec.europa.eu/education/library/reports/erasmus1112_en.pdf), 21

## Languages

Of all mobile students, 67% indicated that English was the language of instruction at the host HEI. This was even higher than the EC statistical average for English as the language of instruction abroad (50%). For those students that were abroad during the survey and those intending to go abroad, 63% answered that English would be their language of instruction at the host HEI, while the level was slightly lower amongst alumni (61%). Of the mobile students who declared English to be the language of instruction at the host HEI, 7% indicated that this language was their mother tongue, for 29% it was one of the languages of the host country and for 19% it was also part of their field of study.

English was even more frequently the *lingua franca* in companies receiving students on mobility programmes. Of the students on work placements, 62% indicated that English was spoken in the host enterprise, while 64% of the alumni stated that English was the language of work. Of students on work placements with English as the working language, 11% said that English was also their mother tongue, slightly more than the number of alumni (9%).

**Table 2-13 Main languages of study abroad other than English (in %)**

	<b>My mother tongue/home country</b>	<b>(One of) the language(s) of my host country/host country</b>
French	19	12
Spanish	16	20
German	15	14
Italian	7	10

The four most widely spoken languages other than English in the EIS sample were French, Spanish, German and Italian. A total of 19% of the students stated French as their mother tongue, 16% Spanish, 15% German and 7% Italian. After English, these were also the most spoken languages on stays abroad, with Spanish in the lead (20%), followed by German (14%), French (12%) and Italian (10%). The EIS sample corresponds here with the official EC statistics for Erasmus which list Spanish (13%), French (12%), German (10%) and Italian (7%).<sup>28</sup>

## Staff

The study also aimed to reflect the effects of international mobility of staff on the HEI and staff. In the EIS staff survey, of a total of 4,986 participants, 26% fell into the category of non-academic staff, 72% fell into the category of academic staff, 2% came from enterprises.<sup>29</sup> Of the non-academic staff, 97% made use of the Erasmus programme, compared to 73% of the academic staff. The main reason for this discrepancy, as the qualitative interviews also showed, is that the possibilities for non-academic staff mobility outside Erasmus are far more limited than for academic staff mobility.

<sup>28</sup> See [http://ec.europa.eu/education/library/reports/erasmus1112\\_en.pdf](http://ec.europa.eu/education/library/reports/erasmus1112_en.pdf), 24

<sup>29</sup> In the official Erasmus statistics, 417 case of mobility were conducted by staff from enterprises out of a total of 46,522, or 1% (see [http://ec.europa.eu/education/library/reports/erasmus1112\\_en.pdf](http://ec.europa.eu/education/library/reports/erasmus1112_en.pdf), 35 and 38).

**Table 2-14 Participation data for staff<sup>30</sup>**

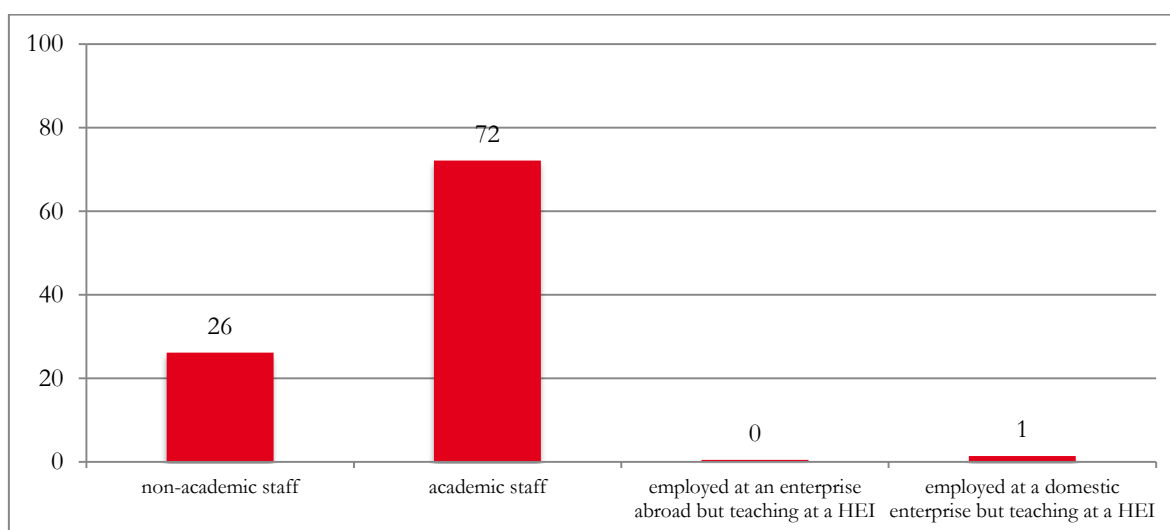
	Participation numbers
Teaching staff	3,594
Non-academic staff	1,301
Guest staff from companies for teaching	91
<i>Total</i>	<i>4,986</i>

**Table 2-15 Proportion of female staff (in %)**

	EIS sample					Official EC statistics 31	
	All mobile	All Erasmus mobile	Erasmus actions				Non-mobile
			STA	STT	IP		
Female	58	60	52	74	51	58	

As we saw in the case of the student and alumni sample, the group of female respondents was the largest. However, in the staff survey, the difference was smaller, ranging from 51% (IPs) to 74% in STT. There was also a clear dominance of academic staff, with most respondents in this category being professors (41%) or lecturers (31%). This is of specific importance to the EIS as it specifically validates the results with regard to the impact on teaching and learning. Although doctoral candidates and post-doctoral students also teach, any impact on curricula and long-term teaching effects could best be assessed by staff with long-term or permanent positions. The respondents largely taught in their mother tongue (68%), although the group of those who were not native speakers of English, but who (also) taught in English was very substantial (43%).

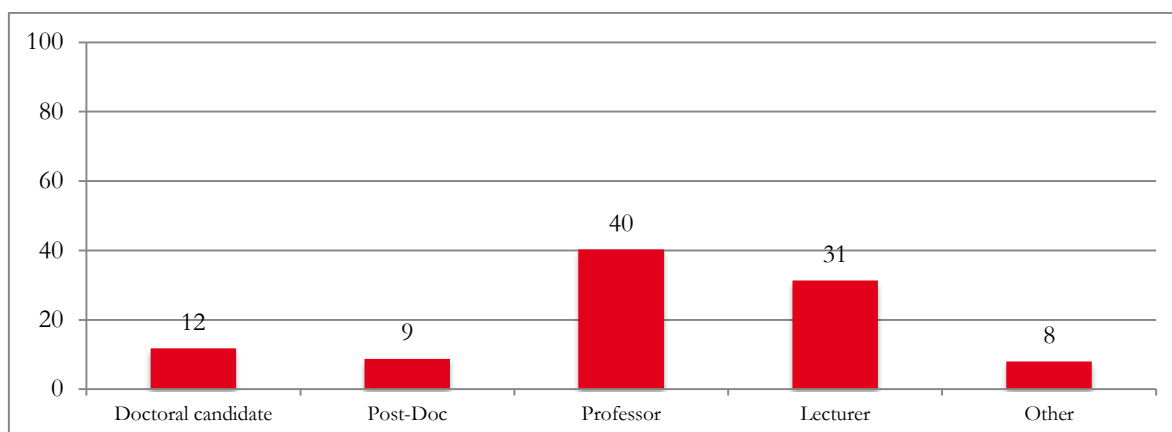
**Figure 2-8 Overall categories of staff (in %)**



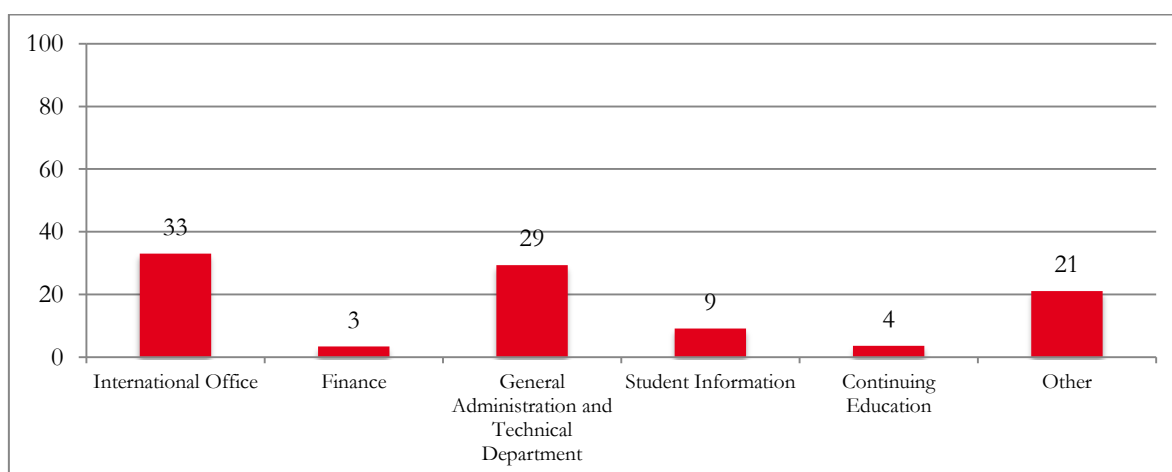
<sup>30</sup> In cases of staff, individuals were identical with cases as we did not have overlaps.

<sup>31</sup> See [http://ec.europa.eu/education/library/reports/erasmus1112\\_en.pdf](http://ec.europa.eu/education/library/reports/erasmus1112_en.pdf) , 35

**Figure 2-9 Categories of academic staff (in %)**



**Figure 2-10 Categories of non-academic staff (in %)**



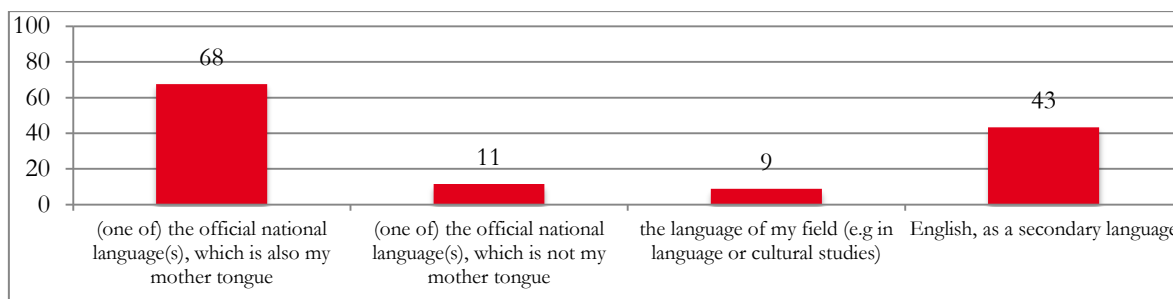
Employees of international offices were the largest group amongst administrative staff, which was not surprising given the topic of the study. This professional group constituted 33% of the overall sample, while 29% were from general administration and technical departments, 9% from student information units, 4% from continuing education and 3% from finance departments. All were types of non-academic units which were particularly relevant when looking at the effects of staff mobility outside the area of teaching and research.

**Table 2-16 Participation of academic and non-academic staff across action types (in %)**

	EIS sample						Official EC statistics
	All mobile staff	All Erasmus mobile	Erasmus actions			Non-mobile	
			STA	STT	IP		
Non-academic staff	22	24	3	58	12	35	28
Academic staff	78	76	97	42	88	65	72

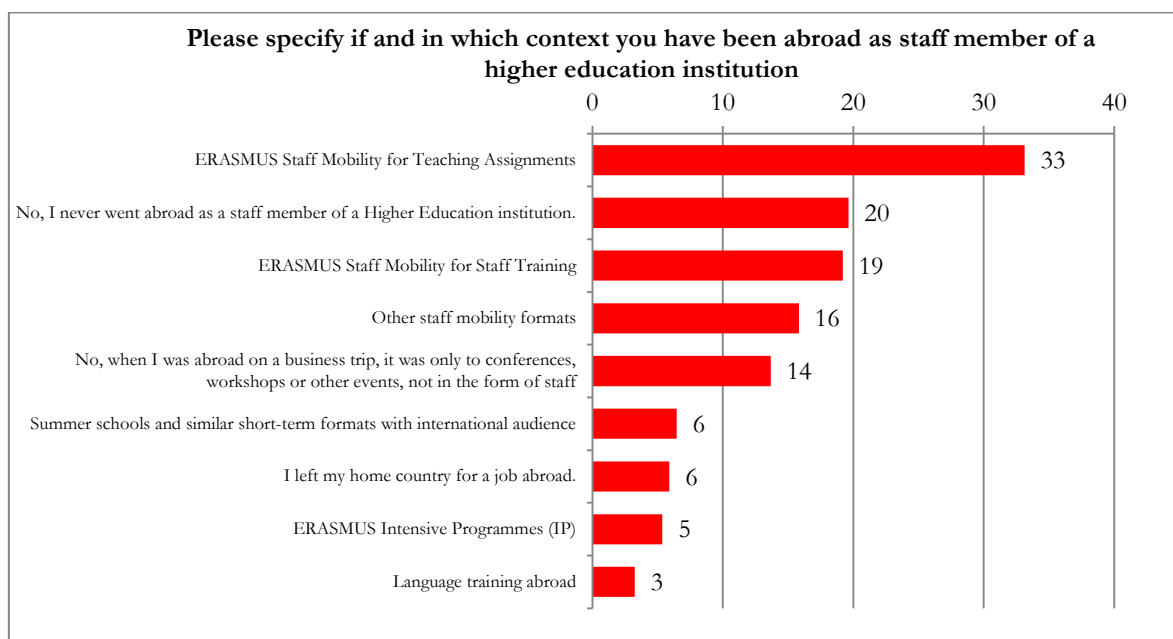
The distribution of academic and non-academic staff was rather uneven in relation to all mobility actions. In EIS, 22% of all mobile staff and 24% of all mobile Erasmus staff were non-academic, corresponding to 28% in the official statistics.

**Figure 2-11 Teaching language, mobile staff (in %)**



In the case of mobility in relation to teaching assignments, the team also observed a high proportion of people fluent in English as their second language (43%). This was relevant in analysing the internationalisation effects of Erasmus on both curricula and institutions, since these respondents were among those who were also able to teach in a language other than their mother tongue.

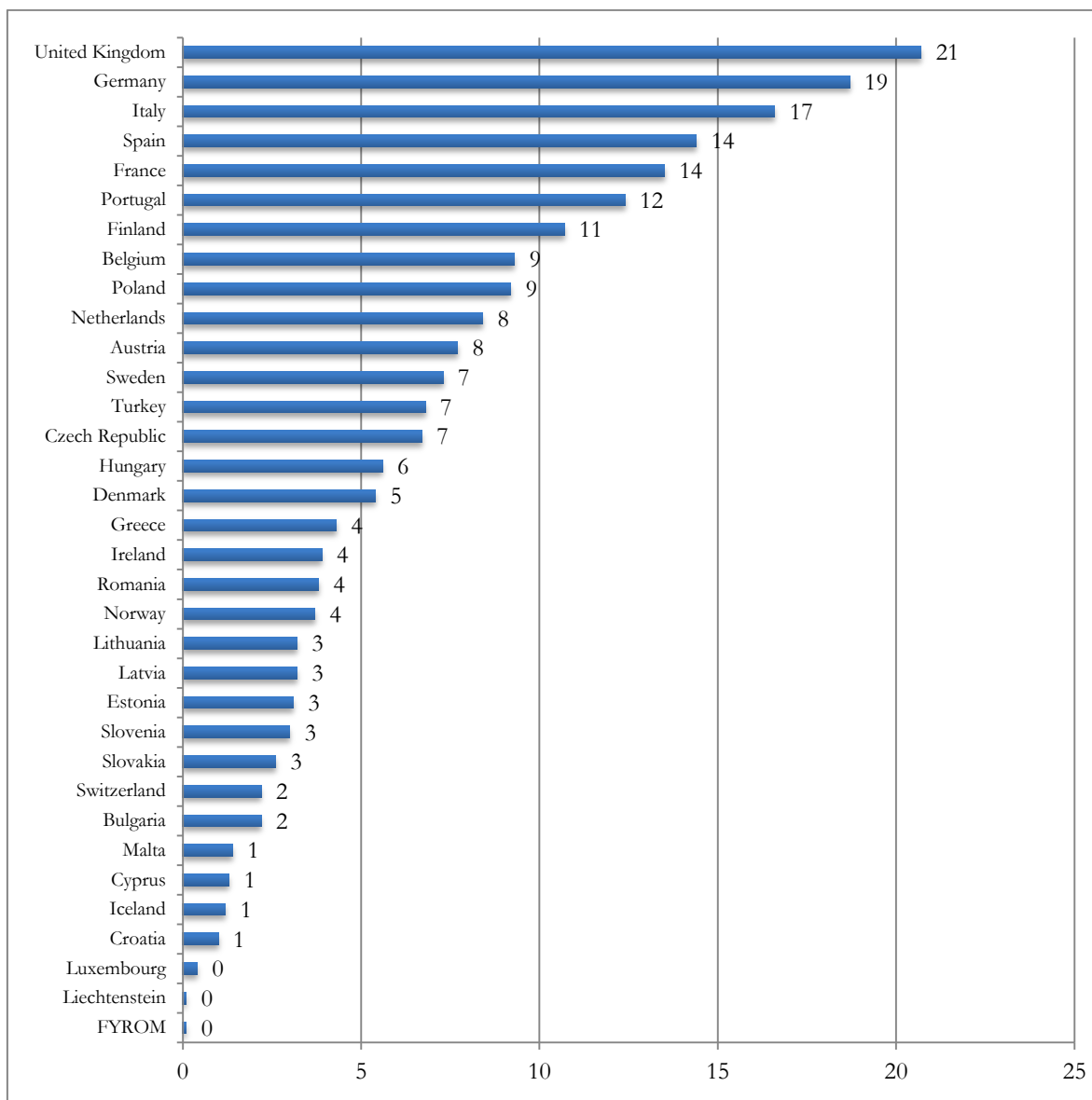
**Figure 2-12 Mobility background of staff\* (in %)**



\* Multiple answers are possible.

As far as the background to staff mobility was concerned, EIS survey results showed that 80% of staff members had been abroad (as a staff member of an HEI), including 14% whose international experience was limited to participation in conferences, workshops and events abroad. 33% of all respondents participated in the Erasmus Staff Mobility for Teaching Assignments (STA). This was a rather high number and might suggest that staff whose mobility was due to the Erasmus programme were overrepresented in this study. Those staff members who went to another country within the framework of an Erasmus Staff Mobility for Training (STT) usually took part in training (48%) and workshops (40%), but also did job shadowing (23%).

**Figure 2-13 Host country of mobile staff, in %<sup>32</sup>**



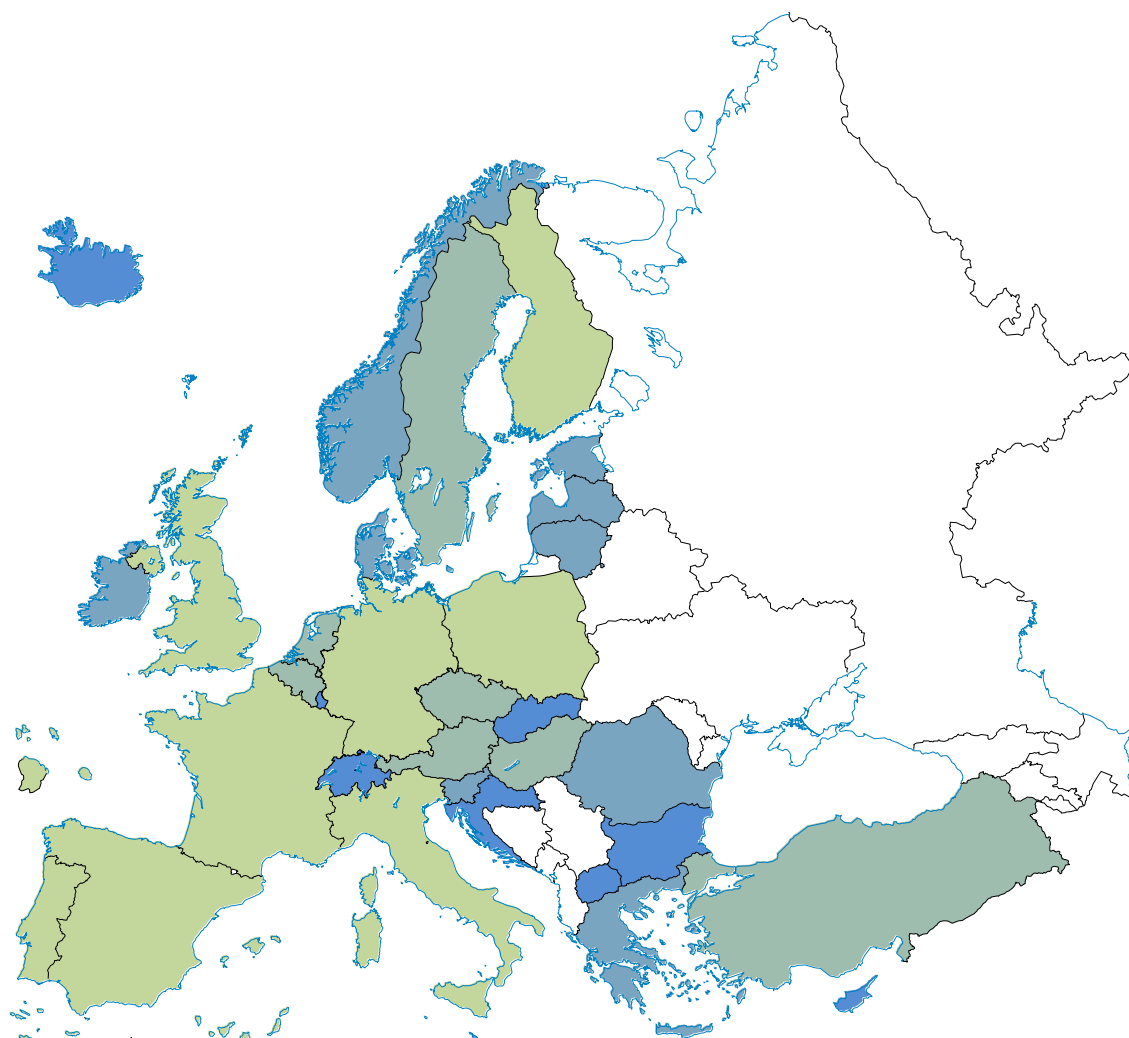
\*multiple answers possible

One sees that the distribution of host countries for staff mobility across Europe was rather uneven. Staff members usually spent time at an institution in one of the large HE systems, namely UK, Germany, Italy, Spain and France, together hosting more than 10% of the staff. The same countries in a slightly different order (Spain, Germany Italy, France and the United Kingdom) were also the main recipient countries according to the official EC statistics.<sup>33</sup> However, Portugal and Finland ranked relatively high on the list of host countries, given the size of these countries while many other smaller countries and particularly those in South-East Europe received low percentages. As the scope of the question was not limited to the Erasmus programme, a substantial number of people go to countries outside the sample monitored.





<sup>32</sup> 0 appears as a rounding effect with values <0.5

<sup>33</sup> See [http://ec.europa.eu/education/library/reports/erasmus1112\\_en.pdf](http://ec.europa.eu/education/library/reports/erasmus1112_en.pdf) , 35

**Figure 2-14 Erasmus staff mobility by host country (in %)**



**Percentages**

	under	3
	3 until	6
	6 until	10
	10 and more	

**Higher Education Institutions (HEIs)**

The EIS also included the perspective of 964 HEIs from 25 countries.<sup>34</sup> This sample represented 29% of the overall possible sample of HEIs sending out students and staff on Erasmus mobility.

<sup>34</sup> The sample does not cover all countries as participation was voluntary and it was not the case that HEIs from all countries responded to the call.

**Table 2-17 Participation data for HEIs**

<b>Number of Erasmus University Charter (EUC) holders (2011-12)</b>	<b>Number of HEIs sending out students and staff (2011-12)</b>	<b>Participating HEIs in EIS 2013</b>	<b>Feed-back rate<sup>35</sup></b>
4452	3329	964	29%

The sample included all types of HEIs especially regarding the highest degree and size.

**Table 2-18 Size and degree distribution of HEIs (in %)**

	<b>EIS sample</b>				
	<b>Short-cycle degree</b>	<b>Bachelor's degree</b>	<b>Master's degree</b>	<b>Doctoral degree</b>	<b>Other</b>
Highest degree awarded	18	13	28	36	5
	under 1,000	between 1,000 and under 5,000	between 5,000 and under 10,000	more than 10,000	
Size	43	28	9	19 <sup>36</sup>	

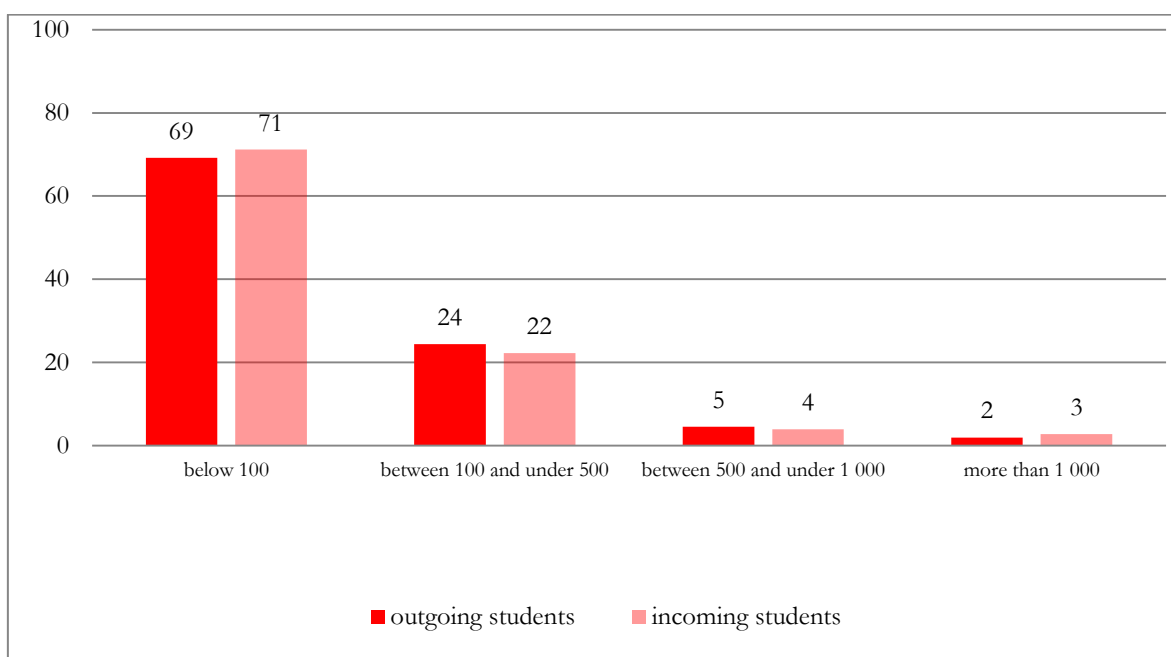
With regard to the aspects of international mobility, the vast majority of HEIs (69% to 71%) sent out and received small numbers of students (less than 100) a year. This is in line with the observations in the Erasmus statistical data.

<sup>35</sup> i.e. the number of HEIs that participated in EIS relative to the total number of HEIs sending out staff and students in Erasmus.

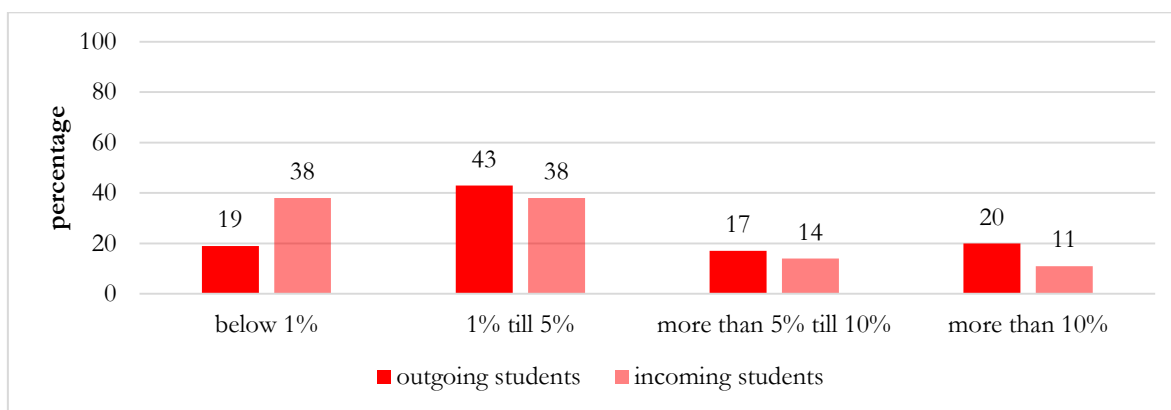
<sup>36</sup> Because of rounding up, 1% is missing in the total.



**Figure 2-15 Number of mobile students (outgoing & incoming) at HEI (in % of participating HEIs)**

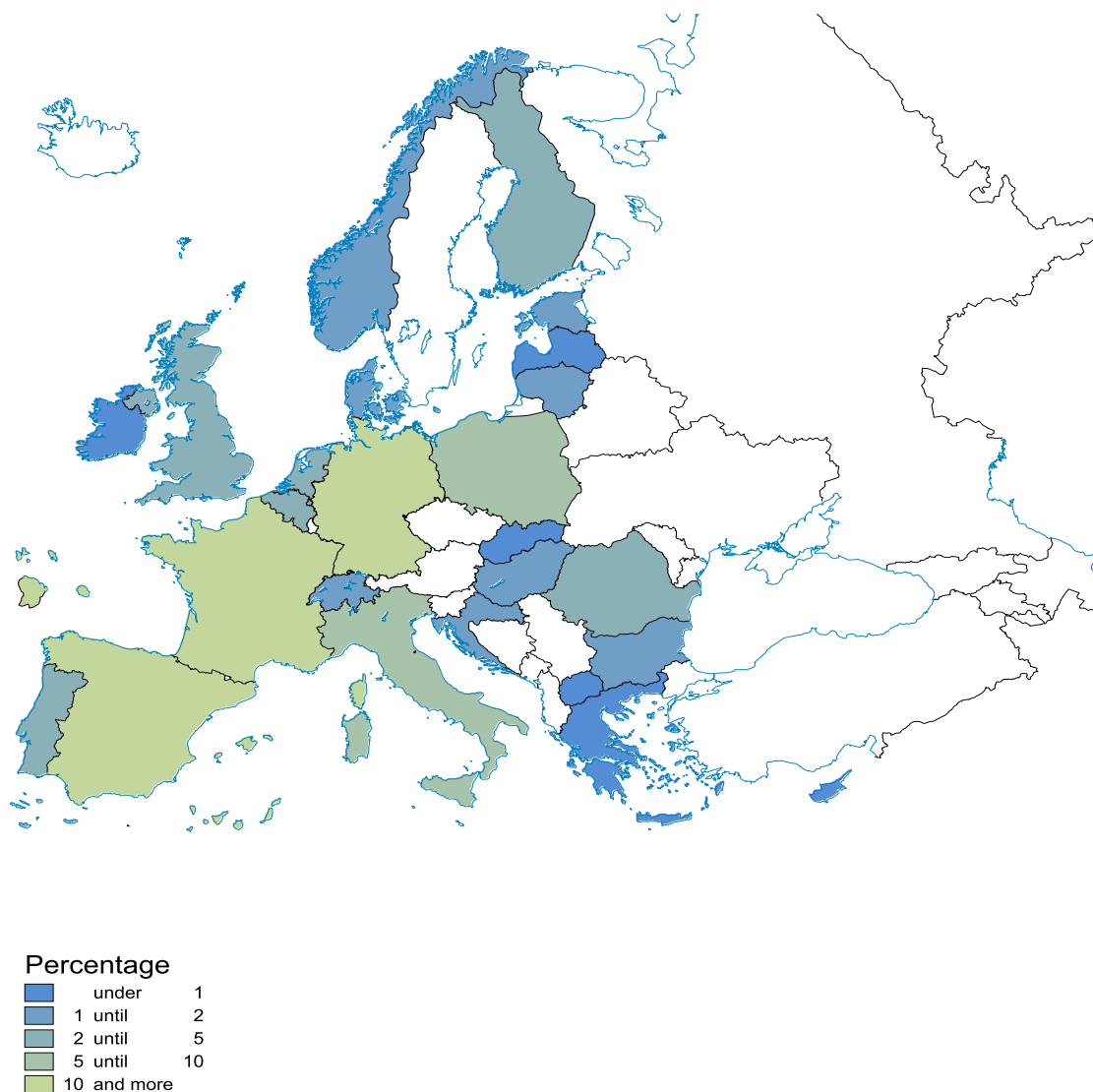


**Figure 2-16 Percentage of mobile students among all students at HEI**



If we consider the percentage values of the annual sample, in 62% (for outgoing students) and 76% (for incoming students) of the HEIs these two groups only constitute up to 5% of the student body.

**Figure 2-17 Distribution of HEIs participating in EIS across countries (in %)**



The participating HEIs were not entirely evenly spread across Europe, but this was to be expected. However, Germany, France, Italy and Spain were strongly represented, which also reflects the sizes of their respective HE systems. As one can also see from the individual country reports in Annex 1, all those countries had a fair number of participating HEIs.

### Employers

**Table 2-19 Participation data for enterprises**

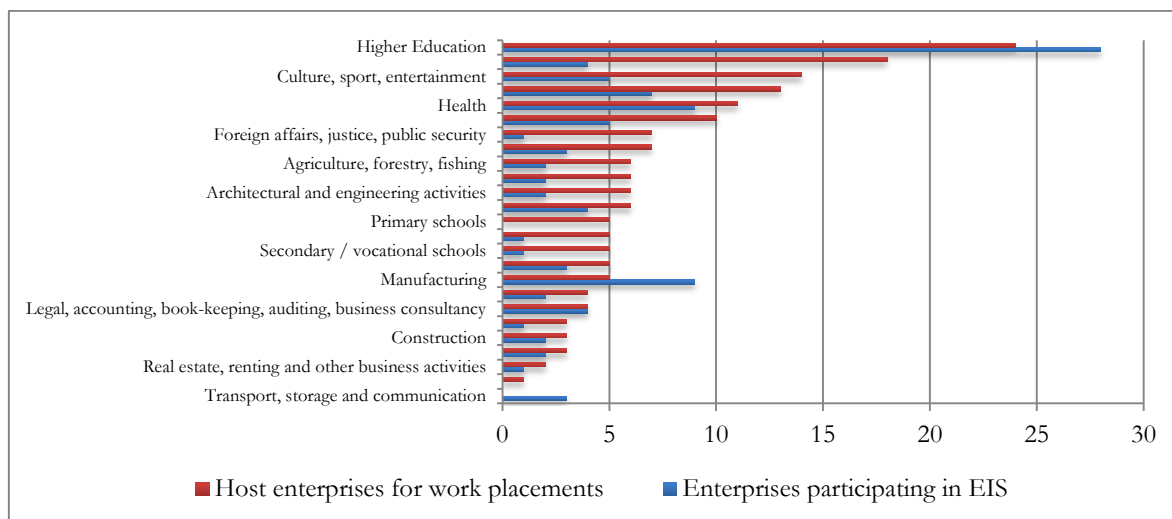
	<b>Participation numbers</b>
Number of small enterprises (below 50 employees)	180
Number of medium-sized enterprises (50 to 249 employees)	136
Number of large enterprises (over 250 employees)	256
No information about size	80
<i>Total</i>	<b>652</b>

The EIS study also reflected the assessments of the employers. A total of 652 employers, covering 30 European countries, took part in the survey. The sample was distributed fairly evenly across the three major segments of public, private not-for-profit and private for-profit companies. The largest sector in the sample was the higher education sector, i.e. companies that defined themselves as working directly for HEIs but not being HEIs, followed by manufacturing. Various other sectors were represented, largely to the same degree. The largest group working with and for HEIs consisted of 68% enterprises in the public sector, 20% private not-for-profit organisations and 10% private for-profit organisations.

**Table 2-20 Distribution of enterprises across sectors (in %)**

EIS sample			
Public sector	Private not-for-profit sector	Private for-profit sector	Other
35	19	45	1

**Figure 2-18 Field of activity, enterprises (in%)<sup>37</sup>**



The sectors of companies which participated in the survey among enterprises and the sectors of companies in which students stayed during the period abroad were largely in the same order, with manufacturing in a position of lesser importance. Regarding size, large companies were slightly dominating.

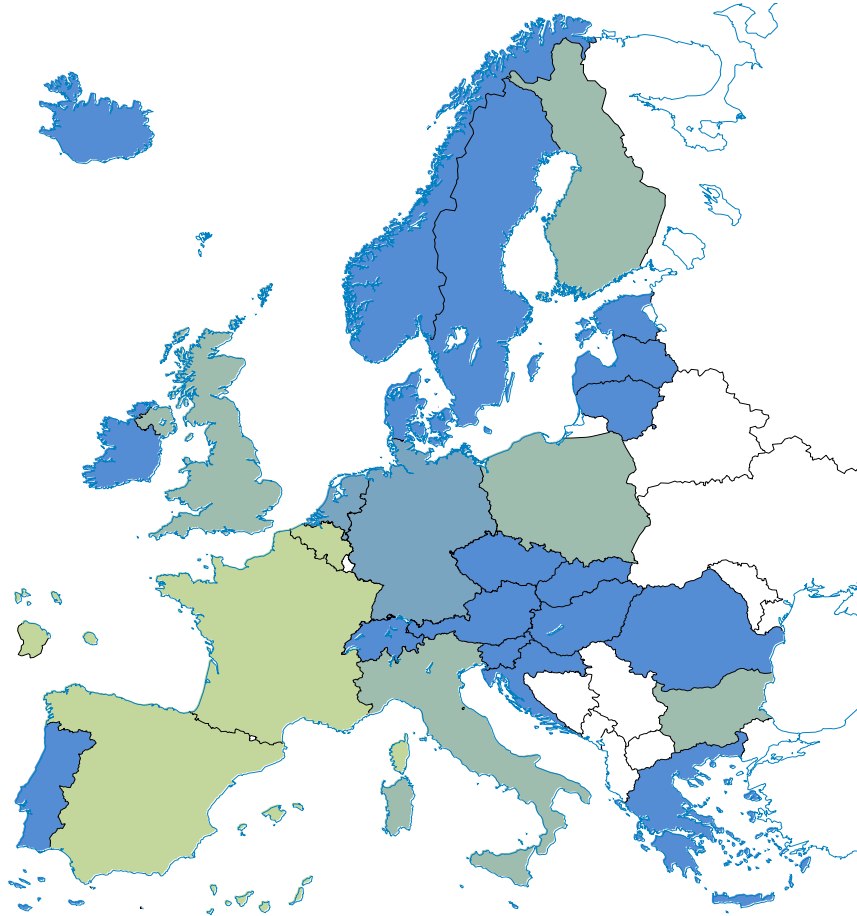
**Table 2-21 Distribution of enterprises by size (in %)**

EIS sample		
Small (up to 49 employees)	Medium-sized (50-249 employees)	Large (over 250 employees)
32	23	45

The participating companies were rather evenly spread across Europe with Belgium, France and Spain being particularly well represented.

<sup>37</sup> The enterprises that stated to work in the field of higher education were not HEIs themselves. Multiple answers were possible.

**Figure 2-19 Distribution of enterprises across countries (in %)**

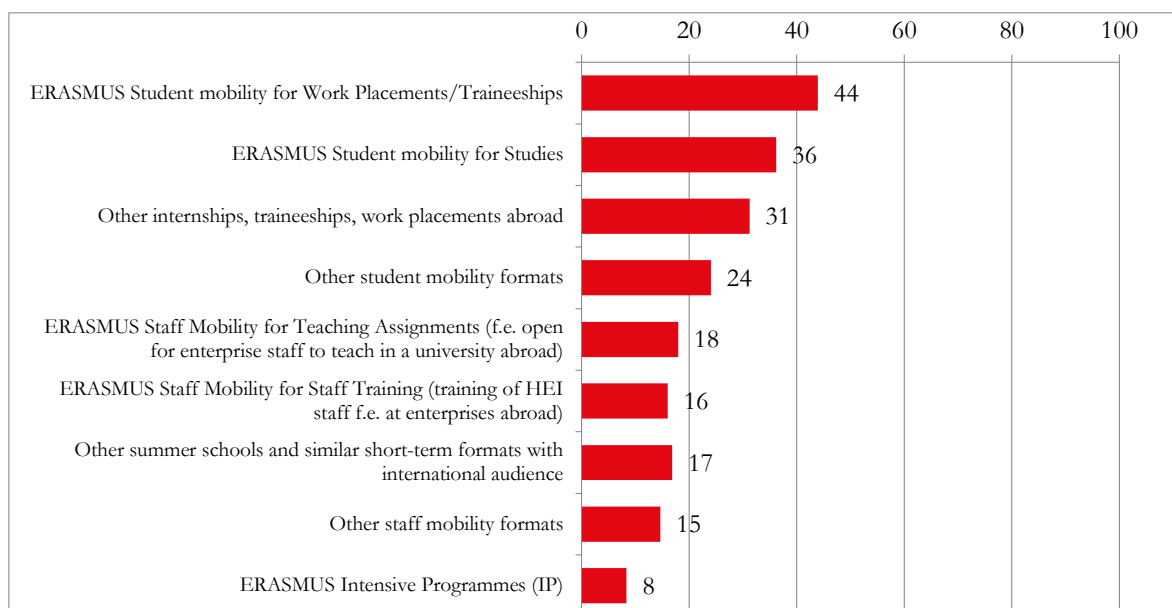


**Percentages**

Blue	under	2
Light Blue	2 until	4
Light Green	4 until	10
Dark Green	10 and more	

The vast majority of the companies used their own national language as the official language of the company, although 26% declared to use English even where it was not the local language.

**Figure 2-20 Types of mobility in which enterprises were involved (in %)**



44% of the responding enterprises were involved with Erasmus student mobility for placements. This can be related to the fact that employers usually act as host institutions for Erasmus student placements and possibly a number of their employees participated as mentors of students in the Erasmus work placement action. Employers were also involved in the Erasmus study action (36%). Additionally, enterprises were active in other work placements (31%) and student mobility actions (24%). Staff mobility was, although to a much lesser degree, also an area of activity for enterprises (18% STA, 16% STT, 15% other staff actions). The slightly lower results for summer schools (17%) and IPs (8%) were to be expected as these are activities in which companies are usually much less involved.

### Intensive Programmes (IPs)

The short-term programmes, in general, and the IPs, in particular, were of special importance to the study. In the EIS survey, we therefore incorporated a sample of 6,112 students, 860 alumni and 589 staff who took part in an international summer school, at their home or abroad. Among those, 24% of alumni, 25% of students and 45% of staff made use of Erasmus Intensive Programmes (IP).

**Table 2-22 IPs and other types of summer schools**

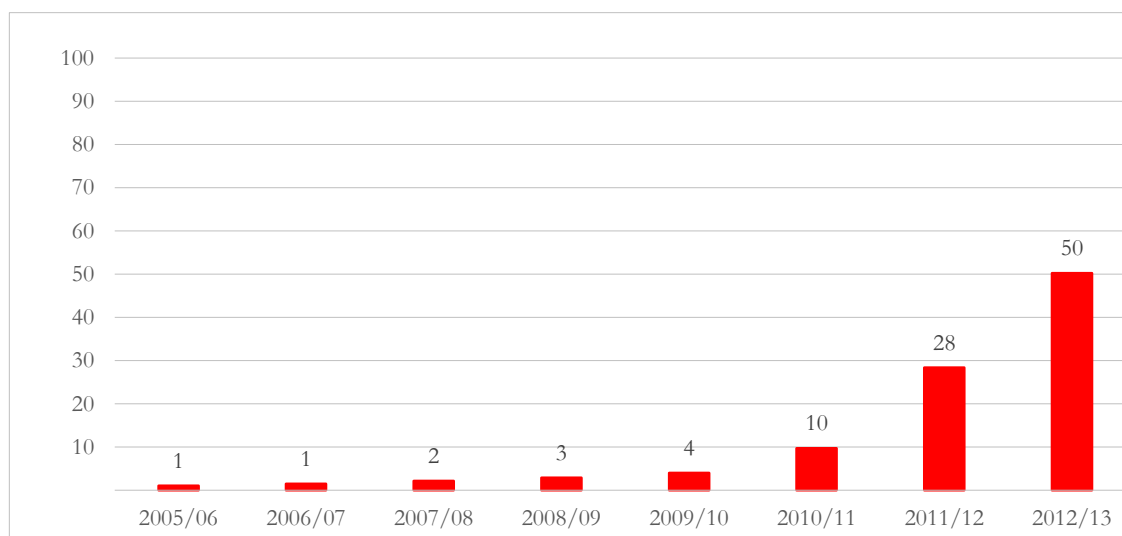
	EIS sample		
	Students	Alumni	Staff
All categories of international summer schools	6,112	860	589
Erasmus IP (at home or in another country) <sup>38</sup>	1,512 (25%)	204 (24%)	267 (45%)

Student respondents who declared they had either already taken part in an IP or were intending to participate in this mobility action, largely did so once or were doing so for the first time and, what is more, were intending to do so during the current academic year.

<sup>38</sup> Technically IPs are not necessarily summer schools, but in practice the vast majority take place during the summer.

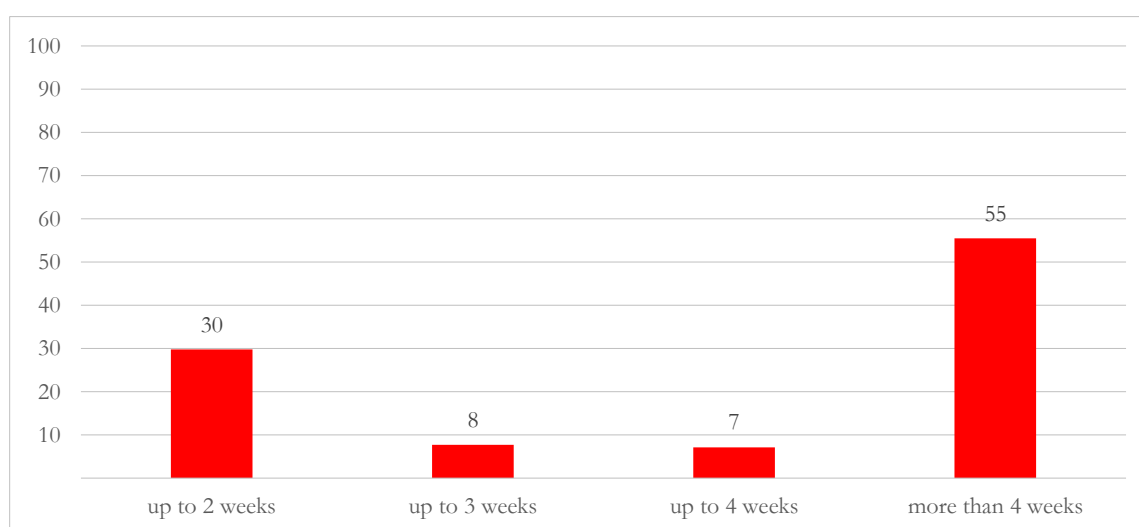
IPs were rather to be expected a one-off experience for most students as most of these programmes are usually linked to a special seminar/project in a particular semester; in addition, given the overall scarcity of IPs, it was not very likely that students will repeat the same programme or find another one on offer. It is therefore interesting to see that despite this, 12% of former student participants in IPs took part in two or more such programmes. Most of the respondents who participated in IPs did so in the year prior to the study and in the year in which the study took place. In the EIS sample, 50% had participated in an IP in 2012/13 and a further 28% in 2011/12.

**Figure 2-21 First year of participation in an IP, students (in %)**



30% of students participated in IPs of less than two weeks' duration, while the majority (55%) participated in IPs of more than four weeks' duration. IPs of up to 3 weeks (8%) and up to 4 weeks (7%) were not as common.

**Figure 2-22 Overall duration of IP, students (in %)**



## 2.3. The qualitative study

### Country sample collection

The qualitative study was carried out in a selection of countries to identify significant similarities and differences. The goal was to represent the diversity and variability between countries in order to understand better the underlying tendencies, facts and perceptions about the impact of Erasmus mobility on the institutional development and internationalisation of HEIs. As a result, the following countries were included: Bulgaria (BG),<sup>39</sup> Czech Republic (CZ), Finland (FI), Germany (DE), Lithuania (LT), Portugal (PT), Spain (ES) and the United Kingdom (UK).

Within each country, all relevant target groups were involved in the study: students, alumni, staff, institutions and employers. In terms of participants, all Erasmus mobility actions were represented in the sample. Differences between mobile and non-mobile students and staff were also analysed. The idea was that each country could represent one or some of these features and characteristics to thus achieve the maximum variation in the selection of variables.

### Methodology of case-study data collection

The team had designed a complex and innovative methodology that combined various qualitative methods for different target groups. As outlined above, the data collection for the qualitative study was conducted through a series of site visits to each of the selected countries, supplemented by online, telephone and face-to-face interviews. Within each of the eight countries selected, data was collected by means of asynchronous online interviews (by email) with students, alumni and staff from various HEIs in each country; semi-structured interviews with employers (online, telephone, face-to-face); one focus group with mobile students per country; one focus group with mobile academic staff per country; and one institutional workshop per country.

The process was very similar in all countries in order to guarantee the comparability of the results. However, depending on the specific characteristics of each country, the exact composition of the focus groups varied. In particular, this decision depended on the data on outgoing students and staff who participated in Erasmus actions in other countries and the relative importance of the different mobility programmes in each country.

### Asynchronous online interviews with students, alumni and staff

The team interviewed by email students, staff and alumni, using around three to four open questions for each target group, three questions for students, two to four questions for staff and four questions for alumni. In order to contact the respondents, we used the database of those who had volunteered to participate in the qualitative study. This database allowed us to select individuals from the categories identified in the initial tender proposal: student mobility for studies, student mobility for work placements, IP for students, non-mobile students, staff mobility for teaching assignments and for training, IPs for staff, non-mobile staff and alumni (of all action types).

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<sup>39</sup> Although Romania was among the first selection of countries, it was ultimately substituted by Bulgaria due to the difficulty of identifying a host institution which could organise site visits. Bulgaria and Romania showed a fairly similar profile in the quantitative study, so that they were of interest in similar ways for the qualitative research.

In the case of students and staff, the CGU was in charge of contacting respondents and sending invitations for the online interviews. The main tool used was the dissemination of the questionnaires for the online interviews by email. Several mailings were sent from the beginning of October until December to both target groups. However, the main challenge faced was that the size of the databases of volunteers differed from one country to another, leading to some irregular results.

An initial invitation email was also sent to the alumni, asking them for their willingness to take part in the questionnaire. After agreeing, a second email was sent to the participants to provide them with the link to the respective questionnaire. Several reminder emails were sent to the persons who had not responded to the first email. Finally, Excel files with the respective responses were sent to the CGU. Alumni were selected and/or contacted using the list from the quantitative study and help from ESN national representatives.

In the countries with larger databases, the target number of respondents was easily achieved, while in those countries whose databases were smaller, additional effort was required. In those countries with a lower response rate, the CGU contacted member universities for the dissemination of the online interviews, as well as other university networks (Utrecht Network, Santander Group, UNeECC). With regard to students, ESN played a crucial role, since it facilitated the work of contacting students through their representatives in those countries with a lower response rate. In the case of alumni, ESN was in charge of contacting possible respondents and sending invitations for the online interviews. The questionnaires for these interviews were designed using Google forms. Two questionnaires existed for each country (one for mobile students and one for non-mobile students). The responses were presented automatically in a Google spreadsheet indicating the respective country and mobility form (mobile/non-mobile).

## **Site visits**

### ***Selection of host institutions***

Despite the tight deadlines and time constraints, the team managed to overcome the difficulties and the site visits were developed in line with the objectives of the study. The Compostela Group of Universities was responsible for the process of selection of the host institutions. Since the beginning of the project, the CGU had compiled a database with the relevant contacts for this study at each member university. This database, which also contained member universities of the Santander Group and the Utrecht Network, was used for the identification of host institutions. A formal invitation was sent to an institution in each of the selected countries which seemed suitable as the organiser of the site visit due to its collaborative role during the study, its specific profile or its geographical location. Geographical location was also important in ensuring that the various HEIs throughout the respective country were adequately represented. This procedure started in June and finished in October 2013.

Most of the host institutions were picked from among CGU member universities to ensure efficient communication from the outset. Once an HEI had accepted the role of host institution, the university had to provide the contact details of a local coordinator who was to act as the liaison between the CGU (the team of researchers for the qualitative study) and the host institution. Coordinators were in charge of identifying students and staff at their universities. Furthermore, they were responsible for sending invitations to other HEIs within their country. It was thought that this was the most efficient way of proceeding to avoid language barriers and in order to highlight the relevant role of the host institution in the organisation of the site visit.



Coordinators were provided with the document 'Guidelines and Programme for the Two-day Site Visit - Information for Facilitators and Coordinators'. This document provided a list of tasks which the coordinator and the host institution were expected to carry out, as well as a proposal for the scheduling of the sessions. The schedule could be modified in accordance with the needs and special characteristics of each country and/or university (such as timetables and overlaps with other events).

The coordinators carried out the selection and established contact with the HEIs. Although in all countries host institutions tried to contact a wide sample of universities, distances between cities, transport connections and the cost of travelling were sometimes a handicap. Therefore, in some cases regional representativeness was not achieved, and most of the participants in the workshops were from the same city or from regions nearby. Moreover, online participation was offered to ensure greater participation. In the case of Finland, representatives from three different HEIs participated online in the institutional workshop.

If the target of ten participant HEIs was not achieved, as a consequence of the factors mentioned above, a short email questionnaire was sent to those HEIs that had been invited. This allowed the team to obtain a wider sample of experience and points of view. Participants had the opportunity to exchange ideas and practices, which was not only of interest for the qualitative study, but also for each of the participants. One expert from the qualitative research team and a representative of the host institution (the coordinator or the head of the international relations office) co-chaired the sessions.

### **Calendar for site visits**

Dates for the site visits were proposed by the CGU, taking into account the availability of experts and the host institution staff. The dates were also set in line with the overall project calendar, which only left a limited window for the visits (late October to early December 2013).

**Table 2-23 Calendar of site visits (in chronological order)**

<b>Country</b>	<b>Dates (2013)</b>	<b>Host institution</b>	<b>City</b>
<b>LT</b>	24-25 October	International School of Law and Business	Vilnius
<b>UK</b>	28-29 October	University of Roehampton	London
<b>DE</b>	14-15 November	Humboldt-Universität zu Berlin	Berlin
<b>CZ</b>	14-15 November	Masaryk University	Brno
<b>PT</b>	21-22 November	Universidade do Minho	Braga
<b>FI</b>	28-29 November	University of Oulu	Oulu
<b>ES</b>	3-4 December	Politechnical University of Cartagena	Cartagena
<b>BG</b>	4-5 December	University of Chemical Technology and Metallurgy	Sofia

### **Methodology of the site visits**

The main purpose of the focus groups and workshops was to obtain further feedback and comments on the results of the online semi-structured interviews in relation to the impact of Erasmus mobility on the institutional development and internationalisation of HEIs. Focus groups allowed us to evaluate the real impact of Erasmus mobility with a view to increasing it or, more generally, developing specific policy recommendations.

For mobile students and staff, the team used focus groups that were held during the two-day site visit in each of the countries selected. Eight site visits were organised with a total of 16 focus groups comprising mobile students and academic staff. Moreover, during the two-day site visit, an institutional workshop was organised with the intention of gathering data from the various HEIs and guaranteeing the adequate representation of institutions within each country (the aim was to ensure that each workshop consisted of around ten different HEIs). The team carried out these workshops, eight in total, mainly with non-academic staff responsible for mobility departments (international relations directors, Erasmus coordinators, staff in charge of mobility programmes, etc.) or other mobility programmes.

Host institutions were in charge of assigning one or more assistants to the various sessions. These assistants were responsible for taking notes during both focus groups and the institutional workshop and had to prepare a summary of the sessions for the qualitative team. Assistants were provided in advance with a script showing the **structure of the sessions in order to facilitate their role as 'rapporteurs'**. Each site visit had an expert assigned to it. The expert offered support to the host institution, mainly with regard to the questions relating directly to the qualitative research, such as the composition of focus groups and the profiles of the participants. The CGU, on the other hand, acted as the coordinator for all the site visits, providing host institutions with continuous information and support, where needed (such as contacting other HEIs, providing contact details and giving advice).

Apart from the above-mentioned guidelines, other documents were provided from the start to facilitate the coordinators' tasks, such as a template for invitations (both for focus groups - academic staff/students - and institutional workshops), a confirmation template (for managing the attendance of participants of focus groups), a project description and scripts. Moreover, with regard to data protection, all participants were issued with a consent form just before the focus groups and the institutional workshop. This document stated that participants had been duly informed of the dynamics of the sessions and that discussions would be tape-recorded only for research purposes.<sup>40</sup> Demographic surveys (one document for students and one for academic staff) were also disseminated among participants in the focus groups to support the experts in their analysis of the results. In addition, the CGU prepared certificates of attendance for participants in the sessions as a way of showing its gratitude for their crucial role in the qualitative study.

### **Focus Groups**

Various socio-demographic characteristics were taken into consideration when deciding on the composition of the focus groups. Socio-demographic characteristics are the main social features that define a population. For student focus groups, the team considered some of the general characteristics (age, gender, degree and duration of study) and some that were specific to our research objectives (Erasmus action types and duration of stay). For mobile staff groups, both general (age, gender, professional position and duration of working at the corresponding HEI) and specific characteristics (Erasmus action types and duration of stay) were taken into consideration when deciding on the composition of focus groups.

As indicated in the guidelines provided to coordinators, they were asked to select seven to ten students and the same amount of staff and to combine the various Erasmus action types (studies, work placements and IPs). The expert from the qualitative team assigned to the focus group moderated the focus group discussions with the help of the assistant provided by the host university, who was responsible for

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<sup>40</sup> It is important to mention that only in Germany were some participants reluctant to be recorded. Those sessions were therefore not recorded to respect the privacy of the attendants.

taking notes. Focus group questions were open-ended and moved from the general to the specific.

Whenever possible, the language used was the language of the selected country in order to guarantee the maximum level of freedom to **'build' and 'develop' the dialogue**. This happened in the Czech Republic, Germany, UK, Portugal and Spain. In Bulgaria, Lithuania and Finland the focus groups were conducted in English.

The focus groups had two main aims:

- personal: an assessment of the motivation of and effects of mobility on students with regard to their own individual characteristics (skills, competences and employability, curricula and expectations of future mobility) and of the impact of Erasmus mobility on staff academic careers;
- institutional: the identification of the changes perceived in their HEIs with regard to the level of internationalisation and the impact of mobility on new teaching and learning methods, in the case of staff also research and the enhancement (or absence of it) of the international profile of the institution.

The team collected opinions about the significant differences between and impacts of various types of mobility, institutions and countries.

### ***Institutional Workshops***

The level of institutionalisation of HEIs, their achievements in terms of institutional impact and their international profile were the main issues dealt with in the qualitative study. In order to analyse the institutional impact of the Erasmus programme, the team drew upon the expertise of internationalisation experts (such as the directors of international offices).

Experts from the HEIs of each country selected were therefore invited to participate in an **"expert's consultation" workshop and to present their views on the institutional impact of the Erasmus programme on their institution under the title '25 years of Erasmus: successes and challenges'**. Host institutions were provided with an invitation template to facilitate the organisation of the workshop. Invitations were mainly sent to Erasmus institutional coordinators, heads of international relations offices, vice-rectors for international affairs and others in similar positions.

### ***Online interviews with HEIs***

Attendance of institutional workshops was sometimes limited, probably affected by travelling expenses and the impossibility of offering participants any financial assistance. Online interviews were therefore carried out to include the perspectives of other HEIs whose employees were not able to attend the institutional workshop and were conducted in several waves. Mailings were sent during the first two weeks of October to students and academic staff using the databases provided. Several reminders were sent out on a weekly basis (or even more often in those countries with lower response rates) during October, November and December. Students were also contacted through ESN databases in those countries that showed a slower response rate for this target group.

Due to the importance of analysing employability and taking into account the fact that some of the respondents targeted who could offer more information on this aspect were alumni and employers, the dissemination of these questionnaires was postponed so that the questions could be improved on the basis of the recommendations made by the EC on 4 November, 2013.

### ***Semi-structured interviews with employers***

One of the main challenges HEIs face nowadays is providing students and graduates with the skills and knowledge a continuously changing labour market requires. Companies are in need of employees who meet professional profiles suited to the **requirements of a global economy. The employers' perspective was therefore** considered essential to a thorough understanding of the impact of Erasmus mobility programmes on employability.

The selection procedure varied from country to country. Initially contact details were extracted from the database of volunteers who participated in the quantitative study, but this database did not provide enough data for some countries. Coordinators for the site visits were therefore asked to help in the identification of three to five employers of their respective countries. They were advised to contact companies with a relationship of some sort with their institution (traineeship/work placement agreements) and to some extent with an international profile (such as companies in need of employees with language skills or special cultural awareness competences, employers active on the international market).

As most of the coordinators were staff of the IROs, some of them did not have any access to the employer database. In those cases, they contacted career offices at their own universities or provided those contacts to the CGU. The CGU was responsible for verifying the willingness and availability of employers to participate in the study and for putting them into contact with the relevant expert of the team involved in the qualitative research for each country. Experts arranged the time and date for the interviews directly with the representatives of the companies. Each interview took approximately 20 to 30 minutes. Due to the impossibility of holding them on the same dates as the site visits, they were organised separately in the months of December and January, mainly by phone or Skype based on a semi-structured interview guide. **However, the modifications to the questions based on the EC's recommendations** resulted in a slight delay. In addition, as December is a fairly busy month for most companies, some interviews had to be postponed until January.

### **Lessons learned with regard to methodology and the data on participation**

The methodology of the qualitative study was complex and it was compiled using a set of different techniques that combined focus groups, institutional workshops, semi-structured interviews and phone/online interviews. In total, the team gathered more than 700 records, a more than significant quantity in view of the qualitative methodology. On the one hand, site visits provided highly interesting conclusions thanks to the dynamics of group discussions. Furthermore, the institutional workshop not only served the purposes of the study itself, but also provided interesting feedback for each of the institutions that participated.

Probably the comfortable atmosphere, encouraged by the member of the team involved in the qualitative research in charge of each site visit, and the use of the **country language in the majority of the site visits facilitated the participants'** discussion. The debates that took place during these sessions provided a set of good practices and areas for improvement that was of great assistance in understanding the impact of Erasmus mobility programmes.

The procedure for the organisation of the site visits was fairly standardised by means of guidelines and other supporting documentation. Nevertheless, it is important to mention that the existing differences between countries were taken into consideration. This means that not only cultural features were considered, but also information provided by the quantitative results and trends within the framework of various categories of Erasmus actions. Furthermore host institutions played a crucial role in

organising schedules and setting dates in such a way that they encouraged participation. They also provided other relevant data concerning the general attitude towards Erasmus actions in each country which might explain the higher/lower attendance in some of the sessions.

Concerning participation in focus groups, individuals were willing to explain their international mobility experience and, in general, host institutions did not face many difficulties in identifying and selecting participants.<sup>41</sup> The economic crisis that affected Europe in recent years led to budgetary restrictions in many HEIs.

**In the case of employers' interviews, in general the information** provided was of considerable importance for a general understanding of the impact of Erasmus actions, especially in relation to employability. Focusing on a profile of companies whose activities to some extent were international in scope, the identification of firms by host institutions together with the CGU was quite fruitful.

In conclusion, the qualitative study resulted in a continuous flow of information and communication between the team and host institutions including quick responses in anticipation of challenges and a high degree of flexibility to enable those involved to adapt to the ongoing demands and to ensure maximum representation of the target groups.

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<sup>41</sup> Except for UK, due to weather-related challenges.

## 3. What happens to the individual student? The development of skills, competences and employability

### 3.1. The context

#### Significance of student and staff mobility

Student and staff mobility has been growing in scale and significance alongside the developments in the Bologna Process and the integration of the European Higher Education Area (EHEA) over the last decades. Between the start of the Erasmus programme in 1987 and the academic year 2012-13, over 3 million students had participated in the Erasmus mobility programme as have more than 300,000 lecturers and other staff in higher education since 1997. More than 4,000 higher education institutions in 34 countries already participated, and more are keen to join in (European Commission 2012a).

On the other hand, one can observe growing needs of European society which have to be met, in particular a skills gap and mismatches between what employers require, the skills available on the labour market and what students learn. In 2013-2014, there were 5.7 million young unemployed European citizens, while at the same time one third of employers could find employees with the right skills on the labour market. Therefore, the links between employability and study experience have to be strengthened and it is the aim of EIS to show how mobility might help to improve the skills needed on the labour market, thus increasing employability and ultimately reducing the rate of unemployment among young people.

Always a number of benefits for participating students, staff and institutions and, by extension, for the EHEA were commonly attributed to student and staff mobility. The European ministers responsible for higher education claimed that the programme had positive effects, such as personal growth, increased employability, the acquisition or enhancement of social and intercultural competences, increased cooperation and competition between participating institutions, and improvements in the quality of education and research (London Communiqué 2007; Leuven/Louvain-la-Neuve Communiqué 2009; European Commission 2011a). Erasmus student and staff mobility, with its core focus on transnational academic cooperation and skills development, is thus a key element in the Europe 2020 strategy for smart, sustainable and inclusive growth and jobs.

To support Member States' reforms and contribute to the goals of the Europe 2020 strategy, the European Commission identified the different areas for reform relating to student/staff skills development in its 2011 Modernisation Agenda<sup>42</sup>: to increase the number of higher education graduates; to improve the quality and relevance of teaching and researcher training, to equip graduates with the knowledge and core transferable competences they need to succeed in highly skilled occupations; and to provide more opportunities for students to gain additional skills through study or training abroad, and to encourage cross-border cooperation to boost higher education performance (European Commission 2013a).

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<sup>42</sup> In addition, the 2011 Modernisation Agenda identified, among various areas of reform for Member States and HEIs, the need to strengthen the "knowledge triangle" by linking education, research and business (European Commission 2011a, 12-13).

Accordingly the European Commission decided to promote mobility through various incentives. The ministers of the European Higher Education Area (EHEA) agreed to double the proportion of students completing a period of study or training abroad to 20% by 2020. The Single Market Act 2011 aimed to reduce barriers to mobility in the regulated professions, while facilitating mobility for researchers through the European Framework for Research Careers (European Commission 2011a, 6–11). In parallel, a **“mobility scoreboard” was developed by the European Commission to assess the progress made in removing obstacles to learning mobility within the EU.**

The question now is whether these investments had a positive impact on the skills and competences of students and thus whether mobility ultimately has positive effects on employability. Regarding mobility as such, various reports and studies provided detailed information and statistics about the phenomena of student and staff mobility, its recent developments and its trends at both the EU and national levels. The most important of these were the *EURODATA Student Mobility in European Higher Education* (Kelo, Teichler and Wächter 2006), the Erasmus statistics (European Commission 2012a), the Flash Eurobarometers (Gallup Organization 2010; Gallup Organization 2011) and the EU-funded study *Mapping Mobility in European Higher Education* (Teichler, Ferencz and Wächter 2011a; Teichler, Ferencz and Wächter 2011b). **These studies showed that experience abroad not only enriched students’ professional and academic lives, but could also promote openness, adaptability and flexibility, or enhance language learning, intercultural skills, self-reliance and self-awareness.** Staff mobility or exchanges were also regarded as having similar positive effects both for the individuals involved and for the home and host institutions (European Commission 2012a).

Previous research and studies of student mobility revealed significant consensus that international experience offers a potentially rich opportunity for significant personal change. For example, a large-scale research study on the impact of overseas experience on undergraduate students studying professional education programmes from the US (Shaftel *et al.* 2007) showed significant improvement in basic characteristics such as open-mindedness, flexibility, cross-cultural adaptability and appreciation of diversity, in addition to increasing understanding of the need for the study of foreign languages and culture, as a result of international study. The impact of the opportunity for international study depended on the length of the programme, with four-week stays resulting in a greater change in personality traits than shorter stays. Other studies provided evidence on the emergence of a new type of citizen, the global citizen, as a result of international mobility (Killick 2011).

In previous studies and in contrast to EIS, the main focus was on social and intercultural competences. According to (Hofstede 2009), the acquisition of **intercultural competences, in particular, generally defined as “the ability to communicate effectively and appropriately in intercultural situations based on one’s intercultural knowledge, skills and attitudes”** (Deardorff 2006, 247),<sup>43</sup> could be regarded today as an important strategy for preparing students to live and work within a globalised and complex world. Social and intercultural competences are therefore an attribute of increasing relevance to educational policies and are also a deciding factor in the selection of new employees. (Hinchcliffe and Jolly 2010) showed that cultural/social awareness was valued by over seventy-five percent of employers.

A large number of competency measurement tools or scales employed for (international) personnel development (Black, Mendenhall and Oddou 1991; Cui and Van Den Berg 1991; Cui and Awa 1992; Kühlmann and Stahl 1998; Bird and Osland 2004), which directly referred to the measurement of intercultural competences, also

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<sup>43</sup> For other definitions of intercultural competences see: Freeman et al. (2009), (Jones 2011), Crichton and Scarino (2007), Paige et al. (cited in Freeman et al. 2009, 13), Bolten (2007), Rathje (2006).

documented the importance of intercultural competences or skills. Furthermore, **(Leask 2009) found that students' development of intercultural competences is a key** outcome of an internationalised curriculum. Such a curriculum requires a campus environment and culture that motivates and rewards interaction between international and home students inside and outside the classroom. According to Leask, a range of people across institutions would need to engage with the internationalisation agenda over time to improve interactions between home and international students.

A comprehensive study conducted in 2006 and based on survey results obtained from 1,593 US students found that the experience of studying abroad produced a statistically **significant positive impact on students' intercultural competences if pre-college characteristics, college experience and the selection effect were controlled** (Salisbury and Pascarella 2013). Similarly, in a comparative study conducted with a group of 52 students enrolled at Texas Christian University, a semester abroad **seemed to have produced greater increases in students' intercultural communication skills** than the same semester spent at the home institution (Williams 2005).

Another large-scale, multi-year study of US students learning abroad with the aim of **documenting students' target-language, intercultural and disciplinary learning** revealed that: 1) students enrolled in study-abroad programmes achieved more progress in intercultural learning and oral proficiency in their target languages than control students studying these same languages in US classrooms; 2) there were significant statistical relationships between independent variables representing learner characteristics (e.g. gender, prior experience of studying abroad, the amount of target-language learning completed prior to departure) and programme features (e.g. duration of programme, type of housing) and the intercultural and target-language learning of students abroad; and 3) there were significant—though somewhat indirect—statistical relationships between gains in target-language oral proficiency and intercultural development (Van de Berg, Connor-Linton and Paige 2009).

However, a screening of the existing literature on the topic of this study reveals a lack of comprehensive studies measuring the actual impact of student and staff mobility by relying only on self-assessments and perceptions without taking into account psychometric-related factors. EIS on the other hand combines the perceptual perspective with a psychometric-related component which measures changes in the personality traits of the individuals involved in mobility programmes. Moreover, the study examines not only the academic benefits, but also the social and intercultural competences students/staff acquire through the experience of mobility. As EIS shows, these competences are closely connected to employability while the memo© factors, as explained in chapter 2, cover both intercultural and employability-related aspects.

### **Effects of student mobility and its relationship to employability**

Though the majority of studies focused on social and intercultural competences, several other studies concentrated on a set of different, more directly related skills. The large-scale VALERA study (Bracht *et al.* 2006) revealed that former Erasmus students associated their experience of mobility with improved international competences and facilitated access to the labour market. In addition, their self-assessment in terms of international competences was much higher than that of students who did not participate in Erasmus mobility programmes. The study **concluded that students "do not only mature during their stay but they also gain in competences often summarised as soft or key skills"** like intercultural awareness, adaptability, flexibility, innovativeness, productivity, motivation, endurance, problem-solving abilities and being able to work productively in a team (Bracht *et al.* 2006, 209).



Accordingly, the 2011 Eurobarometer publication *Youth on the Move* (Gallup Organization 2011, 36–40) emphasised foreign language skills, improved awareness of another culture and a greater ability to adapt to new situations as the three most important benefits students say they derived from mobility. They detailed these competences as socio-communicative skills such as intercultural awareness, adaptability, flexibility, innovativeness, productivity, motivation, endurance, problem-solving abilities and being able to work productively in a team (Bracht *et al.* 2006, 209).

All these skills and competences are closely related to employability. Positive results for three dimensions of personal development were also identified in a study conducted in 1980/81 at Mennonite colleges in the US, with data collected from a group which had studied abroad and a control group before and after the stay abroad, as well as one year later (Kauffmann and Kuh 1984).

These positive results were an increased interest in reflective thought and in the arts, literature, and culture, increased interest in the welfare of others, and increased self-confidence. On the other hand, a study carried out at two Dutch institutions of higher education found that mobility programmes of only three or four months' duration produced little change in students' competences. Other aspects, however, such as motivation and institutional support were shown to be important factors when measuring the effectiveness of mobility programmes (Stronkhorst 2005). These skills are covered by the memo© factors *Confidence*, *Serenity* (awareness of own strengths and weaknesses), *Vigour* (being a problem-solver) and *Decisiveness*.

While the VALERA study, as well as the Eurobarometer, however, lacked a measurement of outcomes, the recent study on the Assessment of Higher Education Learning Outcomes (AHELO) (Tremblay, Lalancette and Roseveare 2012) represented the first international attempt to measure student learning outcomes across borders, languages and cultures in higher education. The AHELO feasibility study was conducted by OECD over five years in 17 participating countries and regions, involving close to 23,000 students and 4,800 lecturers in 248 HEIs. The first report presented only the survey design and lessons regarding implementation, while a second report was expected to be published in due course, which might provide details of the data analysis and national experience. However, it did not materialise during the course of EIS.

The acquisition of social and intercultural competences, as well as other employability-related soft skills which are deemed to be important, is promoted at nearly every HEI through exchange or mobility programmes and similar activities. However, up until now, the literature review showed that no competency measurement tool or survey had been developed prior to memo©<sup>44</sup> that explicitly examined employability-related skills and their improvement through studying abroad. Also possible negative effects, such as those resulting from 'culture shock' (Oberg 1960), have not been monitored systematically thus far.

Also characteristic differences between mobile and non-mobile students were so far not in the focus of most studies. If at all, such studies focused on statistical evidence, such as financial constraints. According to the 2006 *Survey of the Socio-Economic Background of Erasmus Students* (Otero and McCoshan 2006), students with an academic family background, with an above-average family income and with at least one parent working as an executive, a professional or a technician were greatly over-represented among participants in the Erasmus programme. In a similar vein, two EU-funded studies suggested that financial means were an important factor in determining who goes abroad and who does not.

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<sup>44</sup> <http://www.memo-tool.net>

The study *Improving the Participation in the Erasmus Programme* (CHEPS, AEF, ECOTEC, ICHM and Amsterdam University of Applied Sciences 2010) found financial considerations to be the key barrier to participating in Erasmus programmes, while the *Youth on the Move* study identified insufficient financial means as the second most important reason given by non-mobile students for not going abroad.<sup>45</sup> Another survey-based study (Messer and Wolter 2007, 647–663), conducted amongst Swiss graduates, revealed substantial socio-economic differences between students participating in mobility programmes and students not going abroad in the context of their studies. It also found that phenomena correlating with previous experience of studying abroad, namely higher starting salaries and a higher propensity to engage in postgraduate studies, were not causally related to the experience of studying abroad.

Differences between mobile and non-mobile students, however, go beyond financial and organisational aspects. In a study of the impact of studying abroad on students' intercultural communication skills, (Williams 2005) observed that already at the outset students planning to study abroad scored higher on measures of intercultural communication skills than students not planning to go abroad. Evidence supporting the notion of a disparity between mobile and non-mobile students was also apparent in the survey-based QUEST project (CHE Consult 2013), which analysed the diversity of German college students across various dimensions. Apart from notable differences in socio-economic status, the survey found that students who did not participate in study-abroad programmes perceived time spent abroad to have higher instrumental value than students who actually went abroad. The latter appeared to be more intrinsically motivated, as they valued the experience abroad in its entirety and not necessarily in terms of immediate outcomes.

In summary, these findings suggest socio-economic as well as attitudinal differences between those students who participate in student mobility programmes and those who do not. In other words, students participating in mobility programmes exhibit a **different, possibly more academic "habitus"** (cf. Bourdieu) in terms of behaviour, lifestyle and attitudes than those students who complete their studies entirely at their home institution. In addition, (De Wit 2011) also made the critical observation that one of the major nine misconceptions in contemporary internationalisation was that there was no need to test intercultural and international competences. As he stated, "If these kinds of activities and instruments are considered synonymous with internationalization, then it is obvious to assume that intercultural and international competences will therefore also be acquired. Once again, reality is more complicated. It is not guaranteed from the outset that these activities will actually lead to that result. After all, students can completely seclude themselves from sharing experiences **with other students and other sections of the population in the countries they visit**" (de Wit 2011, 5). (Bosley and Lou 2014) also revealed that study abroad has a greater impact on those competencies when it is embedded in good preparation at home, and support during follow up after the period of study abroad.

EIS responded to the present state of this research by conducting a large-scale quantitative survey of various target groups and control groups of mobile and non-mobile individuals, which included psychometric items measuring personality traits, alongside questions on perceptions and facts. Such juxtapositioning of perception and personality trait results contributes to a better measurement of soft skills, such as social and intercultural competences. In addition to the primary data gathered through

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<sup>45</sup> Of non-mobile students, 33% surveyed gave this as their primary or secondary reason, the most frequently named reason being a lack of interest in going abroad (37%). See (Gallup Organization 2011, 44).

the quantitative surveys, qualitative case studies were also conducted in order to complement and contrast existing data on Erasmus mobility and its effects.

EIS examined how Erasmus mobility programmes contributed to the development of the personal competences and social skills needed on the current and future labour markets. As such, EIS explored differences in the social skills and personal competences of mobile students and staff in comparison with non-mobile students and staff. In this regard, the surveys included factual, perceptual and psychometric-related attitudinal items for assessing mobility outcomes.

The factual items were intended to capture the socio-economic differences described above, while the perceptual items provided opportunities for direct comparison with earlier studies, on the one hand, and allowed for a critical review of pure perception-based surveys, on the other hand, by comparing the perceptual results with those from the psychometric-related items. EIS therefore ensured continuity with previous studies, such as (VALERA 2006), (Janson, Schomburg and Teichler 2009), and (CHEPS 2010), and also tested the validity of the psychometric-related approach.

### **The relevance of employability**

In 2013, almost a quarter of young people in the EU labour market were unemployed. The youth unemployment rate has been 20% or above for 11 of the past 20 years (Eurostat, *Labour Force Survey*). In response to the high level of unemployment in Europe, the European Commission launched various policy initiatives in which employability has emerged as an important dimension.

The European Employment Strategy that took its inspiration from the Europe 2020 Growth Strategy sought to create more and better jobs throughout the EU and to support policy interventions aimed at improving the educational, technical and personal skills of young people. It also provided a framework (the "open method of coordination") for EU countries to share information, and to discuss and coordinate their employment policies (European Commission 2013b).

The Lifelong Learning Programme (2007-2013) that integrated the existing programmes, namely Socrates and within it Erasmus (for education), Leonardo da Vinci (for vocational training) and eLearning, emphasised the need to enhance young **people's education and vocational training and**, in particular, their cognitive skills (see Busemeyer and Trampusch 2011). Its main aim was to ensure greater coherence between activities in the area of education and training (Pépin 2007, 121). It also facilitated policy cooperation and interchanges at the level of European Member States and promoted a European dimension in education and training (European Commission 2011b, 2). The Erasmus mobility programme also linked up with Youth on the Move, a programme that was launched in 2010 as a comprehensive package of policy **initiatives to improve young people's job prospects and mobility in both the academic field and the world of work** (Martín 2012, 7-8).

Efforts at the European and state levels to track the progression paths of students and graduates within higher education institutions (HEIs) and beyond were increasing (Gaebel, Hauschildt, Mühleck and Smidt 2012). For this reason, the EU Council decided to establish a European benchmark to identify those education and training policies that may boost the employability of graduates from general education, vocational education and training, and higher education, and to help ensure a successful transition from education to work (Council of the European Union 2012a).

It also proposed a regulation establishing the new Erasmus+ programme for the period 2014-2020, with a significant increase in funding compared to the current budget (Council of the European Union 2012b). The focus on employability in the Erasmus+ programme is strong, as one of its main objectives is to improve the level

of competences and skills, with particular regard to their relevance to the labour market. Key to the achievement of this objective is increased and sustained cooperation between HEIs and business, as well as providing grants for more individuals compared to current programmes, including traineeship grants for students and recent graduates.

As such, Erasmus+ aims to support and promote transnational cooperation programmes like the Strategic Partnerships, Knowledge Alliances and Sector Skills Alliances with the aim to bridge the gap between academia and the world of work. This increased cooperation is fundamental to enhancing quality and innovation in teaching and learning, developing entrepreneurial attitudes and mind-sets, not just in students, but also in staff, and bringing about institutional change to support HEIs in achieving their modernisation objectives.

In addition to the transnational level of the EU, national governments also started to view the employability of graduates as an important policy objective. Consequently, they imposed this objective, to varying degrees, on national higher education systems and institutions. Acknowledging the assumptions of the human capital theory (Becker 1975), governments started to show a higher interest in employability and fostering the conditions necessary for increasing human capital. All these policy initiatives, at both the state and European levels, attest to the growing importance assigned to assessing and improving the track record of higher education in order to produce high-performing and employable graduates.

Several studies focused on the aspect of employability. The most recent study, *The Employability of Higher Education Graduates: The Employers' Perspective* (Humburg, van der Velden and Verhagen 2013), aimed at providing relevant new data about **employers' needs and their perspective on what makes graduates employable. The study used an innovative approach to study employers' preferences for graduates,** namely by simulating the selection process with hypothetical candidates. It employed a mixed-methods research approach by combining surveys among more than 900 employers in nine different European countries with in-depth interviews with employers, as well as focus groups with relevant stakeholders. The study underlined **some interesting conclusions about employers' perspectives on graduates' employability,** which were relevant to EIS. Underperformance of graduates seemed to come at great expense to employers. The results showed that graduates who belonged to the top 25% of their group had around 10% to 15% higher productivity compared to the average graduate, while graduates who belonged to the bottom 25% of their group had 20% to 30% lower productivity than the average graduate. Employers could not pool the risks of variation in skill levels since the costs relating to underperformance of graduates were much higher than the possible benefits associated with above-average performance, so employers seemed to prefer graduates who on average performed in relevant skill domains.

**The risk of graduates' underperformance made employers look for positive signals,** such as the match between the field of study and the tasks of the job, relevant work experience, grades or the prestige of the graduates' HEIs. **Professional expertise seemed to be one of the most important skills for graduates' employability.** Employers seemed to assume responsibility for the further development of expert thinking, as **this normally requires a further five to ten years' of working experience.** Interpersonal skills, such as communication and teamwork skills, became more and more important **for graduates' employability. There also seemed to be some room for specialisation in** the case of innovative/creative and commercial/entrepreneurial skills. International orientation was very much appreciated, though it could not compensate for a lack of relevant working experience or a non-matching field of study. Strategic/organisational skills were also needed for long-term career opportunities, while basic skills such as literacy, numeracy and strategic ICT skills were also relevant.

These skills and their improvement are related to mobility, as another study also proved which related the development of employability-related competences to sojourning.<sup>46</sup> **The results of Zimmermann and Neyer's longitudinal study among university students** provided the missing link between life events and personality development by establishing social relationship fluctuation as an important mediating mechanism (Zimmermann & Neyer 2013). The study examined, on the one hand, the impact of international mobility on personality change, separating self-selection effects from socialisation processes. On the other hand, it analysed the correlation between life events and personality development by exploring the mechanisms that accounted for socialisation processes.

In particular, the study assessed whether individual differences in the fluctuation of support relationships served as an explanatory link. Firstly, the results showed that initial (pre-departure) levels of extraversion and conscientiousness predicted short-term sojourning and extraversion and openness predicted long-term sojourning. Secondly, both forms of sojourning were associated with increases in openness and agreeableness and a decrease in neuroticism above and beyond the observed self-selection. Thirdly, the acquisition of new international relationships largely accounted for the sojourn effects on personality change.

#### **Excursus: defining employability**

*There are many definitions of employability. Although sectors involved with employment and employability tend to define employability in terms of skills, they did not yet reach any agreement on the exact description of these 'skills'. The Council of Europe defined employability as a combination of factors which enable individuals to progress towards or enter employment, to stay in employment and to progress throughout their careers. This set of achievements—skills, understandings and personal attributes—make graduates more likely to gain employment and to be successful in their chosen occupations, and this in turn benefits graduates themselves, the workforce, the community and the economy (Pegg et al. 2012). However, employability represents a complex concept, involving not only each individual's characteristics, skills, attitudes and motivation, but also other external factors which lie beyond the scope of education and training policy, such as labour-market regulations, demography, the structure of the economy and the overall economic situation (Council of the European Union 2012a). At an academic level, there was growing criticism of the strong focus on cognitive or hard skills. Many authors therefore argued that the importance of cognitive skills might be the result of a bias due to their easier measurement (Heckman and Rubinstein 2001; Heckman, Krueger and Friedman 2003). Following this criticism, other authors adopted the view that both cognitive and non-cognitive factors matter for labour-market outcomes (Brunello and Schlotter 2011). Multiple factors operating at many levels of individual experience and social organisation were seen as having an impact on the employability of individuals (Iversen and Farber 1996, 441). A small, but growing body of literature supported the view that other factors, such as emotional maturity, and interpersonal and communication skills are also responsible for labour market outcomes (David, Janiak and Wasmer 2010; Brunello and Schlotter 2011). (Lowden et al. 2011) provided a detailed indication of the difficulties of defining employability and distinguish between a narrow definition (skills and attributes) and a broader and inclusive approach to employability based on values, intellectual rigour and engagement, as suggested by (Hinchcliffe and Jolly 2011, 582). (Hagar and Hodkinson 2009) regarded employability not as a simple 'transfer of skills', but rather as a process of 'becoming' in relation to graduate identity. In the same vein, (Hinchcliffe and Jolly 2011) suggested that universities and governments might*

<sup>46</sup> They use the term "sojourning" to describe a stay abroad.

*endorse employability indirectly through the promotion of "graduate identity and well-being (through the provision of opportunities for functioning) rather than directly through employability skills". (Yorke 2006) also defined employability as something which is much more than simply 'core' or 'key' skills. According to him, employability involves a complex and continuous process of learning. Graduate employability would refer to graduates' achievements and their potential for obtaining a 'graduate job'. However, employability should not be confused with actually acquiring a 'graduate job', which is dependent on the actual state of the economy. In Yorke's opinion, employability as a set of achievements constitutes a necessary, but not a sufficient condition for gaining employment.*

## **The impact of Erasmus actions on employability**

An increasing number of studies pointed to transformative experiences gained from study, work and volunteering abroad, which can be linked to transferable and employability skills. Brooks and Waters (2011, 11) claimed that "there is substantial evidence that, in certain countries at least, an overseas qualification does often lead to substantial labour market rewards." Indeed, "for many overseas students, international experience is seen as an essential part of their CV in an increasingly competitive global employment market" (Fielden, Middlehurst and Woodfield 2007, 16). Rizvi (Rizvi 2000, 214) argued that employers attributed greater value to an overseas education that could offer "exposure to different people and cultures, to different ideas and attitudes, and to different ways of learning and working". Accordingly, (Yorke 2006) emphasised that employers generally perceived graduates' achievements in relation to the subject discipline as necessary, but not sufficient for them to be recruited. In some employment contexts, the actual subject discipline was relatively unimportant, while the possession of the so-called 'soft skills' was valued higher when recruiting graduates.

Some of these 'soft skills' may be gained during periods abroad, as indicated by the ESN Survey 2011 (Alfranseder *et al.* 2012), a student questionnaire focusing on the skills and attitudes of students that seem to be important for the labour market. The survey compared students with academic or working experience abroad to those without such experience. According to its findings, staying abroad enhanced students' career opportunities. The greatest benefit of studying abroad was seen to be the improvement of one or more foreign languages while many students also felt that they enhanced their practical skills and received better education abroad. Personal and soft skills, such as self-confidence, an open mind, intercultural understanding or knowledge about another culture and market were also found to have developed among the students surveyed. Apart from these factors, many students acknowledged that a period abroad increased their employment prospects. Students felt more mobile and more likely to consider moving to a country for job purposes if they already knew it through the experience of a stay abroad. Moreover, at a time of high regional unemployment, the ability to be mobile seemed to be an important asset for job seekers.

Likewise, a recent study of UK graduates (Sweeney 2012) found that studying abroad could significantly boost the employment opportunities of a graduate and bring benefits to the UK's knowledge economy. Another UK-based study (Coleman 2011), in which graduates with a language degree evaluated links between work/study abroad and employability, showed that skills gained abroad were a factor in acquiring one's first and subsequent jobs for over 70% of respondents, a significant factor for over 30%, and the determining factor for about 10%. Skills gained during work and study abroad came in useful at work for nine out of ten graduates. The same study showed that employers valued highly the linguistic and other soft skills acquired during work and study abroad. Accordingly, Crossman and Clarke's study of students, universities

and employers (2010) found that all stakeholders identified clear connections between international experience and employability. Some of the attributes developed through mobility and emphasised by this study included the building of networks, language acquisition and the development of soft skills relating to intercultural understanding, personal characteristics and ways of thinking.

The 2011 *Youth on the Move* Eurobarometer also found that nearly half of all companies with considerable international dealings believed that foreign language skills were the most important skills for the future. This assessment of mobility-related competences also seemed to be shared by employers in the UK. (Archer and Davison 2008), a study of nearly 250 large, medium and small employers for the London-based Council of Industry and Higher Education (CIHE), analysed the skills and experiences employers look for when recruiting graduates. The study found that **communication, teamwork and integrity were the three most important “skills and capabilities” sought by employers, but were far down in the employers’ satisfaction list.** The largest satisfaction gaps related to commercial awareness and relevant working experience. Professional working experience overseas was particularly valued. In the same vein, a British Council/Think Global survey of 2011 found that 79% of chief executives and board level directors of businesses in the UK thought that in recruiting new employees, knowledge and awareness of the wider world was more important than achieving a degree with a high mark.

On the other hand, the study by (Diamond *et al.* 2011) amongst 12 leading employers that together recruited over 3,500 graduates each year in the UK found that multilingualism was not an important prerequisite and was viewed only as a **complementary skill.** The 2010 Flash Eurobarometer on the employers’ perceptions of graduate employability discovered that when rating certain skills and capabilities as being **“very important”, graduate recruiters were more likely to highlight the importance of team working (67%) than the importance of foreign language skills (33%).** Foreign language skills, however, were the only skills that were ranked higher as a requirement for future graduates. Almost nine out of ten graduate recruiters agreed that working experience was a crucial asset for new recruits (87% rather or strongly agreed). They did not agree, however, that it was very important that new recruits had studied or worked abroad before joining their company (70% or more rather or strongly disagreed). Only graduate recruiters with international contacts and employers in the industry sector were more likely to value international mobility in the case of new recruits.

In a more recent study, (Grotheer *et al.* 2012) found that German graduates with experience of an exchange differed from those without such experience, especially with regard to finding a job abroad after graduation. The mobile sample was three times more likely to find a job abroad compared to the non-mobile sample. Graduates with experience of mobility also assessed their own intercultural competences as higher and more important for their jobs, and they were more likely to work in an international environment. Former mobile graduates were more likely to continue their academic education as a doctoral student, but their overall professional success and income was not that different to the success and income of graduates who did not go abroad during their studies.

However, even if mobility seems to have a wide range of effects on the skills development of students, the link between these skills and mobility, as well as some of the competences themselves, is not necessarily visible to the employers. A study by the Center for International Mobility (CIMO) in Finland among nearly 300 Finnish employers and approx. 1,800 students showed that some competences such as tolerance, language skills or cultural knowledge were traditionally recognised. However, a substantial number of skills remained under the radar of employers, as did **the link between these skills and mobility. CIMO defined these skills as “hidden” skills.**

**Figure 3-1 Known and hidden competences**



CIMO 2014, 16

### **The impact of mobility on a European identity**

There are authors who argue that internationalisation strategies should embrace both internationalisation at home and abroad (Fielden *et al.* 2007). According to them, encouraging student mobility and raising the level of participation in the Erasmus programmes should be an objective for all HEIs and it should be incorporated into a Europeanisation strategy that should itself be part of a wider internationalisation strategy. Europeanisation should not only include study abroad or work placements, whether within the Erasmus framework or not, but also the promotion of the European dimension and, in particular, opportunities to learn a foreign language (Sweeney 2012). Some studies focused particularly on the cross-border mobility of people as a promising method of **promoting European integration or the Europeanisation of students' identity.**

(Sigalas 2010), for example, explored the premise that the Erasmus student experience abroad and direct interpersonal contact promote a European identity. The results of his study showed that although studying abroad led to increased socialising with other Europeans, contact with host country students remained limited. Moreover, Sigalas argued that experience acquired through the Erasmus programme does not seem to strengthen students' European identity. On the contrary, he said, it may rather have an adverse effect on it. Yet, increased socialising with other Europeans seemed to have a positive, though modest, impact on European identity. On the other hand, (De Wit 2002) also showed that the European Union was one of the main drivers in the creation of the Erasmus programme in the first place and thus in a way



the Erasmus programme can also be regarded as a tool which directly serves the purpose of promoting a European identity among young people. A more recent study (Van Mol 2013) also examined the influence of European student mobility on European identity. The findings suggested that mobile EU students, as a result of their experience abroad and their social interaction, adopted Europe almost as a personal project in which the social predominates over the political.

## Conclusions and implications for the present study

In summary, the existing literature and studies argued that a wide range of competences and skills are increasingly valued by employers in Europe. This comprises skills such as disciplinary knowledge, foreign languages, adaptability, flexibility, resilience, greater **intercultural awareness, the ability to assess one's own strengths and weaknesses**, to make decisions and to be a problem-solver. As graduates find themselves in an increasingly difficult situation on the labour market (Schomburg and Teichler 2006; Cardenal de la Nuez 2006), so the argument goes, these skills are much needed and frequently required.

So far, studies on skills showed that skills might be relevant to the labour market and which skills these are. They collected evidence from self-assessments on whether such skills are acquired through study abroad and argued that mobility programmes that target education and training may answer to this demand by enhancing the employability of graduates due to the acquisition of the aforementioned skills. These studies showed<sup>47</sup> that all the memo© factors which are used in EIS are relevant to employability.

However, these achievements also revealed major shortcomings of the existing studies:

- in many cases, the samples used in the analysis were limited;
- they inferred real skills improvement from self-assessments;
- they often concentrated too much on intercultural and language skills;
- they often concentrated on one occurrence of mobility (during studies or alumni);
- they often concentrated on one target group (students or employers or HEIs) which made cross-target group assessments difficult because of changing time windows, scales or questions.

EIS, on the other hand, is the first study to provide answers to all the questions regarding the effects on employability of the Erasmus programme because it:

- addresses all five relevant target groups simultaneously (students, alumni, staff, HEIs and employers);
- uses perceptual questions that allow trans-temporal comparisons with former studies;
- goes beyond intercultural and language skills;
- introduces the new element of psychometric-related analysis of the real personality traits of individuals using a selection of six memo© factors;
- relates the personality traits of individuals to their own perceptions, as well as those of other target groups of the study, and to attitudes, perceptions and facts;
- analyses the short, medium- and long-term effects of mobility not only in relation to employability skills, but also in relation to real career and employment aspects, as well as social life and relationships.

By doing so, EIS aims to provide a broad and deep picture of the effects that the Erasmus programme and its various mobility activities have on employability and the careers of students, the competences and perceptions of academic staff as well as the internationalisation and international profile of HEIs.

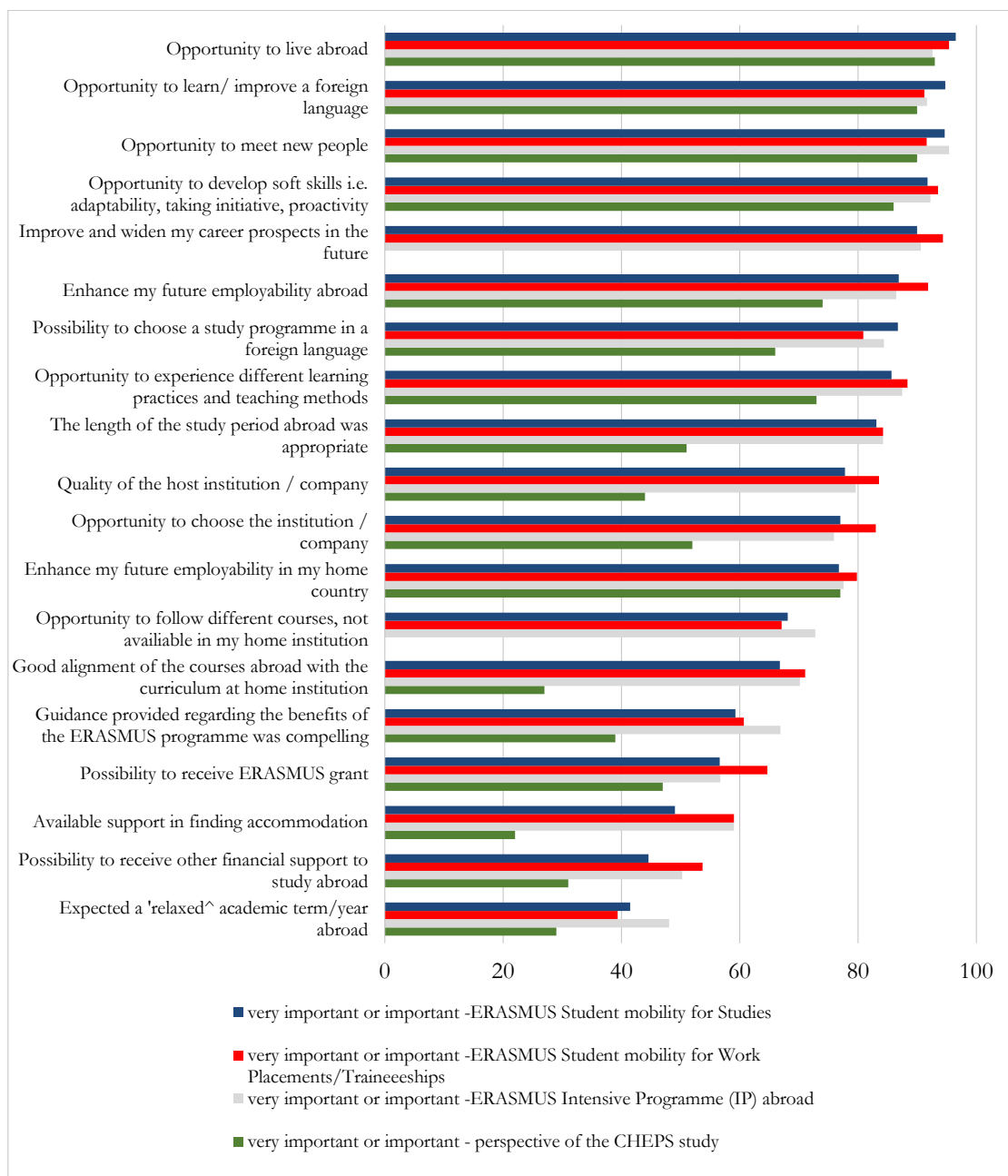
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<sup>47</sup> Especially Humburg, van der Velden and Verhagen, (Humburg, van der Velden, & Verhagen, 2013)

### 3.2. Why students want to go abroad – or not...?

In order to better be able to analyse the results of stays abroad and their effects on employability, EIS also analysed the reasons given by mobile students in all three Erasmus actions (study, work placement, IP) and compared those to the findings of the CHEPS study.

**Figure 3-2 EIS: reasons for participating in student mobility programmes abroad<sup>48</sup>, comparing the perspective of mobile students in the three Erasmus actions and the CHEPS study (in %)**



<sup>48</sup> Not all items were included in the questions posed in the two surveys, so some show fewer values than others.

When comparing EIS with the CHEPS study, some differences might be influenced by different scales used in the surveys.<sup>49</sup> In addition, in the case of CHEPS, the target group for this question had been narrowed – only those students who had actually considered participation in the Erasmus programme had been asked for their opinion, which might have distorted their findings further. In this analysis therefore focused on differences in priorities within the respective list of items rather than comparing the percentages for both studies. It should also be noted that in the case of the CHEPS study the question was limited to a period of study abroad within the framework of the Erasmus programme, while EIS considered all the mobility programmes, including work placement. Nevertheless the results were still largely similar and the four main reasons, including their hierarchy, remained unchanged. Students considered the opportunity to live abroad, learn/improve a foreign language, meet new individuals and develop soft skills, an aspect of key relevance in the young-graduate recruitment process, to be the most important reasons for spending a period abroad. This is in line with the findings described in chapter 3.1. Furthermore, the motivation to go abroad because one expected a “relaxed” academic term/year ranked lowest in importance in the EIS survey.

**More than 90% of the mobile students go abroad to live abroad, to improve their language skills, to form new relationships and to develop skills such as adaptability**

**“The economic situation compels us to consider going abroad and to work harder. There are no jobs, so participating in an Erasmus programme is the only opportunity we have.” (Student, PT)**

**“Mainly due to the current economic situation, the Spanish interns are highly motivated. They want to stay here or at least to enhance their individual qualification profile in order to increase their employment opportunities” (Employer, DE)**

However, there are also some differences between EIS and the CHEPS study. In comparison with the latter, EIS student respondents attributed greater value to employability abroad with enhanced employability at home scoring considerably lower. Whether this was linked to the economic crisis could not be proven or disproven on the basis of the data. The interviews in the qualitative study, however, seemed to confirm this assumption in that particularly in crisis-ridden countries in Southern Europe, students were more aware of the labour market advantages and the need for employability skills to be gained through mobility experiences. Moreover, the quality of the host HEI/company gained in importance, while the possibility of receiving an Erasmus grant has decreased in importance.<sup>50</sup>

The reasons for not going abroad were as important as the reasons for going abroad, especially in relation to institutional strategy building and political policy implementation because they could help to discover obstacles to mobility that an HEI

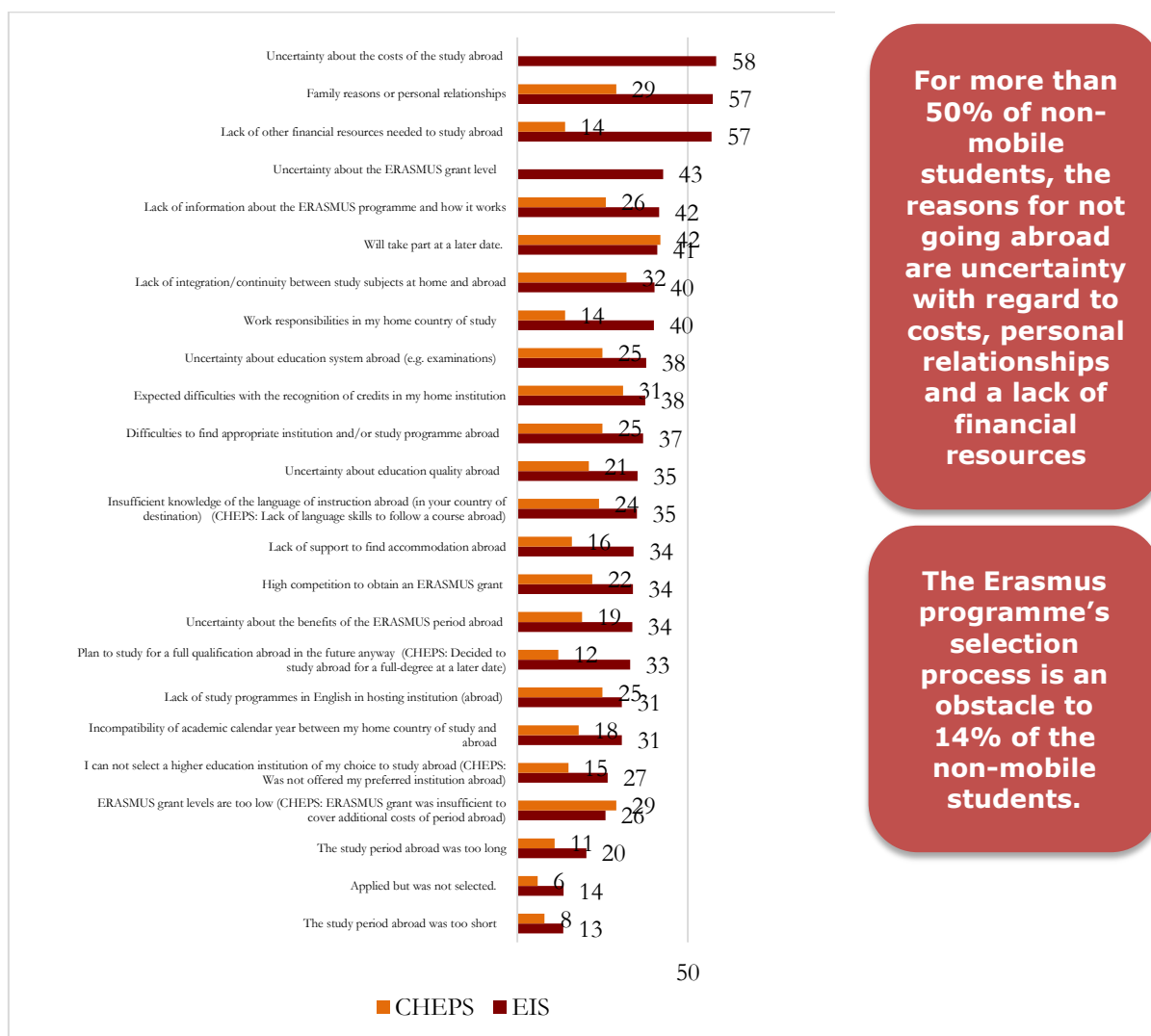
<sup>49</sup> A four-point Likert scale in EIS, a five-point in CHEPS: this reduces the probability of votes for scale points 1-2 in CHEPS.

<sup>50</sup> Explanation for the blue boxes: all cited quotes stem from the qualitative studies. All student respondents were Erasmus students, so that this is not explicitly mentioned. As the majority were on studies, quotes from students on work placements are marked with a „WP” and on intensive programmes with an „IP”. In the case of staff, all respondents had been active in Erasmus actions. As the majority were academic staff, only quotes from non-academic staff are specifically marked. Quotes which came from academic staff on IP or STT are marked accordingly.

might be able to overcome and thus increase the scope of mobile students. In EIS the major barrier to going abroad was uncertainty about the cost of studying abroad (58% of respondents) followed by a lack of other financial resources needed to study abroad (57%). These are experienced as obstacles to mobility. Family reasons and personal relationships (57%) were other major reasons for not taking part in the Erasmus programme, according to EIS. Uncertainty about the Erasmus grant (42%) and information deficits (41%) were also among the major obstacles.

In the CHEPS study, a different order of obstacles could be observed. Focusing on the organisation of the study, the main reasons, after taking part at a later time, were the lack of integration of the subjects studied at home and abroad (32%), difficulties with regard to recognition (31%) and delays through study abroad (29%). These reasons were followed by personal (29%) and financial issues (29%).

**Figure 3-3 EIS: reasons for not taking part in Erasmus - the non-mobile student perspective, comparing EIS and CHEPS<sup>51</sup> (in %)**



**For more than 50% of non-mobile students, the reasons for not going abroad are uncertainty with regard to costs, personal relationships and a lack of financial resources**

**The Erasmus programme's selection process is an obstacle to 14% of the non-mobile students.**

<sup>51</sup> Some items were only asked in EIS and in those cases only one dataset can be represented.

Most respondents of both surveys (86% in the case of EIS, 94% in the case of CHEPS) also stated that their reason for not going abroad was not related to the fact that their application was rejected. One conclusion that might be drawn from this is that the **Erasmus programme's selection procedure was not perceived to be an obstacle to student exchanges** by most individuals and, as the answers to other survey questions confirm, once students had decided to go abroad and had thus overcome the social obstacles mentioned above, they went abroad. The Erasmus programme therefore does not appear to be overly selective.

Some differences between both studies became obvious. Although for both groups financial concerns are relevant, the level of Erasmus grants was a lesser obstacle for EIS students (21%) than it had been for CHEPS respondents (29%). In contrast with the dominance of study-related obstacles in the CHEPS study, the prevalence of financial and personal concerns in the hierarchy of obstacles in the EIS study also indicates a change. However, the lack of integration/continuity between the study programme at home and the stay abroad remained a problem (40% in EIS, 32% in CHEPS) as did expected difficulties with the recognition of credits at the home HEI (38% in EIS, 31% in CHEPS). Here clearly HEIs can still improve their information systems targeted at the larger student body. Also, CHEPS respondents had suggested that the most important reason for not yet taking part in the Erasmus programme had been that they would take part in the programme at a later date (42%). In the EIS survey, this factor is only sixth on the list. However, the percentage of students claiming that it was an important reason, remained almost unchanged (41%). It seems that on average a significantly higher percentage of EIS than CHEPS respondents perceived all the factors listed as important.

### 3.3. How do employability skills and competences improve?

EIS analysed the results of EIS with regard to the competences, skills and employability of students, distinguishing between, on the one hand, personality traits (psychometric-related data) as the objective aspect and, on the other hand, perceptual data as the subjective perspective of individual students. Furthermore the study compared all mobile students and all Erasmus students against the non-mobile sample and differentiates between the Erasmus actions.

**Openness to  
and curiosity  
about new  
challenges  
were  
considered  
important by  
96% of  
employers**

#### The relevance of the memo© factors

With regard to the relevance of personality traits in relation to employability, EIS asked the employers as well as the alumni which predispositions would be considered especially relevant to new employees in their company.

**Table 3-1 Importance of personal characteristics, employers' perspective**

How important are the following personal characteristics for staff at your enterprise?	
very important/important	%
Openness to and curiosity about new challenges (memo© factor, Curiosity)	96
Awareness of one's own strengths and weaknesses (memo© factor, Serenity)	94
Confidence in and conviction regarding one's own abilities (memo© factor, Confidence)	94
Tolerance towards other person's values and behaviour (memo© factor, Tolerance of Ambiguity)	94
Better knowledge of what one wants and reaching decisions more easily (memo© factor, Decisiveness)	92
Management of one's own career development, better able to solve problems (memo© factor, Vigour)	85

**On average, 92% of employers considered the memo© factors relevant**

All personality traits which could be assessed by the memo© factors were considered highly relevant by at least 85% of the employers (lowest score for vigour, i.e. to be a problem-solver). The highest percentage (96%) agreed that curiosity was important or very important, followed by 94% for serenity, confidence, and tolerance of ambiguity. Decisiveness was considered an important personal characteristic by 92%. This corresponds with the results of the alumni survey. Alumni estimated that the same items were important for their respective companies, even more so in the opinion of those alumni with an international background.

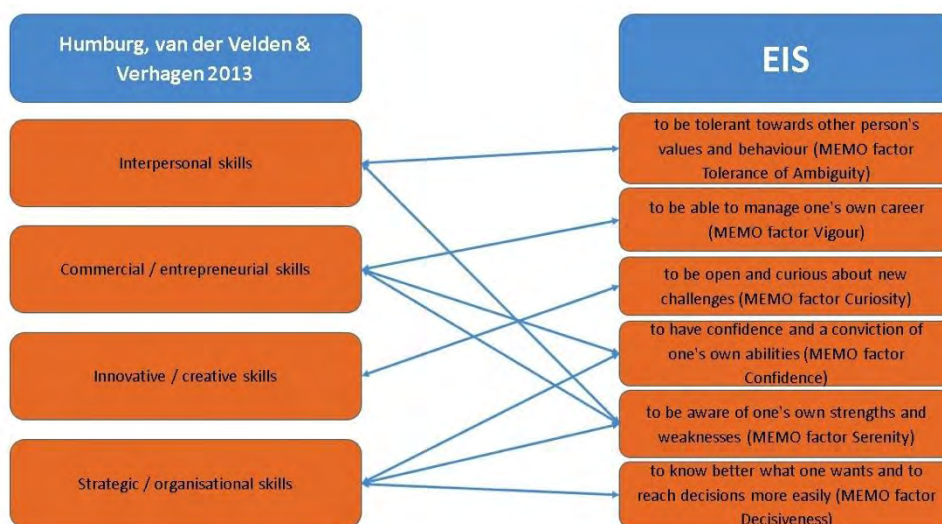
**Table 3-2 Important personal characteristics, comparison mobile vs. non-mobile alumni**

How important are the following personal characteristics for your company/organisation?	Mobile	Non-mobile
very important/important	%	%
To have confidence and a conviction of one's own abilities (memo© factor Confidence)	91	89
To be open and curious about new challenges (memo© factor Curiosity)	89	86
To be tolerant towards other person's values and behaviour (memo© factor Tolerance of Ambiguity)	88	88
To be aware of one's own strengths and weaknesses (memo© factor Serenity)	85	83
To know better what one wants and to reach decisions more easily (memo© factor Decisiveness)	82	77
To be able to manage one's own career, to be better able to solve problems (memo© factor Vigour)	79	72

The highest percentages could be found for confidence amongst the mobile (91%) and non-mobile (89%) alumni. The characteristics that mobile respondents seemed to consider important to their present career and their company or organisation are: openness to new challenges (89%), tolerance of other people's values and behaviour (88%), an awareness of one's own strengths and weaknesses (85%), better knowledge of what one wishes, an ability to take decisions more easily (82%) and an ability to manage one's own affairs (79%). Furthermore large percentages of non-mobile alumni considered these aspects relevant. However, it is worth mentioning that apart from tolerance of ambiguity and serenity, the differences between mobile and non-mobile alumni were still statistically significant.

**Confidence was considered an important personal characteristic for their company by 91% of mobile alumni**

**Figure 3-4 Complementarity of Humburg et al. and EIS**



This is in line with the findings of Humburg, van der Velden and Verhagen (2013) who identified four types of skills relevant to employment (interpersonal, commercial, innovative and strategic). As their categories are much broader than the EIS memo© factors, there are some overlaps between the six memo© factors and their types of skills.

It is important to note that EIS deliberately did not link these skills directly to mobility, but asked more generally about these skills. The reason was that, as (CIMO 2014) showed, while some of the skills measured by memo© can be considered to be automatically related to mobility today (such as tolerance), this is not the case for others such as decisiveness, problem-solving skills, serenity or confidence. The team therefore first wished to check whether the skills described by the memo© factors would be considered relevant by the employers as indicators of employability. In a subsequent step, an analysis was to be made to ascertain whether the development of these skills, which were considered important in relation to employment, bore a relationship to mobility. To do so, the team used the memo© factors, as described in chapter 2.

## The original *ex ante* memo© values

**Table 3-3 Memo© factor values for students before going abroad**

	Mobile		Erasmus		Non-mobile
	Mean	Advantage over non-mobiles	Mean	Advantage over non-mobiles	Mean
Memo© factor Confidence	7.34	2%	7.55	5%	7.16
Memo© factor Curiosity	7.46	5%	7.58	7%	7.09
Memo© factor Decisiveness	6.95	3%	6.99	3%	6.76
Memo© factor Serenity	6.92	4%	7.05	6%	6.68
Memo© factor Tolerance of Ambiguity	5.26	3%	5.36	5%	5.09
Memo© factor Vigour	6.72	2%	6.89	4%	6.61
Memo© total	6.78	3%	6.90	5%	6.56

The research team studied the effects of mobility on individuals by comparing their personality traits before going abroad against the attitudinal results of the control group of non-mobile individuals. As shown above, previous research would indicate that a difference prior to mobility could be expected. Indeed, memo© values confirmed this finding. Mobile students in general and Erasmus students in particular had better values on all factors relevant to employability than the non-mobile control group prior to departure<sup>52</sup>. The advantage of mobile and Erasmus students over the non-mobile group differed between the memo© factors. The largest difference could be found for Erasmus students on curiosity (+7%) and serenity (+6%). Both results were in line with the observation in the qualitative interviews that mobile students were from the outset more open to change and to expose themselves to new environments. The team also observed that in all cases Erasmus students showed higher *ex ante* values than the overall sample of mobile students.

**"Non-mobile students are generally regarded as having lower tolerance to risk, lower foreign language proficiency, different and more difficult family situations, and they seem to fear the unknown" (Student, FI)**

### Significance

All differences were statistically significant with  $p < 0.01$ . This was the proof that the difference was not accidental but that it consisted in the different predisposition of the groups regarding mobility which was fully in line with (Zimmermann and Bever, 2013). However, it did not say anything about the size of the effects.

<sup>52</sup> EIS cannot explain why this is the case as we could not find any specific differences between these two groups.



### Effect sizes measured by Cohen d values

**Table 3-4 Effect sizes for ex ante memo© values, original Cohen d values**

	<b>Mobiles vs non-mobiles</b>	<b>Erasmus vs. non-mobiles</b>
Memo© factor Confidence	0.205	0.443
Memo© factor Curiosity	0.420	0.557
Memo© factor Decisiveness	0.216	0.261
Memo© factor Serenity	0.273	0.420
Memo© factor Tolerance of Ambiguity	0.193	0.307
Memo© factor Vigour	0.125	0.318
Memo© total	0.250	0.386

For most memo© factors in the *ex ante* analysis, the Cohen d values were above the threshold of 0.2 except for vigour and tolerance of ambiguity amongst the overall mobile group. In the case of curiosity, the comparison of groups which participated in the Erasmus programme and non-mobile groups even detected a moderate effect. The Cohen d values for confidence, serenity and the memo© total were also close to a moderate change. Given that 50% of the personality is genetically pre-determined and such personality traits are generally stable and resistant to change, as shown in previous research discussed in chapter 2, these effects could be regarded as substantially stronger than displayed by Cohen d values.

The analysis of qualitative interviews showed a similar pattern. Some of the students (mobile and non-mobile) and some employers agreed that Erasmus students shared some characteristics prior to participating in the Erasmus programme that make them more equipped to initiate an international experience. Nevertheless, all the respondents in the interviews and focus groups agreed that the major changes occurred during the exchange and after it.

### The original ex post memo© values and change

EIS also analysed the change which took place during the period of study abroad. One could observe a positive change in the case of mobile students during their stay abroad for all factors.<sup>53</sup>

**Table 3-5 Memo© factor values for students after their stay abroad and change**

Scale 1 to 10	<b>Mobile</b>		<b>Erasmus</b>	
	<b>Mean</b>	<b>Increase</b>	<b>Mean</b>	<b>Increase</b>
Memo© factor Confidence	7.71	0.37	7.69	0.14
Memo© factor Curiosity	7.71	0.23	7.70	0.12
Memo© factor Decisiveness	7.23	0.25	7.21	0.22
Memo© factor Serenity	7.21	0.26	7.22	0.17
Memo© factor Tolerance of Ambiguity	5.51	0.23	5.42	0.07
Memo© factor Vigour	7.02	0.27	7.02	0.13
Memo© total	7.06	0.26	7.04	0.14

<sup>53</sup> In the case of non-mobile students, a comparison between *ex ante* and *ex post* results would have been meaningless, as the variables influencing each individual in this group were not known.

For the memo© total the increase for mobile students was +4% and for Erasmus students +2%, and those differences were statistically significant. In other words, **being mobile changes one’s mind-set**. The substantial difference therefore in the increase in the advantage of the mobile group, in general, is more or less the closing of the gap between their own *ex ante* score and the higher score of the Erasmus students as both end up with more or less the same overall score.

As was stated above, differences were to be expected amounting to small percentages, as memo© measures a change in personality traits and such changes occur both at best gradually and over time. Psychometric research showed only small changes and therefore these observed changes hint at relevant personality changes in the observed groups.

**Effect sizes measured by Cohen d**

Although Cohen d values are expected to place too low a value on the connection between the measurable effect of mobility and personality traits, they can still give an indication of the size of the effect.

**Table 3-6 Effect sizes for ex ante memo© values, original Cohen d values**

	Mobiles <i>ex ante</i> to <i>ex post</i>		Erasmus <i>ex ante</i> to <i>ex post</i>	
	Change	Cohen d value	Change	Cohen d value
Memo© factor Confidence	0.37	0.420	0.14	0.159
Memo© factor Curiosity	0.23	0.261	0.12	0.136
Memo© factor Decisiveness	0.25	0.284	0.22	0.250
Memo© factor Serenity	0.26	0.295	0.17	0.193
Memo© factor Tolerance of Ambiguity	0.23	0.261	0.07	0.080
Memo© factor Vigour	0.27	0.307	0.13	0.148
Memo© total	0.26	0.295	0.14	0.159

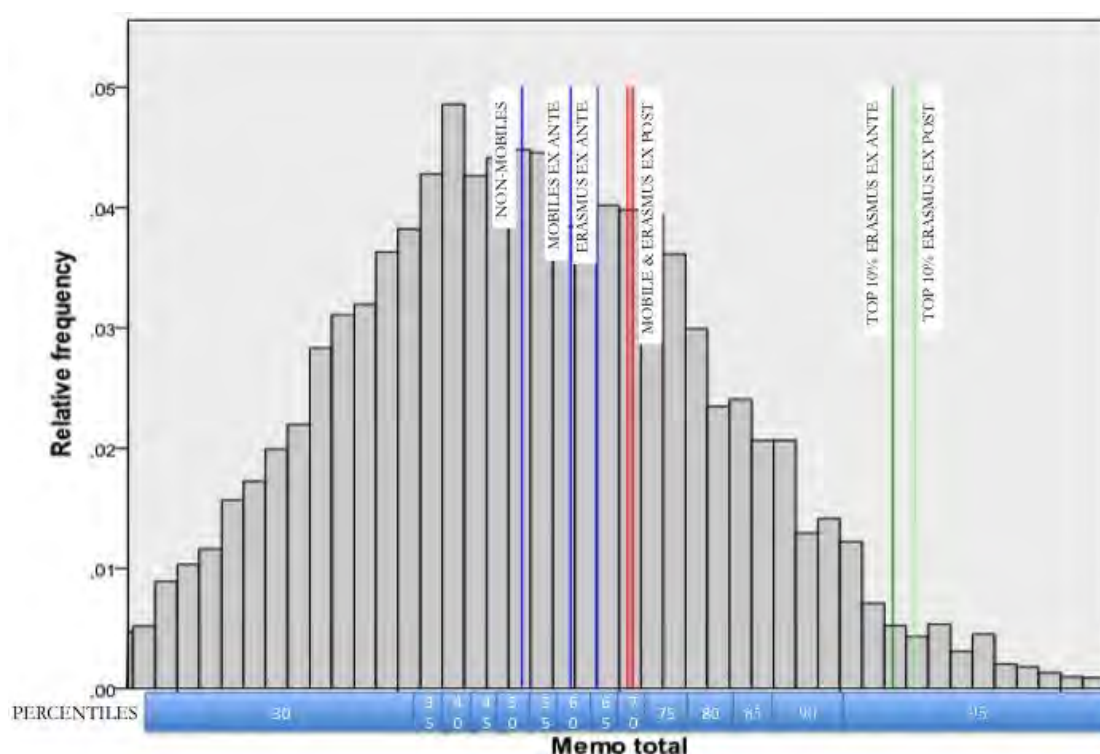
Mobile students in general showed small changes according to the Cohen d scale for all factors except for confidence, where the changes were small to moderate. Erasmus students showed smaller values. However, considering the results from other psychometric research, these were still relevant changes as they referred to personality traits which by definition have been shown in previous research to be stable and difficult to change. Comparing the results to (Specht *et.al.* 2011), it could be observed that the group in that study showed changes in averages for the Big Five in the range of 0.1 to -0.17 over a period of four years. Although memo© measures different aspects to the Big Five, the results give an indication as to how small changes usually are even in a long-term perspective and also how relevant the Erasmus experience therefore is. Moreover, (Specht *et.al.* 2011) also analysed the impact of different major life events on personality traits and only few of those (such as leaving their parents) showed values above the threshold. Zimmermann and Neyer (Zimmermann and Neyer 2013) also found changes in the Big Five through sojourning, which were either below the minimum (in that case of the p-scale of 1-3-5) or small. Yet they also considered these changes relevant for the reasons stated.

**After a stay abroad, Erasmus students had on average higher memo© values than 70% of the students**

In addition, when taking into consideration both the ex ante differences and the changes through a stay abroad, one could observe that both mobile and Erasmus students ended up on more or less the same memo© value and with the same overall difference over the non-mobiles students. This seems to indicate that pre-disposition plus mobility experience can bring groups on a certain level and that both factors have to be counted together. If doing that the real difference between non-mobile students on the one hand and Erasmus in particular and mobile students in general on the other hand was 0.48 and that translated into a Cohen d value of 0.54, a moderate effect even by the strictest standard.

**Description of percentiles**

**Figure 3-5 Distribution of non-mobile, mobile and Erasmus memo© values over quantiles**



As was stated in chapter 2, another perspective on the relevance of the change values could be to control whether one would find some differences regarding the location of mobile and Erasmus students in a certain percentile across the spectrum of memo© values. As a basis, the quantitative team used the distribution of the non-mobile students over percentiles. As it should be, in this distribution the non-mobile average was located in the 50% percentile, the mobile students' *ex ante* average was in the 60% quantile and the Erasmus average was in the 65% percentile. This means that the average Erasmus student had higher memo© values than 2/3 of all students.

**"LOVE it! Support it! Lobbying for it against the sceptics" (Alumnus, CZ)**

In the *ex post* analysis, this advantage had increased and the mobile and Erasmus students were in the 70% quantile, i.e. they had left 70% of all students behind and they had overtaken an additional 5% of the overall student population. If only a moderate stand is taken and if only the 5.35 million graduates in Europe are considered, this would translate into Erasmus students overtaking on average 267,000 other competitors on the labour market on the basis of their mobility experience.

The top 10% of the Erasmus students had even more impressive results. Their *ex ante* memo© total average was in the 90% quantile and after mobility they had moved into the 95% quantile, i.e. their average memo© values were better than those of 95% of all students.

### **Memo© project results**

In addition to this, the results of the general memo© project can be used as a reference in order to judge the relevance of this change. Here the analysis focuses on the institutional perspective, i.e. the averages are given per set of respondents from a single HEI. The average change across all universities was very similar to the Erasmus average. However, there were also substantial differences across HEI averages ranging from a slight decrease of -0.1% to an increase of +6%. In other words, a change between +2 and +4% as observed in EIS across a large sample of individuals is relevant and in line with other research results of memo©.

The changes were also substantial because they were reflected in the self-perception of the individuals, large numbers of whom, as one can see in the next section, felt that their personality had changed due to mobility. One also sees that both groups, mobile and Erasmus students, increased their advantage relative to the non-mobile values (all mobiles by 118%, Erasmus by 42%). With regard to the difference relative to the non-mobile students, the fact that mobile students and Erasmus students in the end managed to increase this difference by such large margins, combined with the fact that mobile and Erasmus students also experienced this change in themselves, means that mobility seems to attract people with certain personality traits and, in addition, boosts their personal development.

EIS also measured the sample of mobile students and Erasmus students that showed an increase in the memo© total as such. 51% of all mobile students and 52% of the Erasmus students, with no substantial differences between the sub-programmes, increased their memo© total by an experience abroad. This means that one in two students who went abroad changed his or her personality traits, increased his or her intercultural competences and, in particular, developed his or her employability skills. In other words, mobility is the most effective way of increasing the employability and inter-cultural skills associated with the memo© factors.

**Erasmus students increased their advantage over non-mobile students on memo© factors through study abroad by 42%**

**51% of all mobile students and 52% of Erasmus students improved their skills through stay abroad**

**"I see myself as a better person than I was before going abroad" (Alumnus, PT)**

As the qualitative study showed, without exception and regardless of their country of origin or the programme they participated in, students enthusiastically supported Erasmus. All the participants referred to extremely positive experiences associated to this type of mobility, speaking with genuine passion about their experiences. Youth is a vital period of change and discovery, meaning that it is no surprise that, according to their stories, for many the Erasmus exchange signified a rite of passage which always resulted in a before and an after. The terms<sup>54</sup> in which they defined Erasmus left no doubt as to the mark this mobility had left on their lives.

These results are in addition in line with the results of (Zimmermann and Neyer 2013) who found that the effect of sojourning for all of the big five personality traits, with the exception of extraversion, was strongly dependent on the length of time, with those going abroad for six months or longer benefitting much more than those going abroad for three to five months. In addition, other studies proved that the first months (up to four, or in some studies six) involve disturbances and difficulties that have a negative effect on personality traits.<sup>55</sup>

### Regional differences

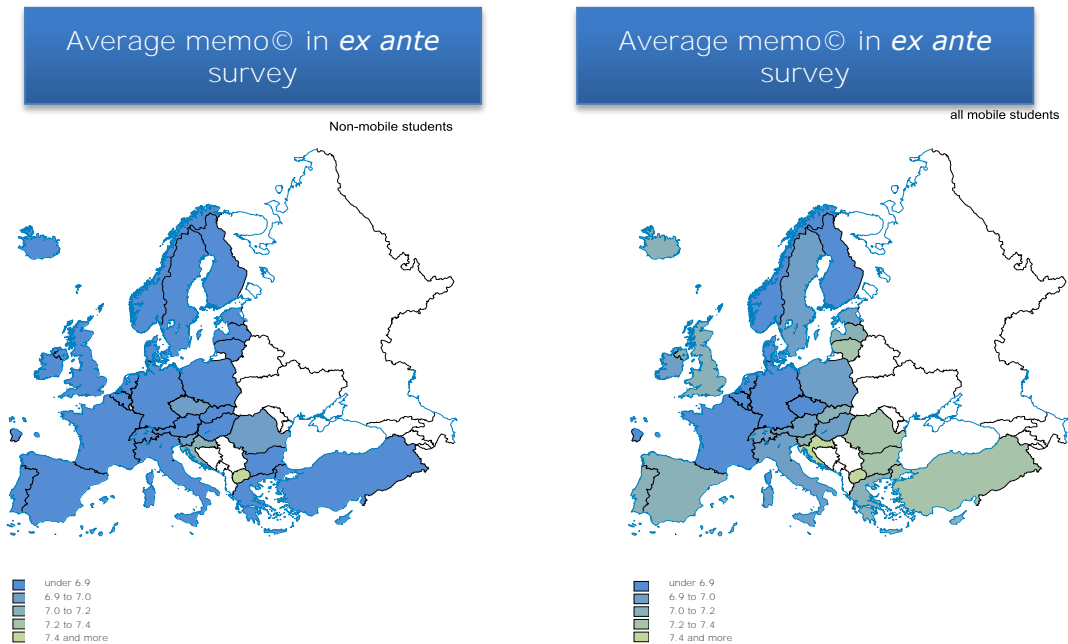
Cultural and national differences may also play a role. EIS therefore compared the memo© results for mobile and non-mobile students across Europe. Considering the *ex ante* survey data, which tells us more about the composition of the various samples, one can see that the *ex ante* values were not only higher for mobile students generally, but were also higher in several countries. Furthermore, the differences between countries were larger within the group of mobile students. While amongst the non-mobile respondents, only very few countries showed high values, most of the South-East and Eastern European countries, but also Spain showed better values in the group of mobile students. The type of student going abroad differed across Europe. In general, in the Northern, Western and most Central European countries, mobility seemed to be less focused on better prepared students, with higher values for factors relating to intercultural competences. In the other countries, however, one could observe a higher level of selectiveness. EIS also controlled the memo© values for the *ex post* survey and the changes for the group of mobile students across Europe. The analysis found different rates of change across Europe and no clear pattern, though some countries such as Norway, Poland or Austria showed average values for changes in the memo© factors which, in general, were substantially above the overall averages.

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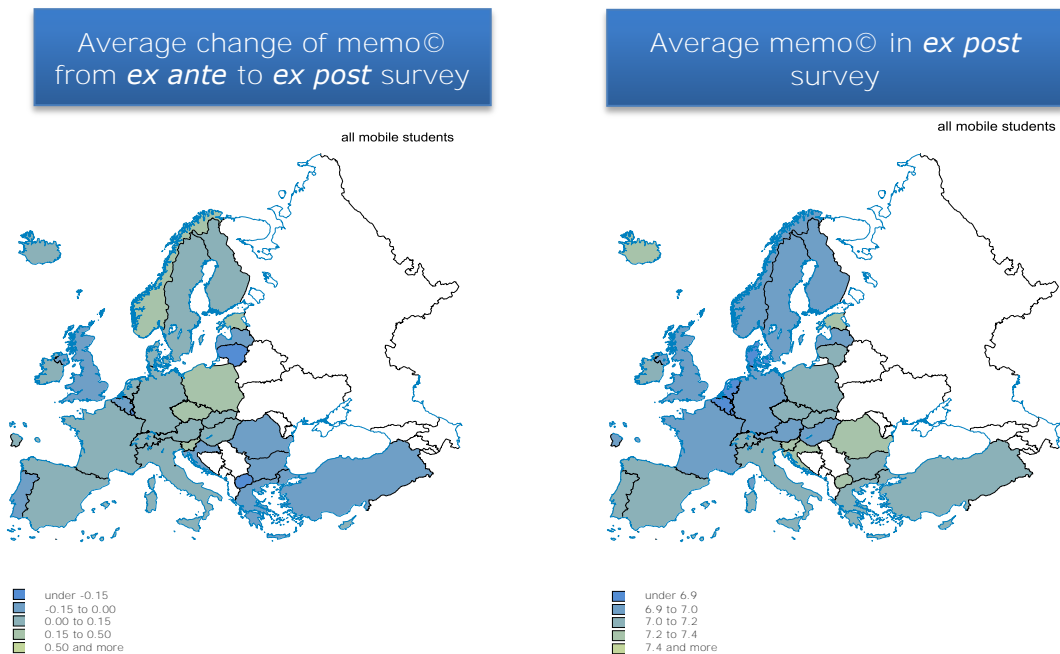
<sup>54</sup> It is worth remembering that, in accordance with qualitative methodology, the questions asked in online questionnaires and in focus groups were open questions, with the aim being to obtain the most spontaneous answers possible.

<sup>55</sup> See for example Ward *et.al.* (1998) or Furukawa and Shibayama (1993 and 1994) as cited by Zimmermann and Neyer (2013)

**Figure 3-6 Country-specific differences in *ex ante* memo© values, mobile vs. non-mobile students**



**Figure 3-7 Country specific differences in *ex post* memo© values and change, mobile students**



## The Erasmus actions

EIS also controlled the results of the memo© factors for students and alumni across various types of mobility offered by the Erasmus programme.

**Table 3-7 Memo© factors across programme types (*ex ante*, *ex post*, change), students**

	<b>Study</b>	<b>Work placement</b>	<b>Intensive programme (IP)</b>
Students <i>ex ante</i>	Mean	Mean	Mean
Confidence	7.54	7.65	7.64
Curiosity	7.57	7.55	7.67
Decisiveness	6.95	7.11	7.21
Serenity	7.03	7.13	7.25
Tolerance of Ambiguity	5.37	5.30	5.24
Vigour	6.85	6.98	7.11
memo© total	6.89	6.95	7.02
Students <i>ex post</i>			
Confidence	7.67	7.70	7.82
Curiosity	7.70	7.62	7.78
Decisiveness	7.18	7.28	7.36
Serenity	7.20	7.26	7.45
Tolerance of Ambiguity	5.42	5.41	5.40
Vigour	7.00	7.06	7.14
memo© total	7.03	7.06	7.16
Comparison (positive values =increase)			
Confidence	0.13	0.05	0.19
Curiosity	0.13	0.08	0.11
Decisiveness	0.23	0.18	0.15
Serenity	0.17	0.13	0.20
Tolerance of Ambiguity	0.05	0.11	0.17
Vigour	0.14	0.09	0.03
memo© total	0.14	0.11	0.14

The differences were only marginal between the three action types in the *ex ante* survey, with either students on work placement or IP students usually having slightly higher results. This pattern was also repeated in the *ex post* survey. The development from *ex ante* to *ex post* was also rather similar between the action types and the differences in change were too small to be relevant.

**Table 3-8 Memo© factors across activity types, alumni**

Alumni	Studies	Work placement	Intensive programme (IP) abroad	Total
	Mean	Mean	Mean	Mean
Memo© factor, Confidence	7.53	7.55	7.76	7.23
Memo© factor, Curiosity	7.71	7.70	7.93	7.36
Memo© factor, Decisiveness	7.10	7.21	7.43	6.81
Memo© factor, Serenity	7.18	7.17	7.39	6.85
Memo© factor, Tolerance of Ambiguity	5.52	5.35	5.67	5.52
Memo© factor, Vigour	7.04	7.07	7.20	6.73
Memo© total	7.01	7.01	7.20	7.02

Comparing this with the results from the alumni survey, as a long-term comparison of development, one observes that while overall the values remained at more or less the same level (as we observed in the previous chapter), there are differences between the groups. In the case of studies, the values were slightly higher or the same, except for confidence. In the case of work placements, the values for confidence, tolerance of ambiguity, serenity and decisiveness decreased, while for the intensive programmes only confidence and serenity showed lower values, while others increased (notably tolerance of ambiguity). Overall, in the end the alumni with experience in IP programmes still had the highest values for all factors and a 3% advantage on the memo© total.

With regard to the relevance of the duration of the stay, EIS could not compare the actual changes over time, since the EIS study was not run for a full academic year. All results from this section were also in line with the major findings of the most recent large-scale psychological study on the effects of personality traits as predictors of sojourning as well as certain effects of lengths of study. (Zimmermann and Neyer 2013) based their work on the so-called 'big five' personality traits (extraversion, conscientiousness, openness, agreeableness and neuroticism), which were analysed in their study by means of a standardised set of 42 items. This study did not cover the same ground as EIS and the latter's methodological basis, memo©, which comprised substantially more items (67) and different factors (originally ten, reduced to six for EIS), but it did provide an additional perspective. The researchers found that predispositions for all of these factors predicted whether students would go abroad or not and also how long they would stay. This was very similar to our finding in which the team could prove that *ex ante* memo© values differed substantially (which does not have to mean in large percentages) between mobile and non-mobile respondents, with mobile students always having higher values. In their study, time mattered: longer periods of sojourning had a more positive impact on the personality traits than shorter stays.

### Perceived development regarding memo© factors

In the analysis of the memo© factors, EIS controlled the real development of the related skills that were considered relevant by employers, HEIs, and alumni and contrasted this development with the perceived development of the related skills. In most cases mobile students, in general, and Erasmus students, in particular, were of the opinion that the actual improvement in skills relating to the memo© factors exceeded their expectations.



**Table 3-9 Expected and experienced change in memo© factors, student perspective<sup>56</sup>**

	Mobile students		Mobile students with Erasmus experience	
	Actual	Expected	Actual	Expected
much improved/improved & much expected/expected	%	%	%	%
Memo© factor, Confidence	91	83	92	84
Memo© factor, Curiosity	88	81	89	82
Memo© factor, Serenity	86	72	87	73
Memo© factor, Tolerance of Ambiguity	85	68	85	69
Memo© factor, Decisiveness	71	67	74	68
Memo© factor, Vigour	55	48	56	49
Average	79	70	81	71

Mobile students judged the actual improvement of several skills to be substantial and in all cases greater than they had expected before going abroad. On average, 9% of the mobile students and 10% of the Erasmus students experienced unexpected developments in their memo© factors. For some skills, students had expected more or less the changes that they later experienced. Only 4% of the mobile and 6% of Erasmus students, for example, experienced an improvement in decisiveness without having expected to do so. More students experienced unexpected improvement in curiosity (7% of mobile and Erasmus students), vigour (7% of mobile and Erasmus students) and confidence (8% of mobile and Erasmus students). Two factors improved for many respondents beyond their expectations: 14% of the mobile and Erasmus students experienced an unexpected

**improvement in their serenity, i.e. the ability to understand one’s own strengths and weaknesses**, and a staggering 17% of the mobile students and 16% of the Erasmus students experienced an improvement of their tolerance of ambiguity, which they had not expected. This shows that mobility indeed changes the personality of people from their own perspective. Both factors which showed unexpected developments for so many people are very relevant to the working environment and prove the point that mobility is very much also about discovering oneself.

There were also some differences between the different factors. While only 48% of the mobile students expected much improvement regarding vigour and, in fact, 55% experienced substantial improvement in this regard, 83% expected an improvement in confidence and 91% even experienced such improvement. Slightly more Erasmus students expected an improvement and also slightly more experienced such an improvement in relation to this factor. This feeling of change also shows that even small percentual changes can be perceived by the individual as a substantial change in personality.

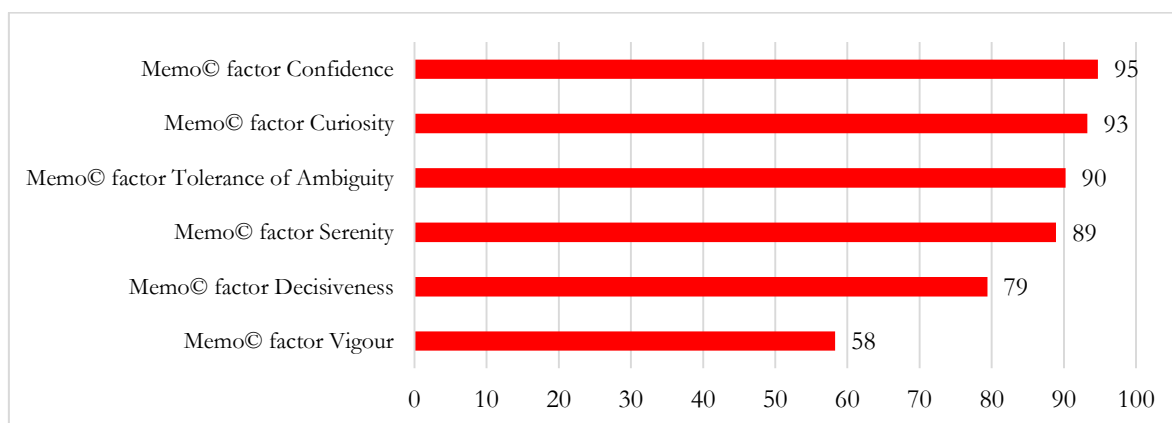
**80% of Erasmus students experienced an improvement in memo© related factors, but only 70% had expected an improvement**

**Nearly 30% of mobile students thought they improved, while memo© data did not confirm this**

<sup>56</sup> In relation to these aspects, a comparison with non-mobile students did not make sense as there would be no conceivable basis on which to assess a change of opinion.

On the other hand, students tended to over-estimate their learning outcomes. While only 50% of the mobile students really experienced a gain in relation to the memo© factors, 79% thought they had improved. In the case of the Erasmus students, the situation is similar, with 52% actually having improved on the memo© factors and 81% assuming they did. In other words, nearly 30% of the mobile students thought they improved while the memo© data did not confirm this directly. This was in line with other results from the memo© project, which showed that students tended to overestimate their learning outcomes. On the other hand, stronger confidence in themselves might be seen as a positive outcome of international experience, as it could confirm the actual development and become a self-fulfilling prophecy. Such effects can be time-delayed – and indeed one saw that the average results of the mobile alumni were higher than the ex post values of the mobile alumni. (Brunelle 2001) showed, for example, that there is evidence of the self-perception theory in real-life situations.<sup>57</sup>

**Figure 3-8 Improvement of memo© factor-related skills, alumni perspectives (in%)**

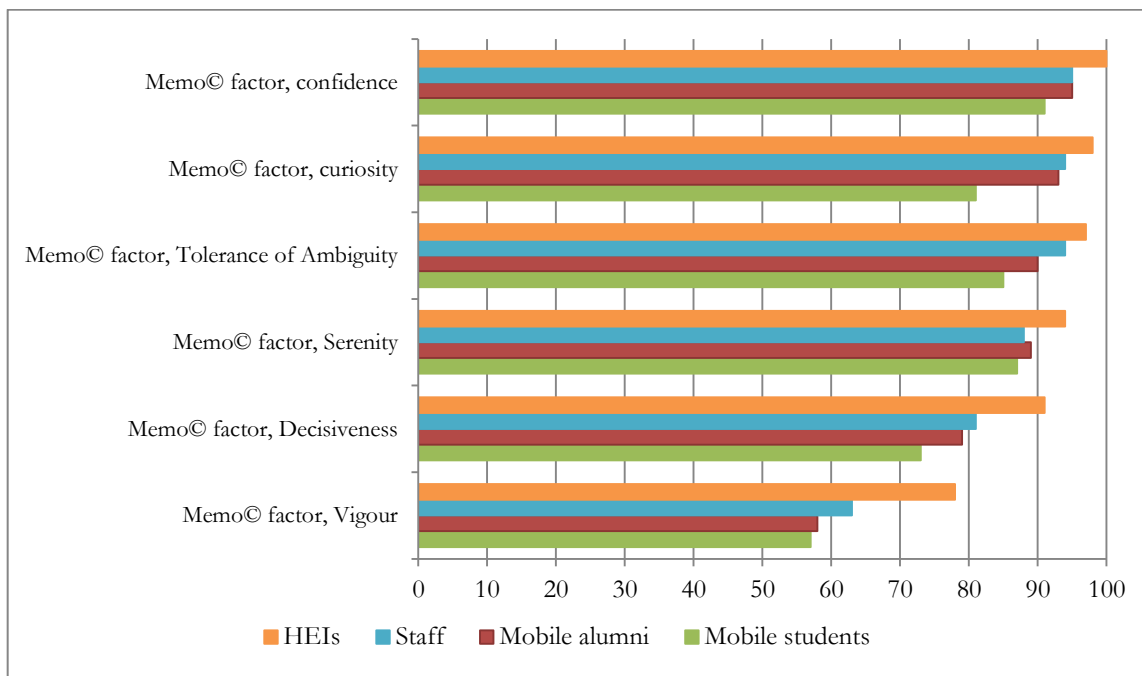


Mobile alumni were even more convinced that their personality traits and competences had improved during their period of mobility than those students who had just completed their stay abroad. Of mobile alumni, 95% saw an increase in confidence, 93% in curiosity, 90% in tolerance and 89% in serenity.

Comparing the perspectives of the HEIs, the staff and the alumni on the impact of mobility on the memo© factors for current students, all the groups had the same relevance ranking regarding the positive effect of mobility on these factors, even though the individual percentages differed slightly. Most were convinced that confidence would increase (95% to 99%), followed by curiosity (93% to 98%), tolerance of ambiguity (90% to 97%), serenity (88% to 94%), decisiveness (79% to 91%) and vigour (58% to 78%). This ranking was identical to that assigned by the alumni with regard to their personal development.

<sup>57</sup> The author tested teenagers who participated in repeated and sustained volunteering services and showed that their personality traits were changed and had shifted to be more caring and considerate.

**Figure 3-9 Improvement of personality traits and competences of students related to memo© factors during stay abroad: perspective of students, alumni, staff, and HEIs (in %)**



The only difference relative to the self-assessment of the students lied in the order of the factors. Decisiveness was higher on the list in the case of students and tolerance of ambiguity was at a slightly lower position.

The picture remained stable when looking at the various Erasmus actions. In all cases, the experience was better than expected in terms of the improvement of core skills. Whatever type of Erasmus mobility activity the respondents chose, they felt that the effect was very positive. However, differences between the various activities occurred, the two most striking being that students on work placements had the highest expectations regarding changes in all values and also experienced the biggest changes, except for curiosity. The changes experienced were also greater than those expected, except for curiosity.

Once again the lowest percentage of agreement is to be found amongst all groups for expected and actual improvement of vigour (less than 60%), while most students across all groups agreed that they expected and experienced the most positive change in relation to confidence.

**Students' participating in all Erasmus activities experienced a greater improvement for all memo© factors than expected, but work placements resulted in the greatest feeling of personal gain**

**Table 3-10 Expected vs. actual change in skills, student perspective across different Erasmus actions**

What did you expect from your (last) stay abroad and how would you assess the change of these aspects during your stay abroad ?	Studies	Work placement	IP	Studies	Work placement	IP
much improved/improved & much expected/expected	%	%	%	%	%	%
	Actual changes			Expected		
Memo© factor Confidence	92	92	88	82	86	79
Memo© factor Curiosity	90	91	87	81	83	83
Memo© factor Serenity	87	90	87	71	77	73
Memo© factor Tolerance of Ambiguity	85	88	87	67	70	69
Memo© factor Decisiveness	73	78	69	68	77	69
Memo© factor Vigour	56	64	58	48	55	52

Comparing the different Erasmus actions, only minor differences could be observed. The order was very similar for all types and also compared to the other groups of respondents (HEIs, employers, alumni and staff). Across all activity types, 59% to 64% of the respondents saw an increase in vigour, while most agreed that they gained confidence (92% to 95%). Furthermore, 87% to 90% also saw an improvement in curiosity and serenity, and 85% to 87% experienced a gain in tolerance of ambiguity. In addition, 69% to 78% also felt that they had gained in decisiveness. An interesting finding is that students on work placements showed the lowest percentage of people who experienced unexpected developments for some factors (6% for confidence and, in particular, only 1% for decisiveness).

**More than 90% of Erasmus students perceived a gain in their confidence through studying**

This coincided with the results for the alumni across all Erasmus actions, except that serenity and tolerance of ambiguity changed places.

**Table 3-11 Change in skills and personality traits through different Erasmus actions, alumni perspective**

How does a stay abroad change students' personality traits and skills?	Studies	Work placement	IP
agree/rather agree	%	%	%
Memo© factor Confidence	95	95	92
Memo© factor Curiosity	94	95	90
Memo© factor Tolerance of Ambiguity	91	92	87
Memo© factor Serenity	89	90	87
Memo© factor Decisiveness	80	83	85
Memo© factor Vigour	59	59	64

***"You go as a child and return as a man."  
(Student, ES)***

Again, the ranking of skills was the same as the one observed with all other groups and it was also identical across all three activities. An interesting difference between the memo© findings and the perceptions of the memo© factors was that while more respondents from all groups were sure that students gained in tolerance of ambiguity, rather than in vigour, the actual memo© analysis did not confirm this. Here tolerance of ambiguity usually had the lowest value, both in the *ex post* analysis and the change.

Overall, this analysis gave rise to four major findings. Firstly, mobile students, in general, and Erasmus students, in particular, had substantially better predispositions than non-mobile students in relation to all relevant employability skills, as measurable by memo©. Secondly, both groups managed to increase this advantage through study abroad by 42% to 118%. Thirdly, 51% to 52% of the mobile students improved their memo© skills. Fourthly, 30% more students felt that their skills had improved.

All these findings were strongly confirmed by the results of the qualitative study. In this case, the results obtained by contrasting the values for the memo© factors, as part of the qualitative study, follow a similar trend to those found in the **quantitative study. The participants' responses, despite often being an expression of their perceptions, were reiterated so often and were often expressed with such a degree of detail and application to their daily lives that it is fair to assume that they have already been internalised as part of the personal and professional character of the students and staff.**

***"...A different perspective on the same subjects, new subjects, definitely new opportunities in curricula and opportunities for work...independence and a capacity to confront new situations...more preparation for entry into the world of work...courage to move to and to adapt to new countries and cultures."  
(Student, FI)***

Students' comments referred over and over again to an extremely varied range of generic and specific competences. They gave examples from daily life which made mention of everything we could encompass in a view of personal development that could lead to adulthood. It gave the impression that the mobility process turned them into different people, defining a maturing process full of opportunities and challenges, and most likely for many constituting a rite of passage to greater independence. Many of the concepts with which they defined Erasmus were, in themselves, competences acquired in the mobility process, such as independence, confidence, responsibility, tolerance and resilience. Students recognised themselves as different after their international experience and different when compared to others. **The Erasmus students' perspective on life appeared to have been broadened** by the opportunity to meet new people and to broaden their horizon. This would seem to be the result of including other cultural perspectives and, by doing so, becoming more tolerant and experiencing other (somewhat more developed) educational systems. This experience seemed to have provided them with the knowledge and skills needed to act more autonomously and with greater self-confidence.

***"Learning to fit in into new surroundings, using languages in practice, getting to know work habits of other countries, the possibility of making work contacts abroad (and eventually going to work abroad one day)" (WP student, ES)***

***Open-minded, self-sufficient, evaluating the real value of money, they learn to cope with problems on their own, working under pressure, teamwork, all the soft skills that are needed are a part of learning abroad, friendships that last forever, how the other works and lives is very important for the youngster...a picture is worth more than 10,000 words..." (Employer, BG)***

The majority of students indicated improvement in the area of self-confidence and independence. Through their stay abroad they achieved a higher degree of self-sufficiency and a strong belief in their own abilities - the ability to live abroad, in a new environment, to create new social relationships, to cope with the study load at a host institution and to overcome language barriers. In general, students sensed that the positive progression they experienced due to their mobility would also be useful in finding a job and improving their professional development. There is an understanding of the competitive advantage that having acquired certain competences through Erasmus mobility implies. Even when they were still undergraduate students, they sensed that these competences acquired through mobility would be extremely useful in their future careers. Mobile students therefore tended to consider the mobility experience they had had as an excellent opportunity to gain valuable career and international experience in their field of knowledge. Erasmus mobility of all kinds, besides **improving students' foreign languages skills, seemed also to strengthen students' CVs in professional terms.** Many mobile students were convinced that Erasmus mobility enhanced their CVs and provided them more opportunities to find a good job in the future.

***"I am undoubtedly a better person thanks to my experience of living and working abroad. I would not be who I am without this. Had I not had these experiences when young, I would have followed a very different professional path."***

Staff and employers also stated that students who had studied abroad through an exchange programme returned as more confident and independent individuals. Or they mentioned that they felt more confident to work abroad after their traineeship period. These characteristics therefore made them more employable. In turn and probably as a consequence of the greater independence and confidence in the face of unforeseen or unfamiliar situations, Erasmus students acquired a pro-active attitude which was highly valued by employers. The following chart shows the relationship between the memo© factors, employability and the stakeholders' perceptions.

**Table 3-12 Memo© factors in relation to employers' survey, quotes and effect sizes**

<b>Memo© factors</b>	<b>Quotes from Students regarding perception of skills</b>	<b>Quotes from interviews with employers</b>	<b>Employers Survey (important)</b>	<b>Cohen d value for mobile students</b>
Confidence in and conviction regarding one's own abilities (memo© factor, <b>Confidence</b> )	"Confidence", "Increased self-confidence" "Self-confidence" "I became amazingly more independent" "Self-confident" "Confidence and strength of character" "More autonomous" "Erasmus gives us safety" "Independence, maturity and responsibility"	"They use the language of some academically acquired knowledge to apply for a job" "Open-minded, self-sufficient, evaluate the real value of money, they learn to cope with problems on their own, working under pressure, teamwork, all the soft skills that are needed are a part of learning abroad"	94%	0.42
Openness to and curiosity about new challenges (memo© factor, <b>Curiosity</b> )	"Non-mobile students are more down to earth" "More persevering, more creative" "It opened a lot of doors for me" "It opens your mind, it is good for the market" "New language, new culture, new people" "You get perspectives for future business connections"	"Fresh air to our company" "They learn to work together ... all that you did not learn in any university" We noticed that they are more independent. Additionally, they are much more prepared to listen and learn. Generally they are more interested in learning" "I think that we -Erasmus students - have a broader view of things in life"	94%	0.26
Better knowledge of what one wants and reaching decisions more easily (memo© factor, <b>Decisiveness</b> )	"My independence" "More positive attitude" "It helped me to understand what I really want to do in the future" "More positive attitude towards the problems facing the future" "Applying for Erasmus is a deliberate step in search of a job" "It is a step further" "Choosing the meat at the supermarket is a personal development" "I was not as active a person as I am right now" "I can travel alone with no problems" ""It changed my life and the way I think. Thanks to Erasmus I started travelling alone around the world, and I became strong and adventurous; I stopped being afraid of following my own convictions."	"An Erasmus student shows me that he/she has been able to seek life and has chosen mobility" "Their expectations of employment are then obviously much broader" The exchange interns do have less fear when it comes to the contact with customers and communication in general" "They have a greater ability to solve problems"	92%	0.28

<p>Awareness of one's own strengths and weaknesses (memo© factor, <b>Serenity</b>)</p>	<p><i>"Being outside of your comfort zone" "Now, I don't get lost in critical situations" "Better team working" "How to manage my time better"</i></p>	<p><i>"Erasmus students solve problems faster than people who have not faced them, and they are brave. They have no fear of the unknown" "Living outside your home country for a while and getting used to a different environment helps to distinguish yourself from others."</i></p>	<p>94%</p>	<p>0.30</p>
<p>Tolerance towards other people's values and behaviour (memo© factor, <b>Tolerance of Ambiguity</b>)</p>	<p><i>"Less judgmental regarding differences" "destroying stereotypes" "More tolerant and communicative" "more tolerant and open" "To enlarge one's horizon with other cultural perspectives and values" "adaptable, easy going" "Tolerance, adaptability" "Much more flexible" "I learnt to be more self-confident, and to communicate with different people, even those I don't like." "Open-mindedness to different cultures"</i></p>	<p><i>"They have knowledge of another culture, understanding or sensitivity to people who are not like you" "Mobility leads to a certain basic flexibility. Additionally, mobility causes an intellectual opening and the readiness to engage with new topics" "The European student, is much more tolerant" "These cultural skills are very valuable; "Mobile people are more empathetic towards foreign cultures and contexts" "Everything which implies an international experience, relating with other cultures and other languages... is a bonus for us."</i></p>	<p>96%</p>	<p>0.26</p>
<p>Management of one's own career development, being a problem solver (memo© factor, <b>Vigour</b>)</p>	<p><i>"To handle stressful situations a lot better" "This semester taught me that even if you are in a hopeless situation you can find a solution" "Not afraid anymore to meet challenges" "Brave, communicative, responsible" "I felt like I was all the time solving different problems" "Being able to resolve problems" "Less afraid of trying new things" "I am more able to find solutions to a problem" "More eager to learn new subjects" "We are better in dealing with bureaucracy" "It is a challenge" "Mobile students learn to solve problems on the go" "I learnt to be more self-aware of my learning".</i></p>	<p><i>"Erasmus students are more motivated and they are happy to work" "Just to apply for Erasmus, get it, get the money, get your life there (for me are the keywords of Erasmus) are people who are looking for life alone, in an age that not all people do" "It is necessary to combine both: academic message with a life full of experiences" "International students incorporate the business model within their master, their curriculum" "They have the courage to step into new projects and travel. This is very helpful as they are more flexible"</i></p>	<p>85%</p>	<p>0.31</p>

### The relevance of skills besides the memo© factors

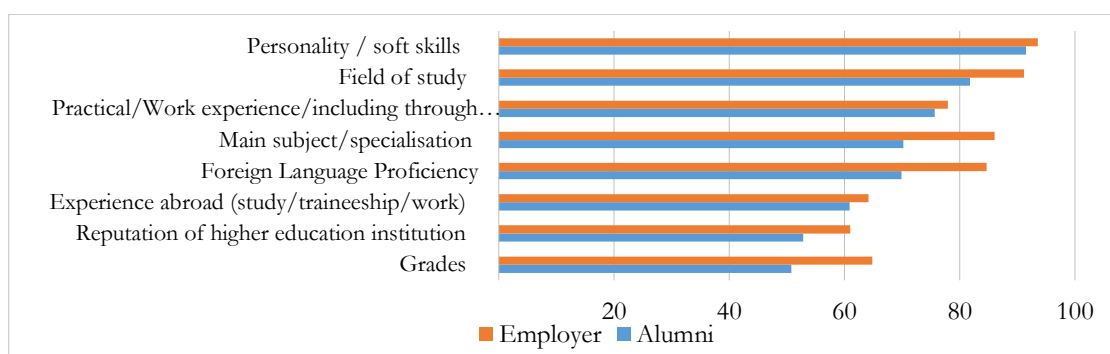
In order to assess the skills dimension from a perceptual perspective, EIS looked at skills and competences defined by three target groups, namely employers, HEIs and alumni beyond the memo© factors. The team was especially interested in skills and competences that were considered relevant to recruitment.

On the whole there was no significant divergence in the opinions of alumni and employers regarding aspects relevant to the process of recruiting young HE graduates. In both groups, most respondents agreed that personality, soft skills and the field of study were the top priorities when recruiting graduates. Furthermore, employers considered talent and skills to be at the top of the list, although this characteristic was not taken into consideration in the other surveys. Moreover, alumni perceived practical working experience as the third most important feature, more important than the main subject or specialisation, while the order is reversed in the opinion of employers. Nevertheless, whereas employers generally assigned much higher values to all aspects, when compared to alumni, the percentage of employers which considered practical working experience to be crucial was actually higher than the corresponding share of alumni (78% compared to 76%). The same also applied to work placements abroad (64% compared to 61%).

***"It definitely helped me to get the job position I'm currently holding. It is a valuable item in my CV." (Alumnus, PT)***



**Figure 3-10 Aspects important in recruiting young HE graduates, alumni vs. employers' perspective (in %)**



Candidates' grades were attributed the lowest relative importance for all three target groups, although employers interestingly found study period abroad and recommendations/references even less relevant.

Again, the qualitative study supports the quantitative results. Employers and alumni confirmed that a greater degree of employability increases the chances of receiving a job offer and is an advantage in job interviews. They also said that participating in Erasmus was becoming a "standard".

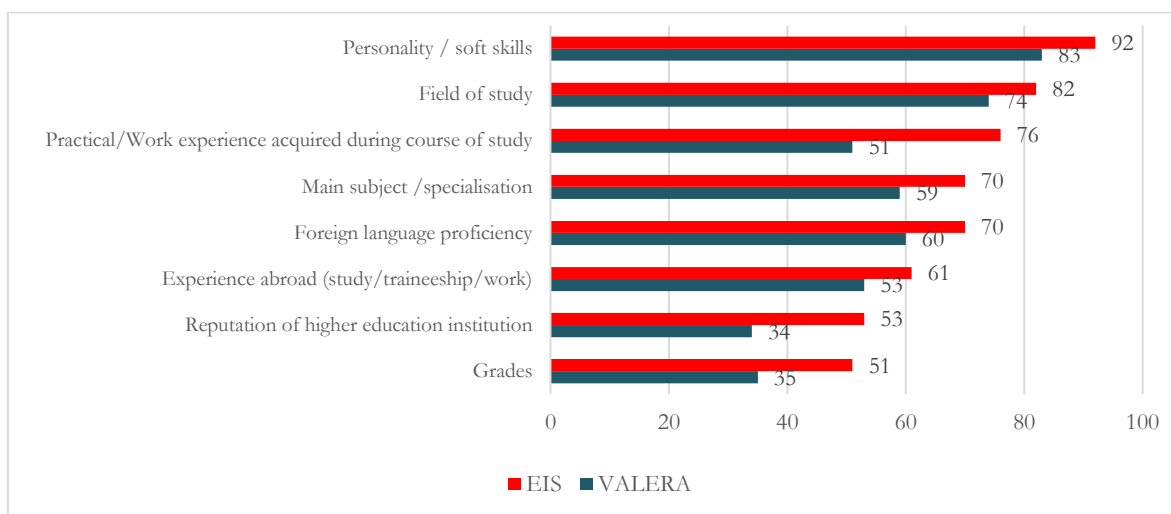
Alumni perceived continuity between their personal skills and the professional qualifications based on these skills, a synthesis that they all recognised having used in their professional careers. Numerous references appeared, whether to their own job, the company or the organisation they worked for, or to part of the activities they were involved in during their degree, which had to do with their experience abroad and with the skills learned during their mobility project.

Employers agreed that competences gained during mobility were useful on the labour market and that students had more opportunities to find a job: students can show additional activity done during their studies and usually had more practical experience, compared to non-mobile students, and they also showed a higher level of motivation to work hard. Mobile students had an impact on the institutional profile of companies—international students bring new ideas, different thoughts and perspectives and they improved the company's skills portfolio.

The HEI perspective was slightly different. First and foremost, HEIs (as in the case of all other questions) generally assigned higher values to the aspects under evaluation and there was little differentiation between their own responses. Secondly, while concurring with the other two target groups that personality had the highest relevance in the recruitment process, they perceived language skills to be the third most important characteristic.

**"We had one guy from Spain whose work was a little different. People could see that. This brought fresh air to our company, because Erasmus students are young and they have different thoughts and perspectives. I think it improved our company portfolio."**  
(Employer, CZ)

**Figure 3-11 Aspects important in recruiting young HE graduates: comparison of EIS and VALERA, alumni perspective (in %)**

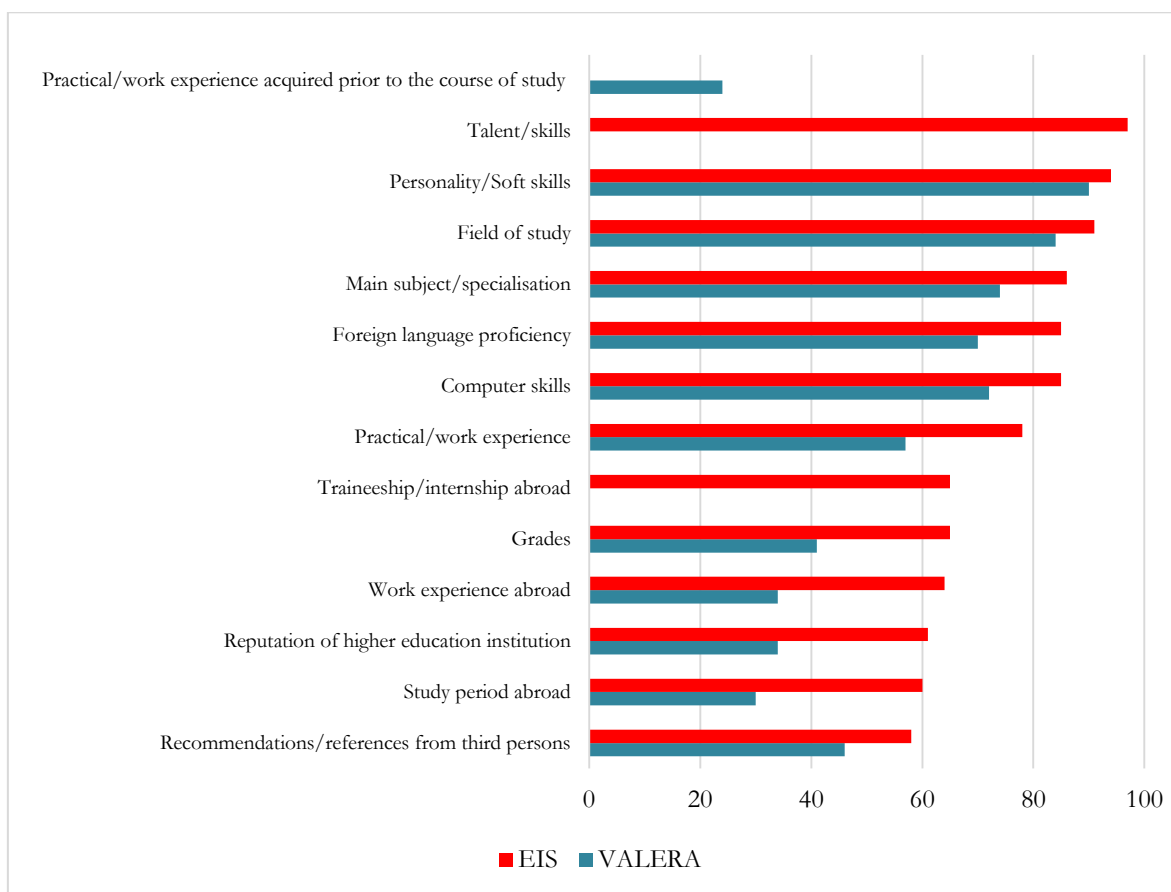


In the next step, EIS compared these findings with the results of the older VALERA study to look for changes over time. Bearing in mind the differences between the two studies,<sup>58</sup> the findings of both studies with regard to the student and alumni perspective were largely similar, with personality and field of study ranking highest. Only slight changes occurred in the hierarchy of the aspects observed. In particular, foreign language skills, considered to be the third most important characteristic by students who participated in the VALERA study, ranked only fifth in the perception of EIS alumni, while practical/working experience gained in value - from sixth position in the VALERA study to third position in the EIS.

The hierarchy of characteristics of young HE graduates remained almost the same, in the view of employers interviewed by VALERA and EIS, at least in relation to the six most important aspects (disregarding talent and skills which were added in the EIS). Nevertheless, one could observe that experience abroad gained in relevance from the perspective of employers surveyed by the EIS, while grades and recommendations became less relevant.

<sup>58</sup> VALERA uses a five-point Likert scale, EIS a four-point scale; VALERA only addressed the above question to former students who participated in Erasmus activities.

**Figure 3-12 Aspects in recruiting young HE graduates: employers' perspective, VALERA vs. EIS<sup>59</sup> (in %)**



Moreover, whereas general experience abroad ranked rather low among the employers in EIS (places 8, 9 and 12), soft skills were ranked very high and the memo© factors showed that these skills increased during stays abroad. Therefore, even though the employers did not consider mobility itself to be especially important, they did value the results of such mobility. This is in line with the findings of (CIMO 2014) that many skills are hidden and the link between mobility and skills improvement is not always obvious to and made by employers.

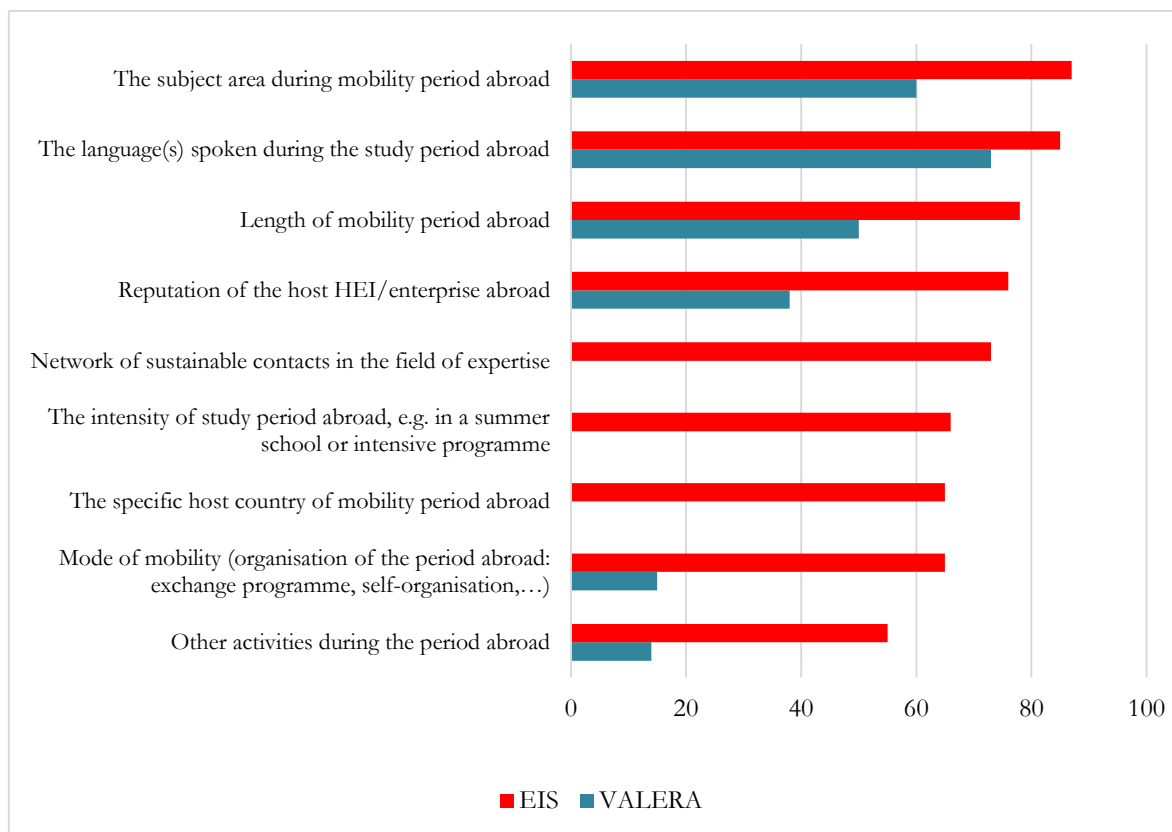
Taking into consideration that work placements are one of the main reasons for participating in the Erasmus programme and other mobility programmes as an employer, it is relevant to look at the important characteristics of a period abroad from the employers' perspective and to compare the results of EIS with the former VALERA study.

In this respect and in addition to the differences mentioned above, it must be taken into account that the comparison between EIS and VALERA is also slightly distorted, mainly because the question in the 2006 questionnaire focused predominantly on mobility in relation to study, while in the new survey work placements and therefore new items related to this type of mobility were included. Despite this limitation and the difference in the scales used in the two surveys, one can still draw certain conclusions. First of all, from the perspective of EIS respondents, the subject area was slightly more important than the language spoken during the period of mobility, while the order was reversed in the VALERA study.

<sup>59</sup> Some items only appeared in one of the surveys. For those only one dataset can be displayed.

The relevance of both items was also perceived in EIS as almost equal, while the respondents in the VALERA study assigned greater value to the language of instruction. Moreover, the reputation of the host HEI or company gained in importance, while the host country seemed to be less crucial for employers in EIS.

**Figure 3-13 Characteristics of study / work abroad: employers' perspective, VALERA vs. EIS<sup>60</sup> (in %)**

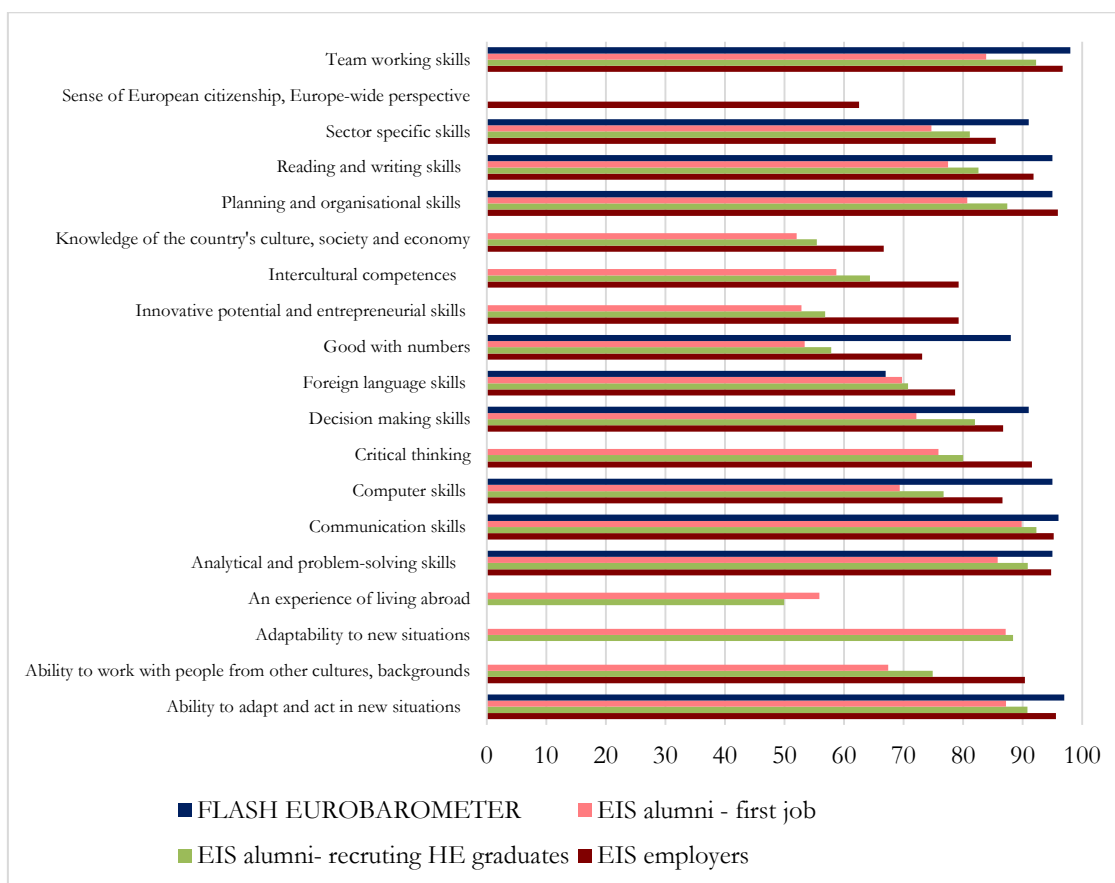


One of the questions the quantitative study could not answer was whether these changes were somehow related to the economic crisis. However, the qualitative study was able to shed some light on this. The sustained and positive effects of the Erasmus programme were common to all the countries surveyed. However, the economic crisis and high levels of unemployment in the countries of Southern Europe changed the perspective of students and staff there with regard to the programme. In general, the respondents could identify a positive evolution, not only in terms of institutionalisation and improvement in the processes of credit acknowledgement (see the next chapter), but also in the perception of the programme itself; from origins linked more closely to **the travelling and festive aspects, towards "professionalisation" of the admissions requirements, content and impact.** This evolution was clearly assumed by students in countries experiencing economic difficulties, probably because there Erasmus became the only opportunity to develop their professional experience. At the same time, students were aware of the fact that this professional experience gave them a competitive advantage over other students, an especially important factor in the light of the current levels of youth unemployment and scarcity of job offerings.

EIS also tested a set of skills with regard to their relevance to recruitment among employers and alumni which had been used in the Flash Eurobarometer in 2010.

<sup>60</sup> Some items only appeared in one of the surveys. For those only one dataset can be displayed.

**Figure 3-14 Skills important when recruiting HE graduates: comparison of EIS and FLASH Barometer, employers' perspective<sup>61</sup> (in %)**



With regard to the skills considered important in the process of recruiting HE graduates, in the opinion of alumni and employers surveyed by the EIS, a clear pattern emerged with employers assigning greater value to all skills than alumni and with alumni considering all skills to be slightly less important when recruiting graduates for their first job immediately after graduation than for recruitment as such.

The opinions of both target groups were generally in line with each other, although certain differences persisted. Employers placed analytical and teamwork skills at the top of the list (97%), closely followed by planning, organisational and communication skills, as well as adaptability (each 96%). The alumni ranked the same five skills highest on their list, in a slightly different order. Moreover, (in relation to all the skills listed) alumni seemed to assign a higher value to sector-specific and decision-making skills than employers. The most striking difference could be observed between the perspectives of employers and alumni perspectives on entrepreneurial and, interestingly, intercultural skills, with both characteristics being regarded as more relevant from the employers' perspective.

A comparison of the results mentioned above with the Flash Eurobarometer study revealed that employers' expectations did not change in any remarkable way. The hierarchy was slightly different, but the top-five skills remained exactly the same. The results were also in line with (Humburg, van der Velden and Verhagen 2013), whose main skill areas covered similar aspects (see Figure 3-4).

<sup>61</sup> Some items only appeared in one of the surveys. For those only one dataset could be displayed.

Most importantly, the team knew from the analysis of the memo© factors that both the top-five skills, mentioned both by the EIS respondents and the Flash Eurobarometer, and a number of slightly lower ranked skills, such as the ability to work with people from other cultures, intercultural competences or decision-making, could be improved through stays abroad and that, in fact, more than 50% of the mobile students did increase these skills. In other words, mobility as such and, in particular, Erasmus mobility actions had an impact on all major skills expected by companies and employers.

**Table 3-13 Importance of skills for recruitment, alumni perspective**

<b>Please rate the following skills and competences: How important are they when recruiting higher education graduates in your company/organisation?</b>	<b>Mobile</b>	<b>Erasmus</b>	<b>Non-mobile</b>
very important/important	%	%	%
Ability to adapt to and act in new situations	92	92	89
Planning and organisational skills	88	88	84
Decision-making skills	83	83	79
Foreign language skills	74	73	61
Being able to interact and work with people from other backgrounds and cultures	77	76	69
Intercultural competences	67	67	54
An experience of living/studying/training abroad	55	55	31

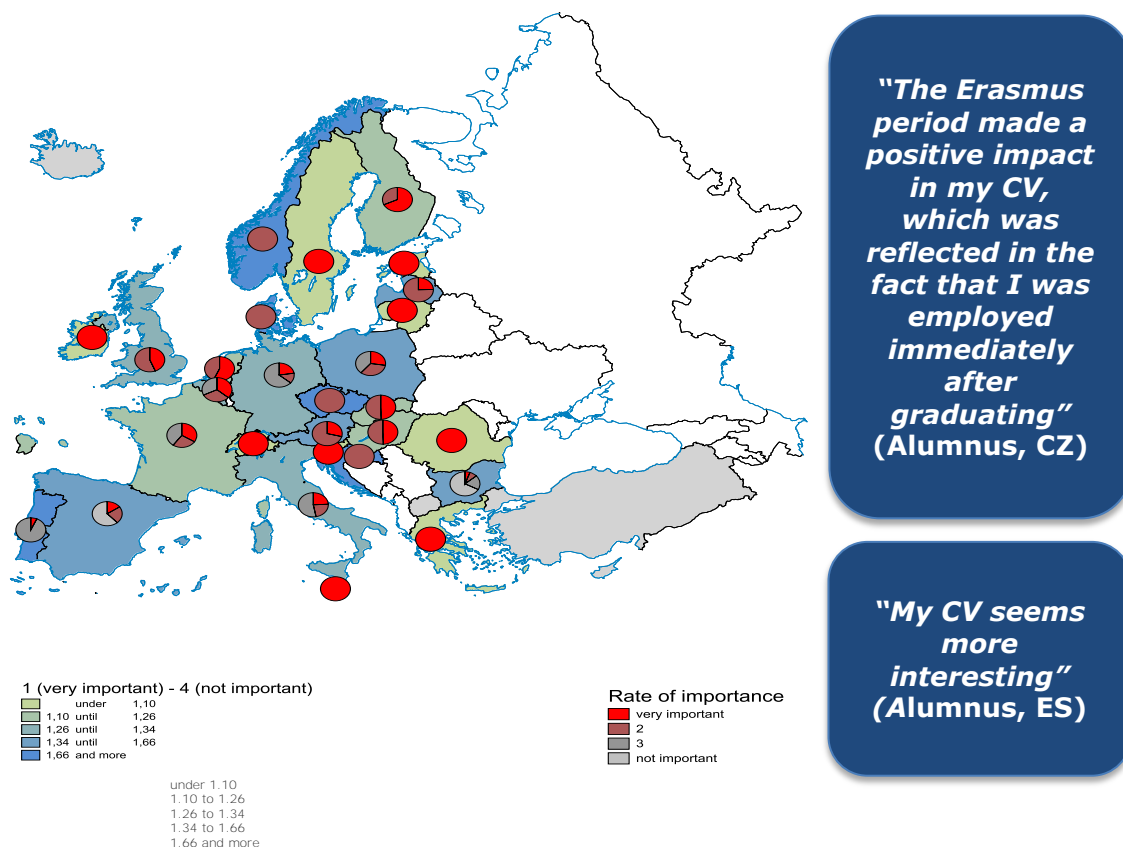
The perspective of the alumni was comparable to that of the employers. All three groups of alumni (mobile 92%, Erasmus 92%, non-mobile 89%) rated the “ability to adapt and act in new situations” as one of the desirable characteristics of new personnel, here therefore fully in line with the HEIs. High percentages of agreement could also be found for planning and organisational skills (mobile and Erasmus 88%, non-mobile 84%) and decision-making skills (mobile and Erasmus 83%, non-mobile 79%). Foreign language skills and intercultural skills were considered relevant by approximately 10% fewer respondents and the experience abroad itself received the lowest level of agreement (mobile and Erasmus 55%, non-mobile 31%). This was again in line with findings from VALERA and the Flash Eurobarometer and those of (Humburg, van der Velden and Verhagen 2013), namely that it is not the activity itself that matters, but the skills gained from it.

**24% more mobile than non-mobile alumni considered international experience to be an important recruitment criterion**

In all cases, more mobile than non-mobile alumni with international experience rated the relevance of the respective skill highly (between +3% and +24%), while no substantial difference appeared in the assessment of these skills between all mobile alumni and Erasmus alumni regarding their relevance to recruitment. In particular, the assessment of international experience depended very much on the mobility background of the respondent. 24% more mobile than non-mobile alumni considered this criterion relevant when recruiting staff. Given that the substantial numbers of mobile students will result in a growth in the percentage of mobile alumni over time, the relevance of international experience can be expected to increase in the future as well.

The perception of the relevance of skills to recruitment varied across Europe. For this reason, EIS compared the results for the top employability skills mentioned by the employers, namely teamwork skills.

**Figure 3-15 Importance of foreign language skills for recruitment of HE graduates, perspective of formerly mobile alumni**



One could not identify a coherent picture, neither in terms of regions, nor other criteria. In some crisis-stricken countries, such as Greece and Bulgaria, these skills were rated higher than in other countries with similar economic conditions, such as Spain and Portugal. The same unclear picture could be observed in less crisis-ridden countries. In addition, while the averages showed no substantial differences in many countries, in Spain and Portugal far more than 50% of the respondents gave ratings of three or four, which means that the skill was considered rather irrelevant. These differences were less prominent in most Northern, Western and Central European countries, with notable exceptions. France and Germany both showed substantial percentages of respondents who gave teamwork skills a rating of three, thus considering them to be rather unimportant.

**Table 3-14 Importance of aspects for recruitment, own experience of alumni by Erasmus action type**

How important, according to your perception, were the following aspects for your employer in recruiting you for your first job after graduation ?	Studies	Work placement	Intensive programme (IP)
very important/important	%	%	%
Communication skills	91	92	91
Ability to adapt to and act in new situations	89	91	90
Analytical and problem-solving skills	85	84	84
Teamworking skills	85	88	88
Planning and organisational skills	82	82	81
Good reading/writing skills	77	76	79
Foreign language skills	76	76	80
Critical thinking	76	72	81
Decision-making skills	74	76	74
Sector-specific skills	73	75	78
Being able to interact and work with people from other backgrounds and cultures	71	76	78
Computer skills	71	65	70
Intercultural competences	64	66	73
An experience of living/studying/training abroad	65	70	70
The knowledge of the country's culture, society and economy where the company is located	55	54	63
Innovative potential and entrepreneurial skills	54	59	59
Good with numbers	52	51	54

No substantial differences occurred across the Erasmus action types. There was agreement among the respondents that communication skills were of crucial relevance to recruitment (91% to 92%) while, for instance, innovative potential and entrepreneurial skills were considered to be much less relevant to all types (54% to 59%), least of all to alumni with experience of studying abroad.

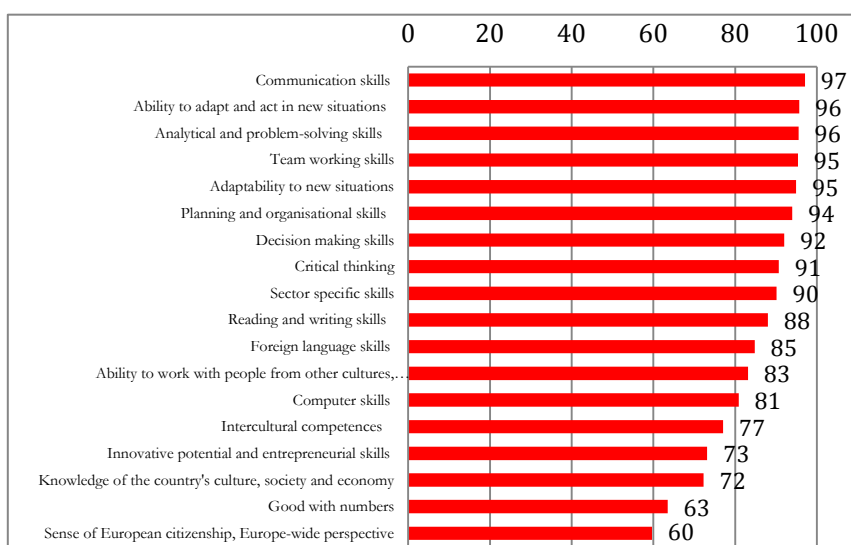
Skills that alumni considered important for a career, that is, after having accepted a job, were not different from those which were decisive in getting a job in the first place. The top-five skills stated were communication skills (97%), the ability to adapt and act in new situations (related to tolerance of ambiguity) (96%), analytical and problem-solving skills (related to vigour) (96%), teamwork skills (95%) and planning and organisational skills (94%). At least 90% also agreed that decision-making skills related to decisiveness (92%), critical thinking (91%) and sector-specific skills (90%) were highly relevant. In other words, the skills which the memo© analysis showed had improved for many students due to a stay abroad were later also relevant to the pursuit of a successful career.

**"I get job offers because of the new language and knowledge I have about the country."**  
(Alumnus, DE)

**Over 90% of mobile students experienced an increase in employability skills**



**Figure 3-16 Skills important for a successful career: EIS, alumni perspective (in %)**



***"It definitely helped me get the position I am currently holding."***  
(Alumnus, PT)

***" I am currently doing my PhD at the same University where I did my year abroad."***  
(Alumnus, ES)

**More than 90% of mobile students experienced an improvement in language skills, communication s skills, intercultural competences, adaptability and knowledge of the host country**

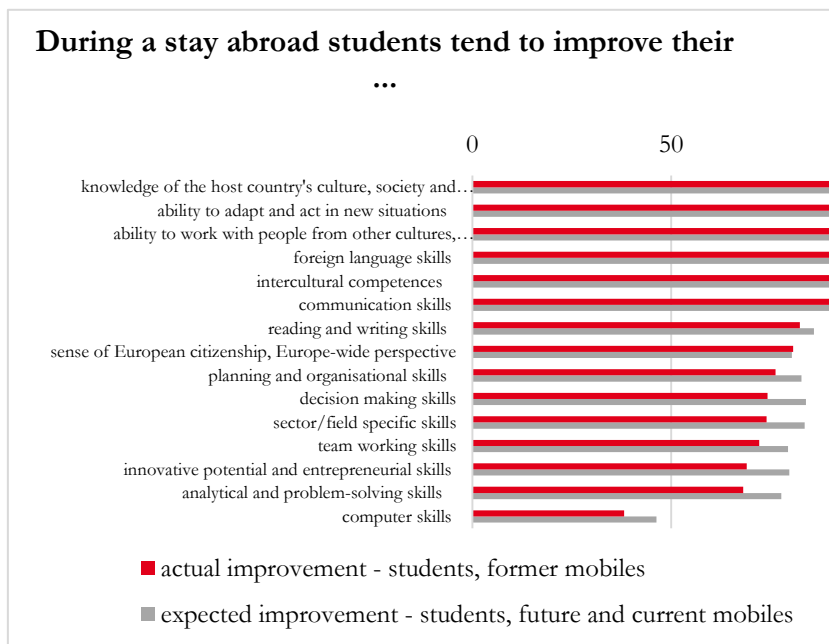
The qualitative results were again in alignment with the quantitative findings. With regard to alumni, their status as graduates, and often as jobseekers on the job market, made their retrospective assessment of the Erasmus experience more thoughtful. Together with the most expected reasons - seeing other countries, cultures, people, learning the language - alumni went one step further and stated that the opportunity to learn and benefit from other educational systems, and the improvement of the competences associated with the development of a professional career (adaptability, problem-solving, open-mindedness) were very important effects after their period abroad. This was probably a delayed impact of the exchange. Once time had passed, alumni were able to reflect on how mobility abroad also had had useful effects on learning through understanding new tools and methods. It is possible that these skills became evident to the student once he or she had become employed. The mark that a stay abroad had left thereafter influenced the development of future graduates' professional careers and alumni opinions confirmed this idea.

### Perceived development regarding other skills

Answers to the further questions in the EIS survey revealed that, in the students' opinion, mobility had the greatest impact on increasing the participant's knowledge of other countries, the ability to interact and work with individuals from different cultures, their adaptability, their foreign language and communication skills, as well as their intercultural competences. Strikingly, over 90% of respondents agreed that these skills, some of which were closely related to employability skills, improved during their period abroad.

Students evaluated the actual as well as the expected improvement in "hard skills" more cautiously, along with other skills considered highly relevant by employers. While the values for the expected and experienced increase in skills were fairly similar in the case of the skills rated highest (knowledge, adaptability and intercultural competences), there were evident differences between the expected and actual improvement in decision-making, analytical/problem-solving, teamwork, sector-specific or decision-making skills. These skills, however, were highly relevant to employers. On the other hand, mobility had a positive perceived impact on the individuals for all skills, except for computer skills which were not a focus of Erasmus or mobility in general.

**Figure 3-17 Change in skills, student perspective (in %)**



***"I'm also now able to communicate with everyone I need to communicate with without any of the problems I experienced before, not only due to language barriers (this was also important). Now I can manage and do whatever I need to do. Also I'm now more open-minded due to the possibility of living with people in a completely different country."***  
**(Student, ES)**

Except for the ability to reach decisions and the knowledge and skills required for working in teams, Erasmus students experienced slightly more improvement than the overall sample of mobile students. 94% of the mobile students and 95% of the Erasmus students agreed that their knowledge of the host country had improved and the staff perspective concurred with the student perspective, namely that **students' skills improved substantially through the experience of mobility.**

The students' perspective in the qualitative study converged again on a similar point, namely linguistic and so-called

intercultural competences were certainly the most evident and the most recognised by participants. However, students considered that what had been learnt went beyond knowledge and the improvement of language skills (English or another language), and that the exchange improved their relationship to the world. They also noticed progress in their communication skills and recognised that they had developed cultural and cohabitation skills, as well as competences associated with their studies and the development of a professional career. They also spoke about a general experience, based on the understanding of administrative and bureaucratic procedures that they acquired through the Erasmus grant.

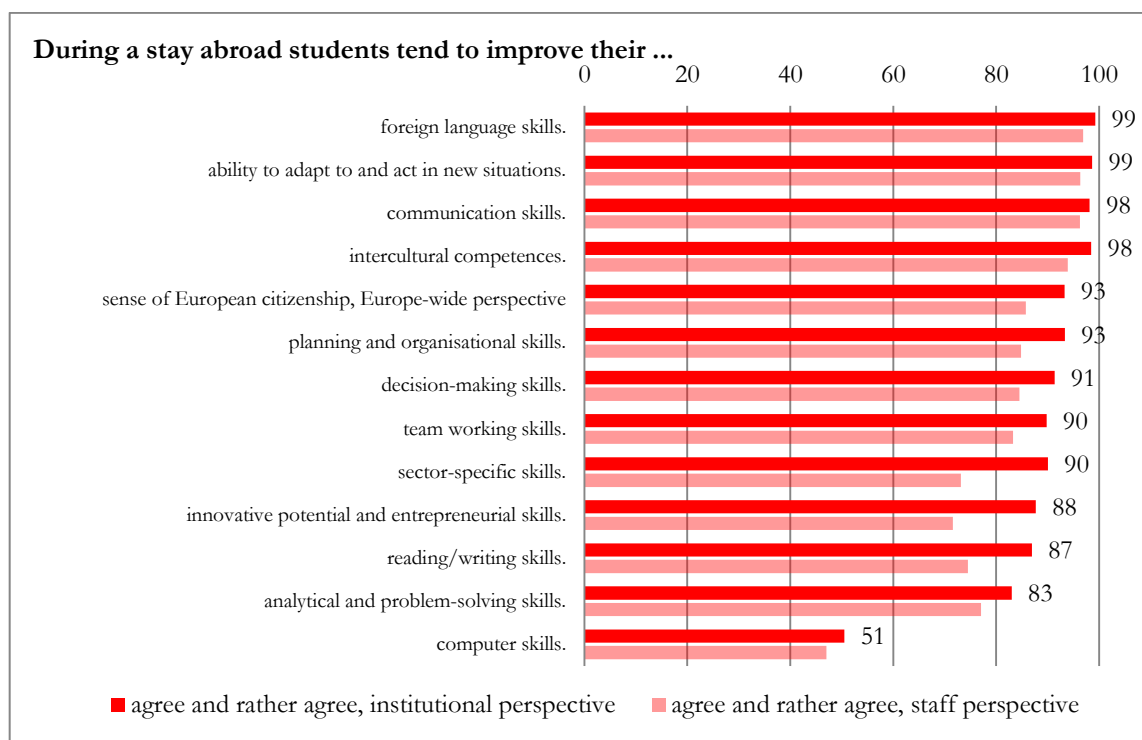
Moreover, students gained respect for their own culture and mentality, increased their competences in the area of intercultural learning, learning in general and understanding of intercultural differences. They also seemed to become more extroverted, adaptable and aware of their own cultural identity after a period of mobility abroad. Furthermore, the majority of students interviewed pointed out that they had developed “cultural awareness” and had acquired insights into the country’s (academic) culture, lifestyle and social norms.

Some participants also mentioned that the “change of perspectives” during their stay abroad as part of the Erasmus programme had brought about a better understanding of the situation of immigrants, which specifically meant developing empathy, flexibility and tolerance through understanding others.

The perspectives of the HEIs and staff were similar to the students’ perspectives with slightly different priorities. Here, language skills, the ability to adapt and communication skills were the top-three skills which were improved by a stay abroad. The difference lies in the percentage of respondents that agreed that a certain skill of a student improved through study abroad. While always more than 80% of the HEIs agreed with the statement for each of the skills except for computer skills, slightly fewer respondents among the staff agreed to the improvement of sector-specific skills, innovative skills, reading and writing and problem-solving skills.

***“I am more extroverted, open to new things and adaptive now than before exchange. Everyone should go and experience what it is like to live in another country. I now appreciate my own country more and my attitude is more positive.”  
(Student, FI)***

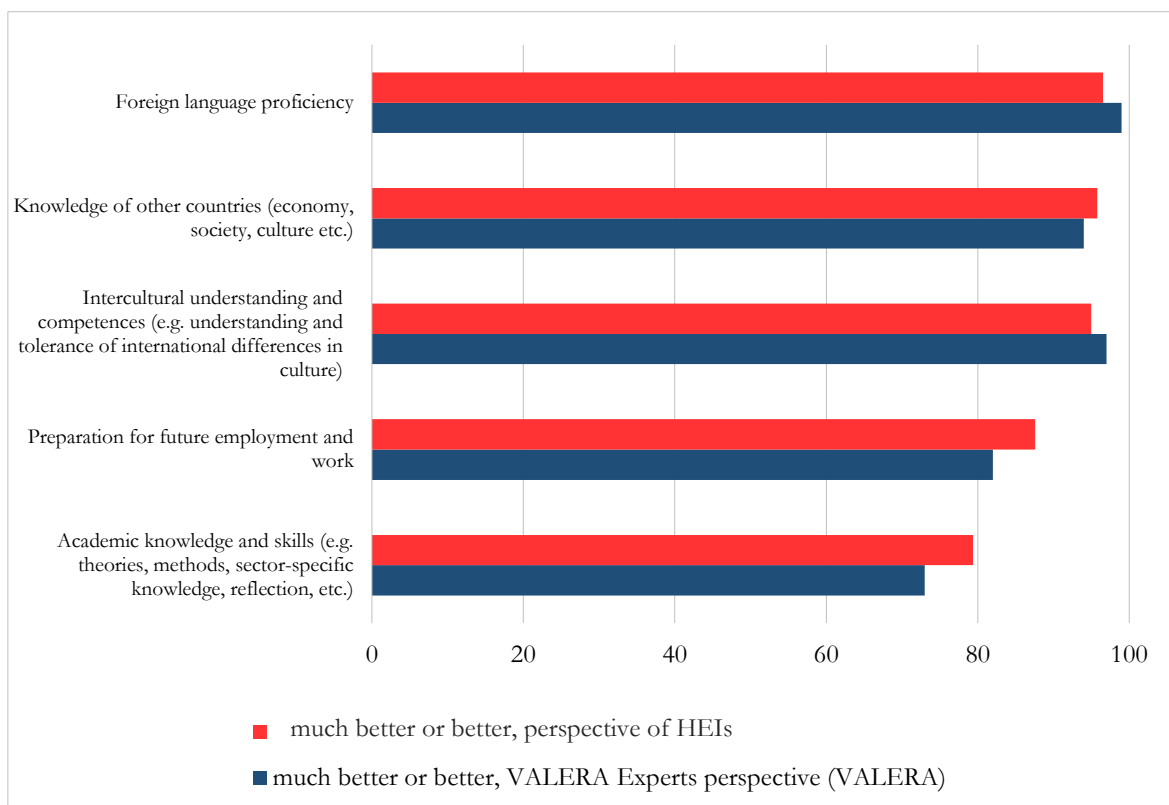
**Figure 3-18 Change in skills, HEI and staff perspectives (in %)**



Additionally staff and HEIs were asked to name the most important skills that were improved, from their perspective, through mobility. Both groups agreed on one skill: 96% of the staff and 99% of the HEI estimated that the ability to adapt more easily and to accept more easily changing circumstances and new realities was greatly enhanced through the experience of mobility. This indeed corresponded with the memo© findings in that mobile students showed a substantial increase in the value for tolerance of ambiguity, which, as described in the methodological chapter, is related to adaptability. Moreover, 99% of the HEIs considered the ability to work with individuals from other cultures and backgrounds to be a skill improved through mobility, again a skill related to the memo© factor tolerance of ambiguity. Of the HEIs, 98% also regarded knowledge of the host country’s culture, its society and its economy as greatly improved through the experience of mobility.

**99% of HEIs saw an increase in the adaptability and confidence of students through stays abroad**

**Figure 3-19 Competences in relation to which Erasmus students score better than non-mobile students: comparison of EIS and VALERA studies (in %)**



Prior to the EIS, the VALERA study also looked at the perceived competence levels of returning mobile students, albeit exclusively students who participated in Erasmus actions. The team therefore added this specific aspect, in which the results for Erasmus students were compared to non-mobile students although the comparison in the EIS is usually made between mobile and non-mobile students. The results of the EIS survey indicated that HEIs believed that students who went abroad gained substantially in relation to all skills and the changes related to the VALERA study were small in this respect.

As the comparison of perceptions and the data on personality traits confirmed, Erasmus students had indeed better competences after studying abroad than the non-mobile sample, and in most cases also experienced more improvement in relation to practically all the relevant skills than the overall sample of mobile students. To cut to the chase, Erasmus seemed to have a substantial effect on employability for the majority of participants. This coincided with the results for the memo© factors which tested employability skills that had been considered highly relevant by the employers. It was also in line with the findings of (Humburg, van der Velden and Verhagen 2013) whose main skill areas were comparable with the memo© factors (see Figure 3-4).

***"I improved my work abilities"***  
**(WP student, PT)**

**Table 3-15 Improvement of skills, student perspective across various Erasmus actions**

<b>Please rate the following skills as to how you expect them to improve by your experience of mobility.</b>	<b>Studies</b>	<b>Work placement</b>	<b>IP</b>
	<b>%</b>	<b>%</b>	<b>%</b>
very improved/improved	%	%	%
intercultural competences	96	95	94
being able to interact and work with people from other backgrounds and cultures	96	95	96
knowledge of the host country's culture, society and economy	96	93	96
foreign language skills	95	94	90
to adapt and act in new situations	95	95	94
(oral) communication skills	94	95	96
reading and writing skills	88	86	90
planning and organisational skills	86	92	86
sector- or field-specific skills	85	96	86
ability to reach decisions	85	88	87
to feel European, to have Europe-wide perspectives beyond the national horizon, to have a sense of European citizenship	84	86	79
know how to work in teams	83	90	86
innovative potential and entrepreneurial skills, get new ideas how to do things	83	86	89
analytical and problem-solving skills	83	90	84
computer skills	51	71	64

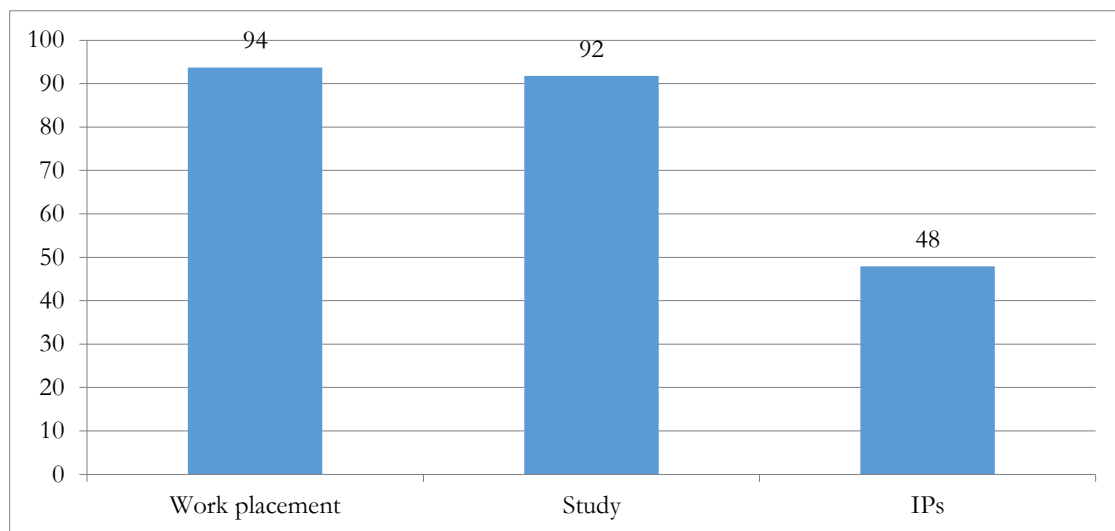
Comparing the Erasmus actions, the picture does not change substantially. Students on work placements had the highest expectations and assigned the highest possible values to nine out of the fifteen items. They did so for four of the six items with statistically significant differences. This clearly indicates that students at least expected work placements to provide them with the highest level of confidence by enabling them to improve skills that were relevant to their employability. However, one could observe differences regarding the skills on which most of the respondents concurred. While those who had participated in a study abroad agreed most on intercultural competences (96%), the ability to interact (96%) and knowledge of the host country (95%), IP participants agreed on the knowledge of host country and ability to interact (96%), but diverged in also expecting oral communication skills (96%) to improve most. Students going on work placements had a different distribution and expected the largest improvement to occur in relation to sector-specific skills and adaptability to new situations (95%).

**"My experience brought me a lot of new knowledge in different fields like economics, marketing, customer behaviour, finance and internationalization."  
(WP student, BG)**

The development of communication skills was rated very similarly by all activities as the sixth most improved skill. Again, the lowest evaluation was given to the development of computer skills, although slightly more students on work placements saw an improvement in these skills (71% compared to 51% (study) and 64% (IP)), possibly due to their having more opportunities to improve their IT knowledge and competences.

In the qualitative results, in the case of the mobility for work placements, the participants stressed the competences associated with professional development more, along with those closely linked to the job market. This was logical considering that these types of programme are more similar to the real job market. The main reason for these statements, however, derived from the way the programme itself was conceived. During the exchange, students - without ceasing to be so - became workers, and thus became aware of and valued the skills associated with the job they carried out during their period of international mobility. In general, Erasmus work placements seemed to give students an excellent opportunity to gain valuable career and international working experience, to strengthen their CVs and to improve their foreign language skills. They also seemed to enhance interpersonal skills such as openness, the capacity to work in a team and in a cooperative and comprehensive manner, strategic and organisational skills, such as problem-solving, or other soft skills, such as self-confidence, independence or a more mature way of thinking.

**Figure 3-20 Impact of Erasmus actions on employability, HEI perspective (in %)**



The relevance of work placements but also study abroad was reiterated by the HEIs. 94% of HEIs observed a substantial impact of work placements on employability and 92% were of the opinion that studying abroad influenced employability. IPs were considered relevant for employability by only 46% of the HEIs which responded. The comparatively low value for IPs is understandable, as it is less likely that such a short-term activity would have such a far-reaching effect on long-term skills.

EIS also controlled for the top-five most improved skills as named by the students. While students with experience of studying abroad through the Erasmus programme valued the development of their language skills and knowledge of the host culture most, the other two groups - students with experience of work placements and IPs - saw as the major improvement, the improvement in their ability to interact and work with people from other cultures and to adapt to new situations. The respondents agreed to a similar degree across all activities in relation to these top-five aspects. For students on study-abroad programmes, all five aspects were assigned

***"I feel very positive about international mobility, it is important for students nowadays. After the course, I understand different cultures and people from different cultures better."***  
**(IP student, FI)**

percentages above 93% while for work placements the range was between 93% and 96% and for IPs the distribution was slightly larger with a range from 89% to 96%. Students (whether on study-abroad schemes, work placements or IPs) estimated that they substantially improved their foreign language skills, gained knowledge of the host country's culture, society and economy, and improved their ability to interact and work with people from other backgrounds and cultures, increased their intercultural competences, and learned to adapt to and act in new situations.

**Table 3-16 Top-five improved skills, students' perspective by Erasmus action type (in %)**

<b>Please rate the following skills as to how you feel that they improved by your (last) experience of mobility.</b>	<b><u>Studies</u> Top-five most improved skills</b>
Foreign language skills	96
Knowledge of the host country's culture, society and economy	96
Being able to interact and work with people from other backgrounds and cultures	94
Intercultural competences	94
To adapt and act in new situations	94
<b>Please rate the following skills as to how you feel that they improved by your (last) experience of mobility.</b>	<b><u>Work placement</u> Top-five most improved skills</b>
Being able to interact and work with people from other backgrounds and cultures	94
To adapt and act in new situations	96
Knowledge of the host country's culture, society and economy	94
Intercultural competences	94
Foreign language skills	93
<b>Please rate the following skills as to how you feel that they improved by your (last) experience of mobility.</b>	<b><u>Intensive programme (IP) abroad</u> Top-five most improved skills</b>
Being able to interact and work with people from other backgrounds and cultures	96
To adapt and act in new situations	95
Knowledge of the host country's culture, society and economy	94
Intercultural competences	92
Foreign language skills	89



**Table 3-17 Advantages experienced from stay abroad, students perspective by Erasmus action type**

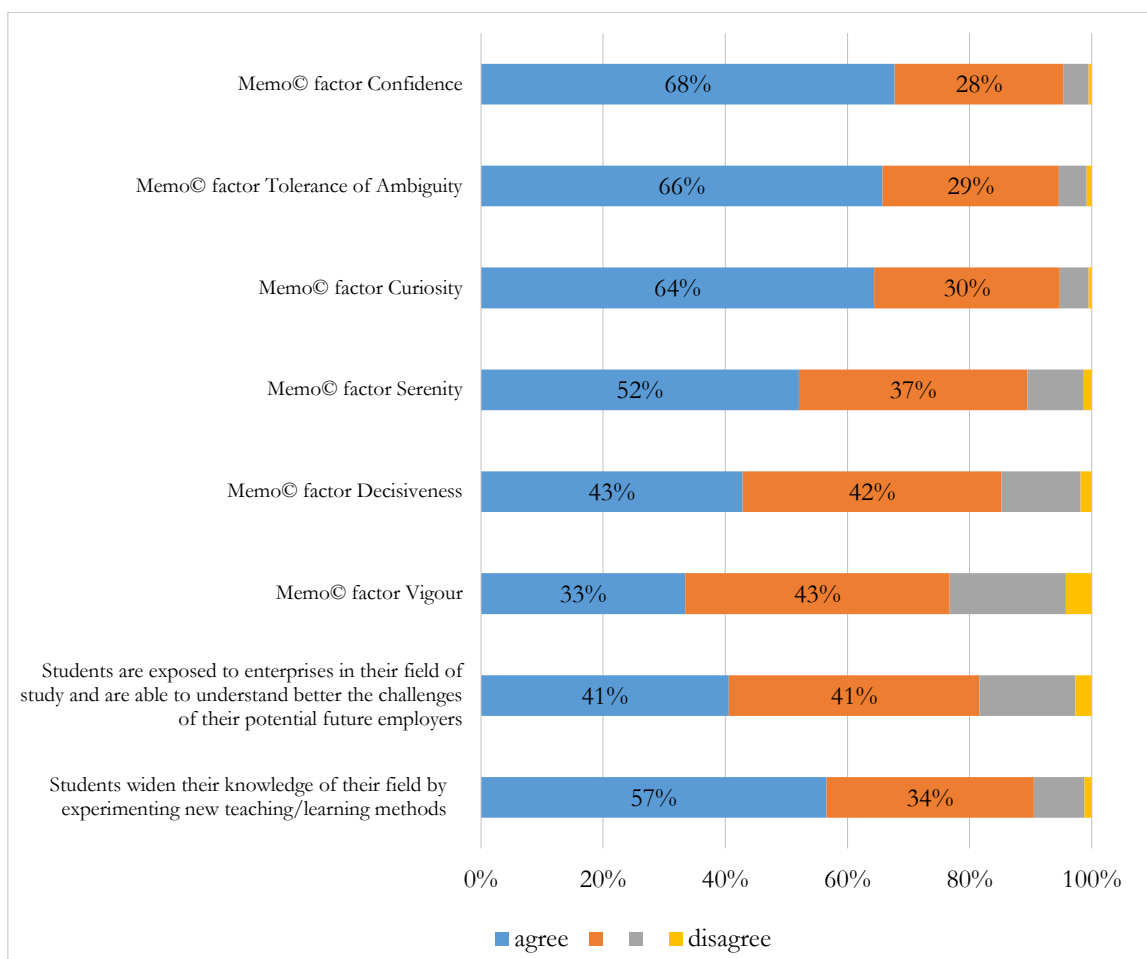
<b>What kind of advantages do you experience from your stay abroad?</b>	<b>Studies</b>	<b>Work placement</b>	<b>IP</b>
<b>agree/rather agree</b>	<b>%</b>	<b>%</b>	<b>%</b>
I appreciate my home university now more than before.	90	96	94
I have a better idea what I want to do after graduation.	88	92	87
I expect to have better job opportunities after my graduation.	76	79	75
I feel more involved in my field of study.	73	87	81
I have better opportunities for work placements or student jobs in my home country.	73	83	78
I have new friends who live abroad.	56	51	53

In addition to the aspect of skills, students also gave feedback on other effects of mobility. Of all respondents, 90% to 96% said that they appreciated their home HEI more than before, 87% to 92% stated that they had a better idea of what they wanted to do after graduation, 75% to 79% expected to have better job opportunities after graduation and 73% to 87% felt more involved in their field of study. Interestingly, for this item substantially more students on work placements agreed with this statement than students on study abroad schemes. The responses showed that 73% to 83% also saw better opportunities for work placements or student jobs in their home country and 51% to 56% had acquired new friends who lived abroad.

### **The impact of Intensive Programmes (IPs)**

Staff rated all aspects of students’ development in IPs positively and expressed high appreciation of the effects of IPs in general on students’ personality traits and abilities. They saw positive effects for all memo© factors, with confidence in the lead (96%), followed by tolerance of ambiguity (95%), curiosity (94%), serenity (89%), decisiveness (85%) and vigour (76%). Additionally, staff saw very positive effects in terms of a better understanding of the future work environment (82%) and widening their knowledge while experimenting with new teaching/learning methods (91%).

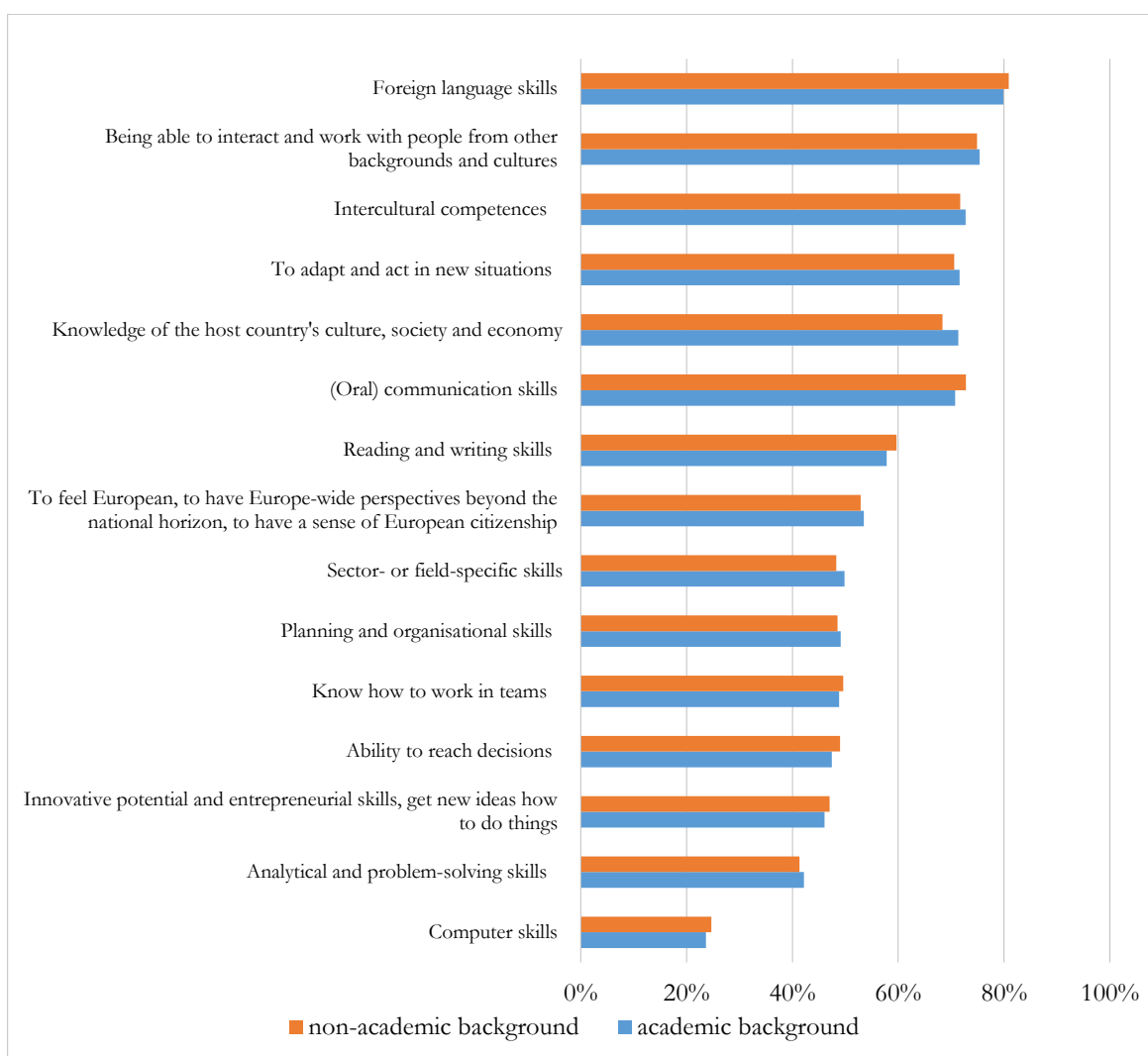
**Figure 3-21 Change of personality traits and abilities through participation in IP, staff perspective (in %)**



EIS was asked to specifically control IPs for students from non-academic background. All in all, 1,512 students took part in an IP at home or abroad. Slightly more than half of them (51%) came from families whose parents had not attended university. Only 179 of the participants in the survey took part in an IP at their home university. There was no difference based on the academic background of their families between the participants in IP's at home and IPs abroad.

On the memo© factors, only for tolerance of ambiguity a difference of 7% for students from non-academic background could be observed, which was also statistically significant.

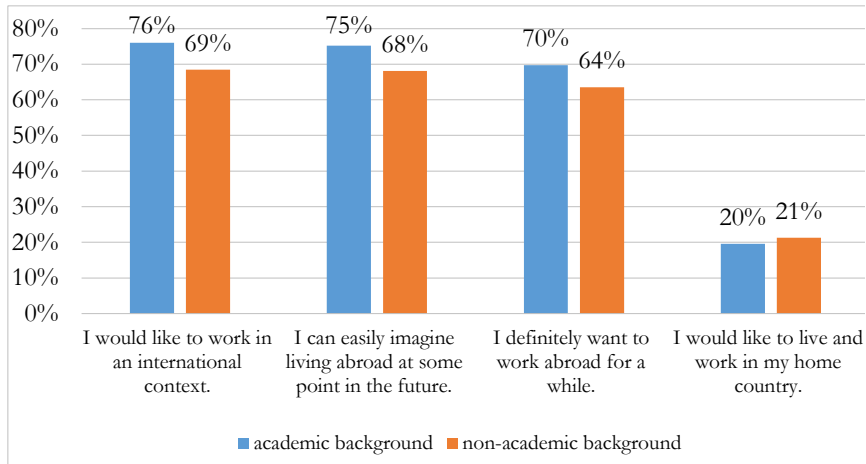
**Figure 3-22 Expected improvement of skills through a stay abroad, academic vs. non-academic (in %)**



On the other hand, students from families with academic backgrounds had a greater tendency to imagine themselves working in an international context or going abroad after graduation. All in all, the majority of the participants in IPs were open to living or pursuing a career abroad. However, with regard to all aspects, students from families with an academic background had an advantage of seven to eight percentage points, which means that they were more certain about their assessment of the statement.

On the other hand, the percentage of students who were sure that they wished to live in their home country was three percentage points higher for those from families with a non-academic background than for those from families without an academic background and students from non-academic family backgrounds did not seem to develop the same level of eagerness to live or work abroad as those from academic family backgrounds (6% to 7% less per item).

**Figure 3-23 Future plans of IP participants**



***"I think it is important to say that between two CVs, one with an international experience and one without it, we will go first for the one with the international experience. No doubt."***  
**(Employer, PT)**

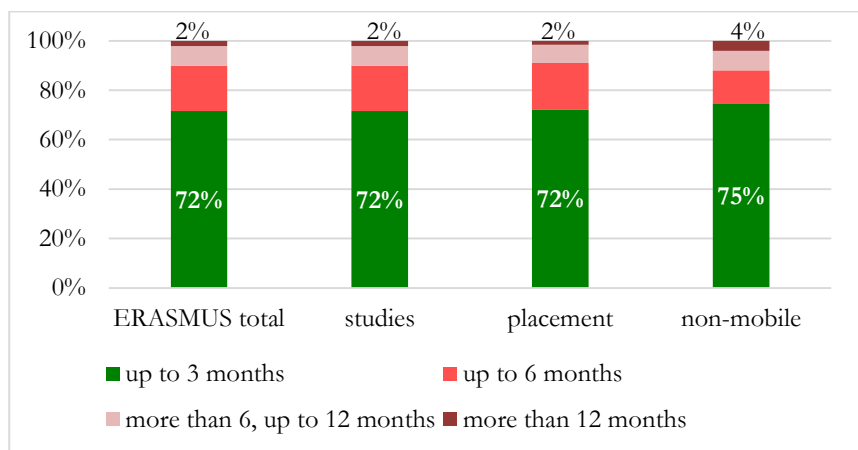
### 3.4. How does mobility affect employment and career?

#### Unemployment and first job

With regard to employment and (later) careers, the team had to focus on the alumni survey. The following graph shows that the Erasmus alumni had an advantage when looking for their first job. While the vast majority of all graduates needed up to three months to find their first employment after graduation, a proof that an academic degree is in general advantageous on the job market, the risk of long-term unemployment after graduation was half as high for Erasmus students than for non-mobile students.

***"My international experience was one of the main reasons for getting my first job after last graduation."***  
**(Alumnus, LT)**

**Figure 3-24 Period of unemployment after graduation: comparison of alumni of Erasmus vs. non-mobile alumni**



**Risk of unemployment after graduation was half as high for Erasmus students: 2% needed more than 12 months to find a job compared to 4% of non-mobiles**

Which skills were considered to be important to alumni to get their first job and are there any differences between alumni who participated in the various types of mobility?

Alumni who participated in all three types of Erasmus action attached considerable importance to communication skills, an ability to adapt to new situations, and analytical and team-working skills (around 90% of the alumni across all three types agreed to this statement). On the other hand, certain skills, which were valued highly by students (such as knowledge of host country's culture, interaction with individuals from other countries and intercultural competences), seemed to lose some value over the time, as they were not considered to be as important by alumni.

**90% of Erasmus alumni regarded communication skills, adaptability and analytical skills to be important for getting their first job.**

**Table 3-18 Importance of skills for recruitment, alumni perspective by Erasmus action type**

<b>How important, according to your perception, were the following aspects for your employer in recruiting you for your first job after graduation?</b>	<b>Studies</b>	<b>Work placement</b>	<b>IP</b>
<b>very important/important</b>	<b>%</b>	<b>%</b>	<b>%</b>
Communication skills	91	92	91
Ability to adapt to and act in new situations	89	91	90
Analytical and problem-solving skills	85	84	84
Team-working skills	85	88	88
Planning and organisational skills	82	82	81
Foreign language skills	77	76	80
Good reading/writing skills	78	76	79
Critical thinking	76	73	81
Decision-making skills	74	76	74
Sector-specific skills	73	75	78
Being able to interact and work with people from other backgrounds and cultures	72	76	78
Computer skills	71	65	70
Intercultural competences	65	67	73
An experience of living/studying/training abroad	66	70	70
The knowledge of the country's culture, society and economy where the company is located	56	54	63
Innovative potential and entrepreneurial skills	55	59	59
Good with numbers	53	51	54

**Job characteristics**

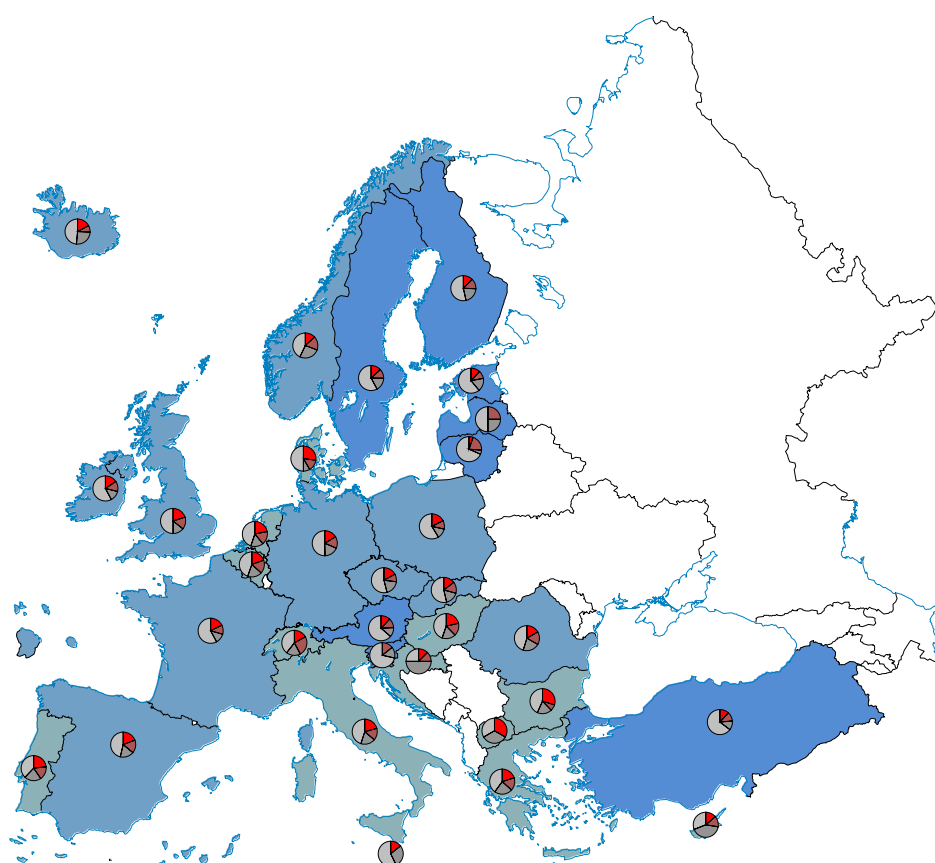
Mobile alumni rated all international aspects of their job or company significantly higher than non-mobile students. Moving abroad to work was much less common (35%) than having international business contacts (65%), cooperating with branches abroad (60%), having customers abroad (58%), having part of the company staff from abroad (57%) or travelling abroad (52%). However, 69% of the mobile students said that their work environment has characteristics of internationalisation.

***"As I made contacts abroad, I would be able to find a job there much more easily"***  
(Alumnus, LT)

**Table 3-19 International job characteristics, mobile vs. non-mobile alumni**

What characteristics of internationalisation does your job today have?	Mobile	Non-mobile
relevant/not relevant (1-4)	%	%
Jobs with characteristics of internationalisation	69	64
International business contacts	65	52
Cooperation with branches abroad	60	46
Customers abroad	58	45
Part of the staff is from abroad	57	43
International travel	52	42
I moved abroad for my current job.	35	18
My job does not have any characteristic of internationalisation.	31	36

**Figure 3-25 Spread of cases of jobs without international characteristic across Europe, mobile alumni**



**"[The mobility experience] definitively helped me to get the position I currently hold."  
(Alumnus, PT)**

1 (very relevant) - 4 (not relevant)

<span style="background-color: #90EE90; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> under 1,70	<span style="background-color: #90EE90; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> 1,70 until 2,00
<span style="background-color: #66CDAA; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> 2,00 until 2,90	<span style="background-color: #66CDAA; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> 2,90 until 3,15
<span style="background-color: #4682B4; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> 3,15 and more	

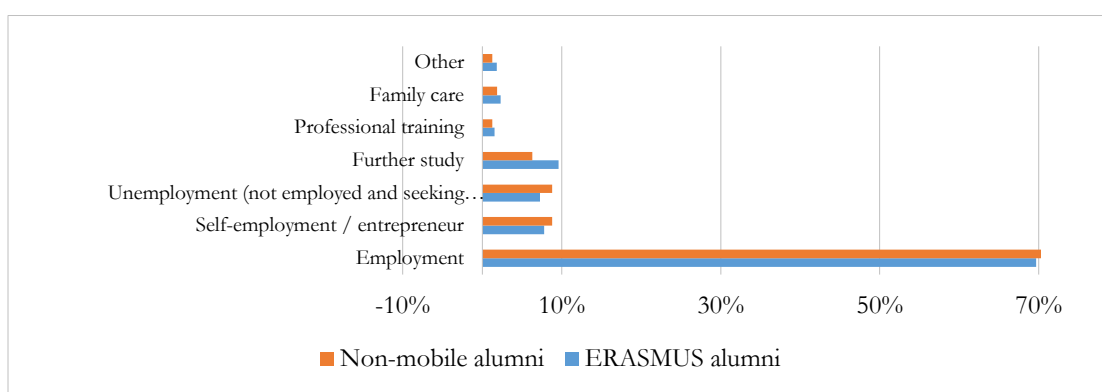
Rate of relevance

<span style="background-color: #FF0000; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> very relevant
<span style="background-color: #8B4513; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> 2
<span style="background-color: #696969; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> 3
<span style="background-color: #A9A9A9; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> not relevant

Most of the alumni who stated that their job had no characteristic of internationalisation and also rated this aspect as not very relevant were located in the Mediterranean countries while the majority of respondents with international job characteristics who also considered these characteristics important were found in the Nordic countries, Turkey and Austria. Thus, there still seemed to be a difference in the level of internationalisation in working environments across Europe. This corresponded with the findings regarding the relevance of international experience or language competences.

**35% of mobile alumni moved abroad for their work, nearly double as many as non-mobile employees.**

**Figure 3-26 Job characteristics 5 years after graduation, Erasmus alumni vs. non-mobile alumni**

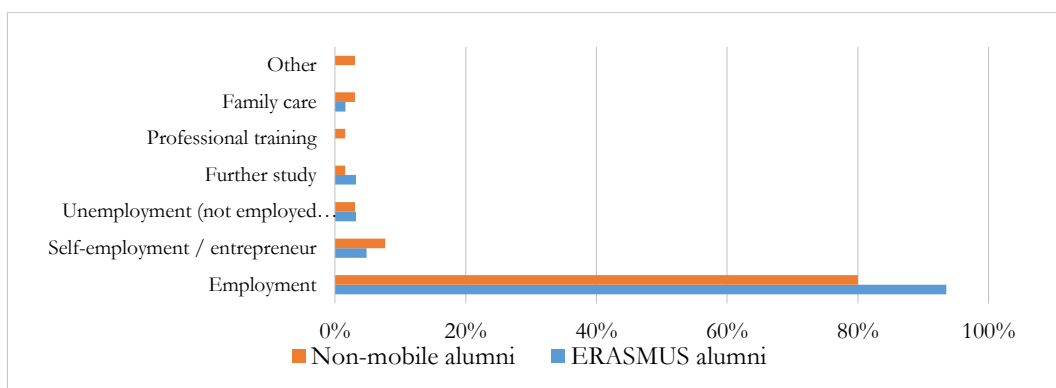


There were considerable differences in the job characteristics between mobile and non-mobile alumni some years after graduation. Non-mobile students were in employment slightly more often than alumni who participated in Erasmus actions, a higher percentage of which reported that they were still involved in further studies. Given that there is a **strong correlation between the level of the alumni's degree, and their income and rate of unemployment**, this is again a positive finding for mobile students. Moreover, the unemployment rate of mobile alumni was lower than that of non-mobile alumni.

**The unemployment rate of mobile students (7%) was 23% lower than that of non-mobile students (9%) five years after graduation**

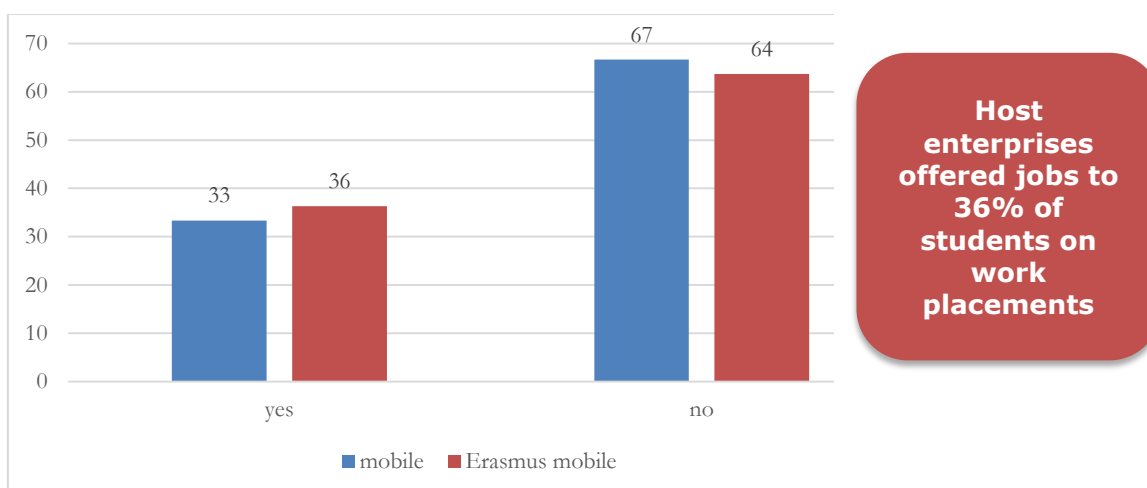
For the analysis of the graduates of ten years ago, 69 alumni participated in Erasmus actions and 68 were non-mobile alumni. This low number did not allow for generalisation of the results. Nevertheless, the sample showed a higher rate of employment ten years after graduation for alumni who participated in Erasmus actions.

**Figure 3-27 Current major activity ten years after graduation, Erasmus alumni vs. non-mobile alumni**



Among the different Erasmus actions, work placements had a specifically direct effect on employment: 36% of respondents who participated in an Erasmus work placement stated that the company or branch of the company where they did their work placement abroad offered them a position or even hired them.

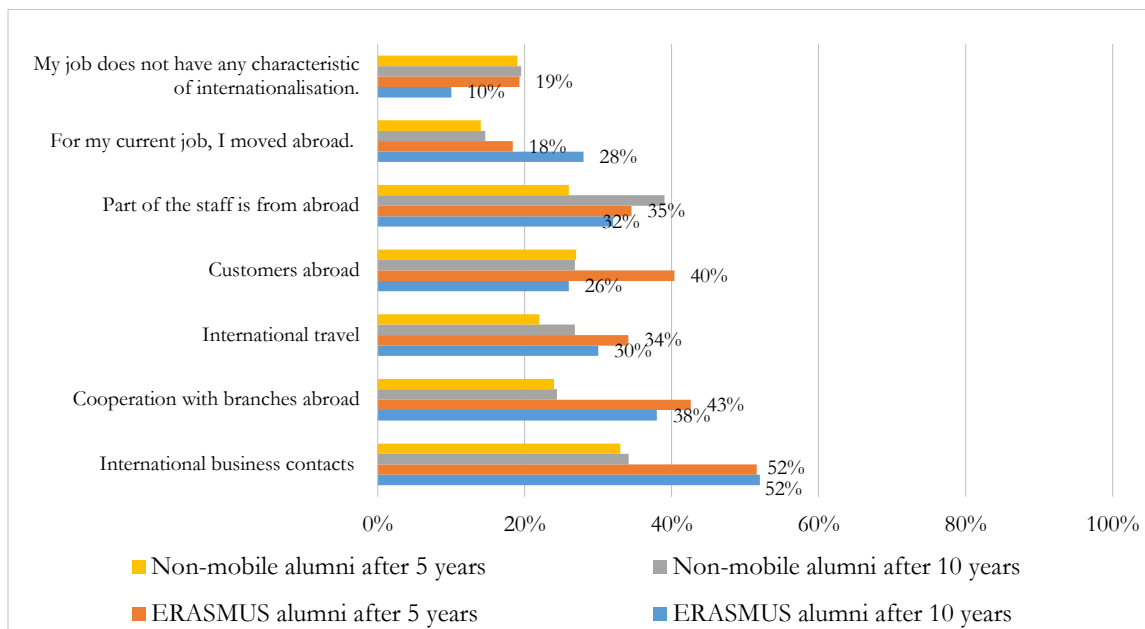
**Figure 3-28 Job offer through work placement abroad (in %)**



Five years after graduation, only 18% of the alumni who had participated in Erasmus actions had moved abroad for their work, compared to an even lower figure of 13% for the non-mobile alumni. However, 28% of ERASMUS alumni had moved abroad 10 years after graduation. Consequently, while the jobs of most alumni who participated in Erasmus actions had an international orientation, for the vast majority the home country still remained the focus of their lives.



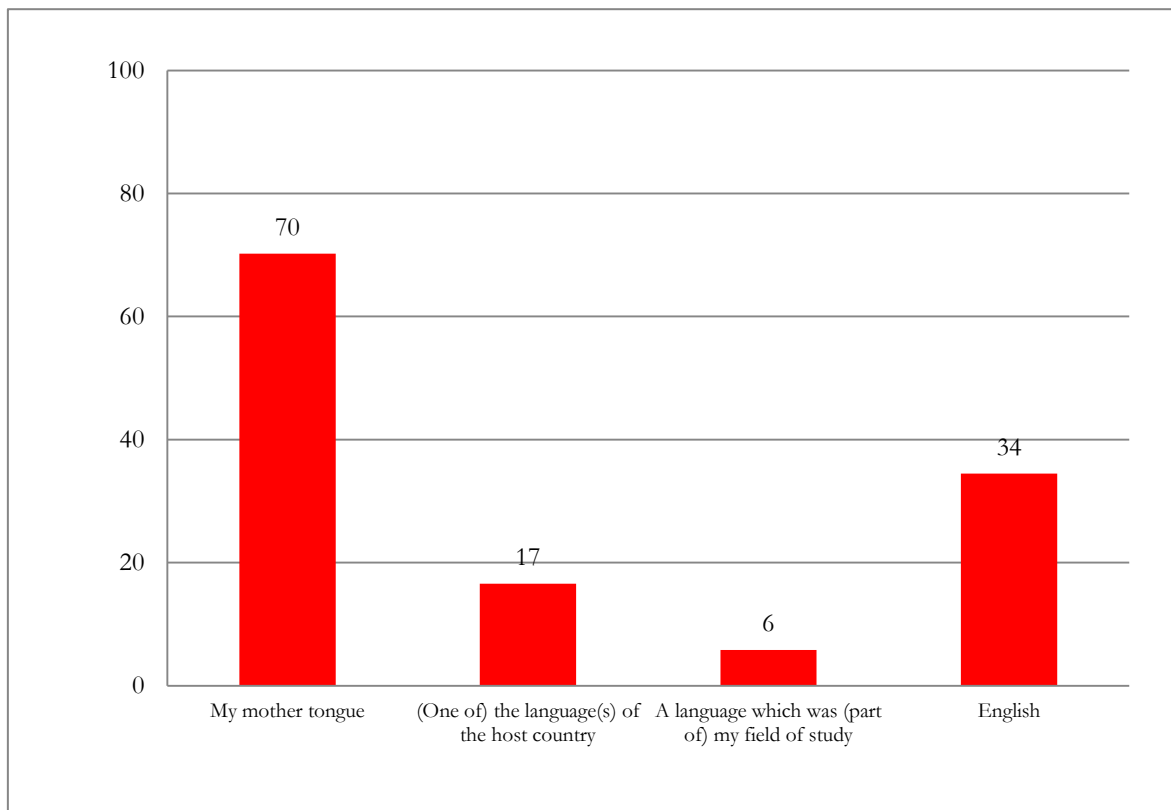
**Figure 3-29 Very relevant job characteristics: five vs. ten years after graduation, Erasmus alumni vs. non-mobile alumni**



The quality of the jobs attained 10 years after graduation also differed considerably between Erasmus alumni and alumni without a mobility experience. The former were twice as likely to report that their job and work environment five years after graduation had characteristics of internationalisation. Especially among Erasmus alumni after 10 years of work experience, the percentage of persons declaring that their job had no international characteristics was extremely low (10%) and nearly at half of that of Erasmus alumni with five **years' experience**. Less of the more experienced Erasmus alumni, however, claimed to have international business contacts.

This international orientation of the alumni's working environment was also reflected in the language component.

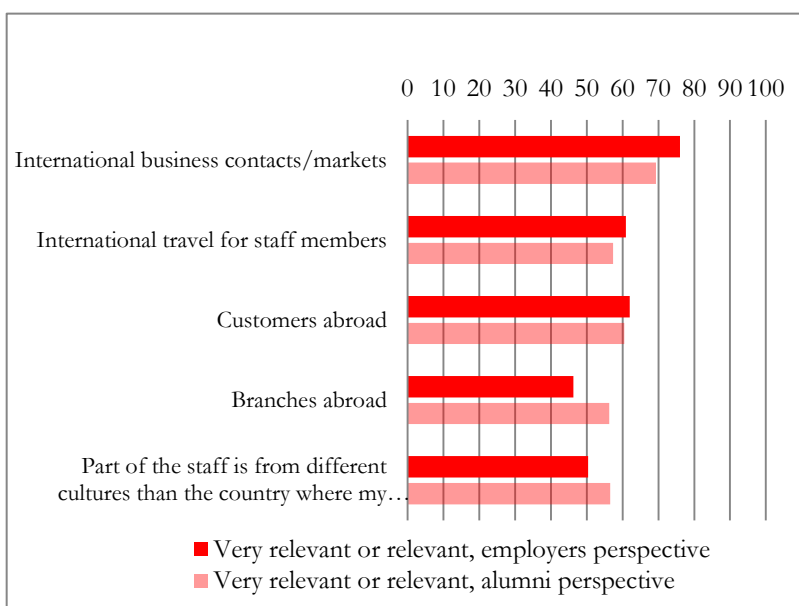
**Figure 3-30 Official language of the enterprise, alumni perspective (in %)**



Despite their background of international mobility, alumni mainly found themselves in companies which had their mother tongue as an official language (70%). However, a substantial percentage worked in companies using English as their major business language, both within and outside English-speaking countries (second position, 34%). This was in line with the fact that 73% of the alumni worked in their country of origin and 60% of employers which participated in the survey indicated that they used the language spoken in the country of their location as an official language.

EIS also asked alumni and employers for the aspects of internationalisation which were considered relevant to them. All five aspects were considered relevant, with international business contacts and international travel of staff being the top priorities for the employers.

**Figure 3-31 Relevant aspects of internationalisation, employers' vs. alumni's perspective (in %)**



***"Everything which implies international experience, relating with other cultures and other languages... is a bonus for us." (Employer, CZ)***

Additionally, employers were asked to rate two other aspects of internationalisation. In their responses, 60% stated that the "necessity to open up markets other than the local one" was a very relevant aspect for their enterprise, and 60% claimed the same for "bringing in house talents or skills that are scarcely developed at the national level".

**81% of mobile students chose a field of study because of its career options abroad**

### Career

Career orientation was relevant to students from a very early stage onwards. While 95% of the mobile students chose a subject because they were interested in it, 75% had considered the career options and 81% had even taken into account possible career options abroad (compared to only 66% of the non-mobile students).

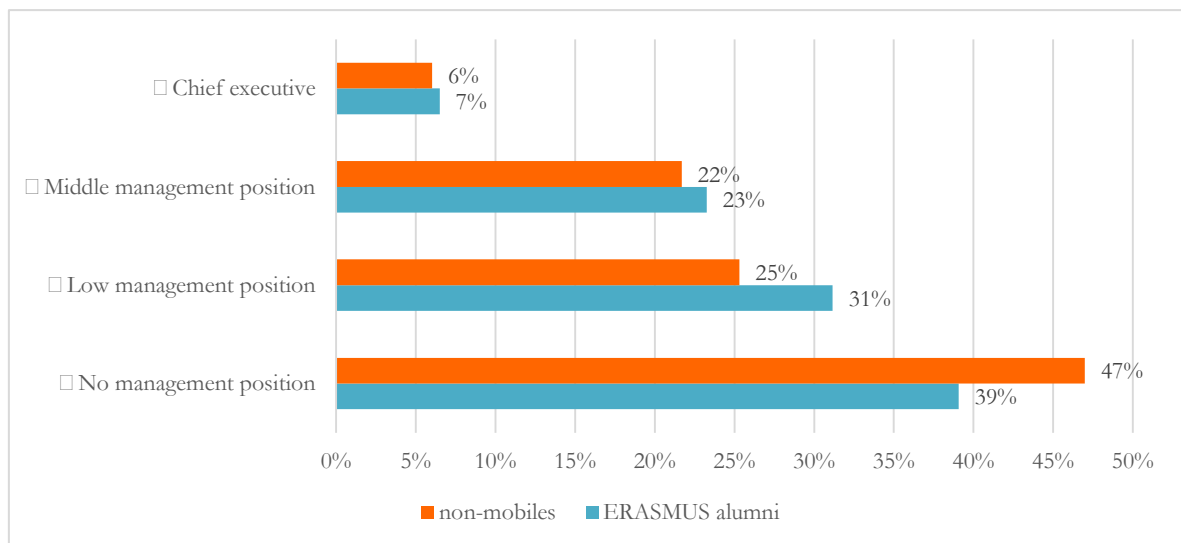
**Table 3-20 Importance of career aspects on study programme, mobile vs. non-mobile students**

How important were the following aspects for the choice of your study programme?	Mobile	Non-mobile
	%	%
agree/rather agree		
...I am very interested in it.	95	94
...the field offers many career options.	75	76
...the field offers career options also abroad.	81	66
...I expected a higher than average income with my degree.	61	60

For the three Erasmus actions for students, EIS could not detect any substantial differences.

The data also shows that experience acquired through an Erasmus action improved the chance of attaining a management position five years after graduation. Of the alumni who participated in Erasmus actions, 39% and of the non-mobile alumni 47% did not have a management position by this time. Alumni who participated in Erasmus actions had managerial positions at every level more frequently than non-mobile alumni.

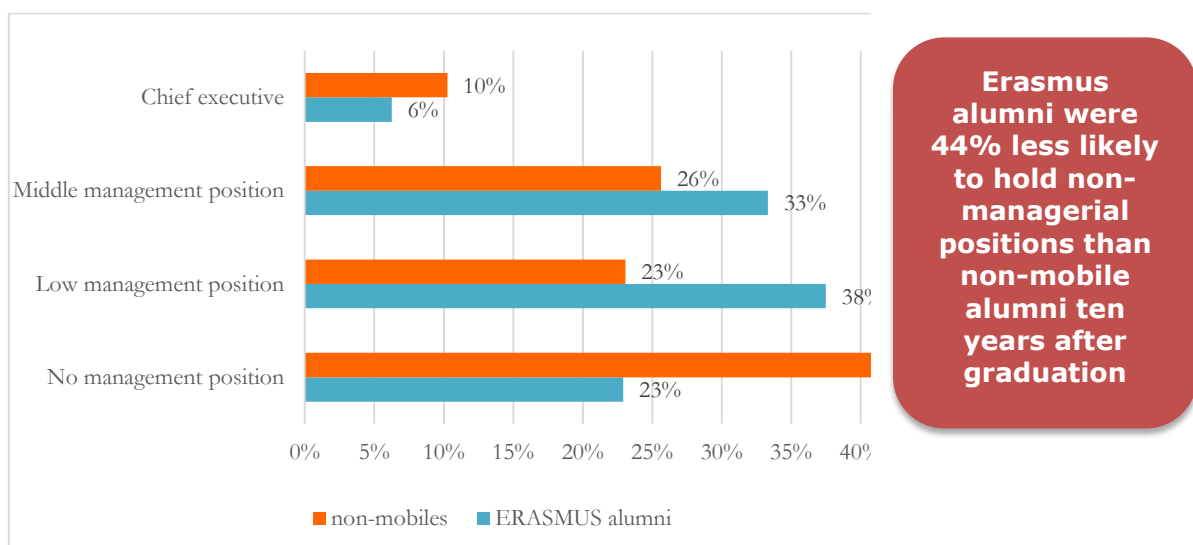
**Figure 3-32 Current job situation five years after graduation, Erasmus alumni vs. non-mobile alumni\***



\* Multiple answers are possible.

Ten years after graduation, the advantage of experience gained through an Erasmus activity increased with regard to their job situation, but only up to a certain level.

**Figure 3-33 Current job situation ten years after graduation, Erasmus alumni vs. non-mobile alumni\***

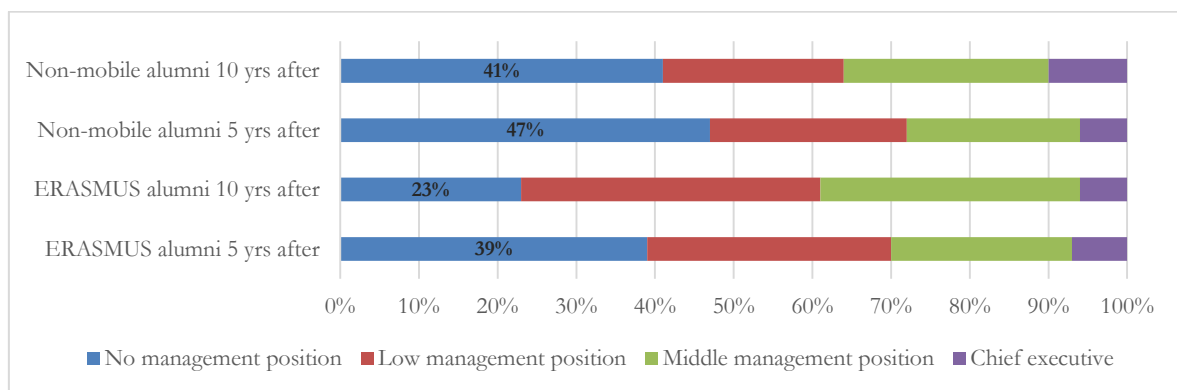


\* Multiple answers are possible.

By this stage, the chance of attaining a managerial position of some kind increased substantially and alumni who participated in Erasmus actions were 44% less likely not to have a management position after ten years, compared to non-mobile alumni. They also had a greater chance of attaining lower or middle-management positions. However, the probability decreased with the level of the position and at the CEO level the tables were turned. Alumni who participated in Erasmus actions were less well represented in this group, at approximately 6%, while the non-mobile students scored slightly above 10%.

With regard to the probability of attaining particular positions, the development over time was more pronounced for the alumni who participated in Erasmus actions than for the non-mobile graduates. This might reflect the increasing importance of international experience in companies today.

**Figure 3-34 Job situation five and ten years after graduation, Erasmus alumni vs. non-mobile alumni\***

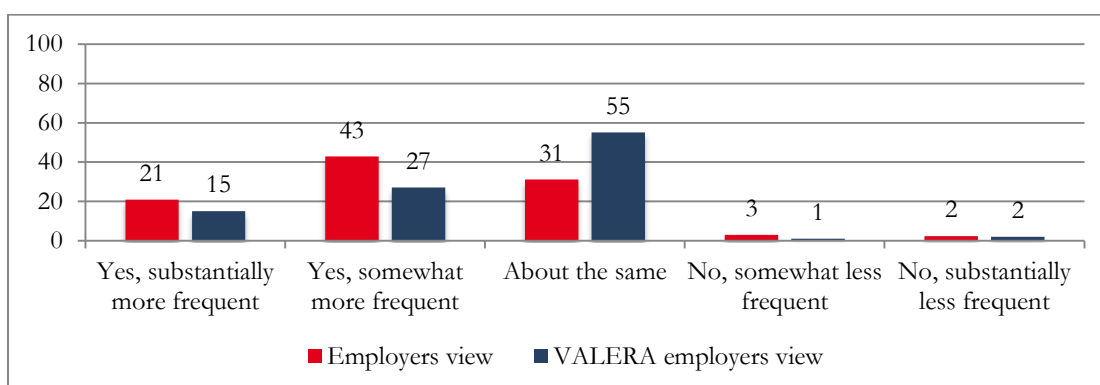


\* Multiple answers are possible.

One could only speculate about the reasons behind the stronger representation of non-mobile alumni in CEO positions. A possible answer could be that the rise within a company, which is more common among non-mobile alumni, probably pays off later if the new CEO of such companies is selected from the middle management with longer experience in the company. In any case, the above mentioned low number of cases called for cautious interpretation.

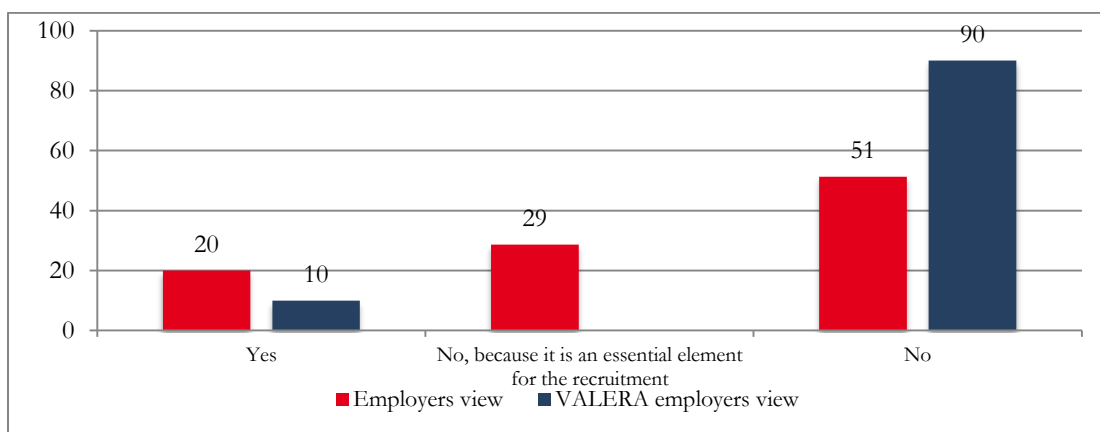
**The relevance of an international background in gaining professional responsibility increased by 51% since 2006**

**Figure 3-35 Higher professional responsibility of internationally experienced graduates, employers in EIS vs. VALERA (in %)**

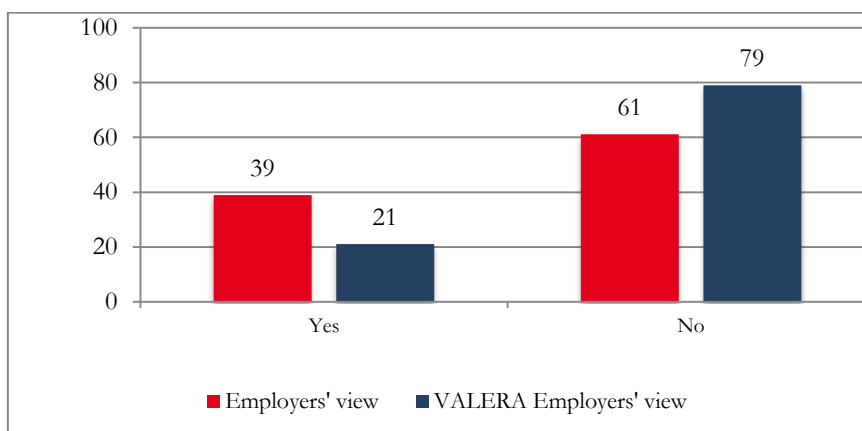


There were clear advantages of mobility with regard to responsibility and salaries. When comparing the results of the EIS with those of the previous VALERA study, the **employers’ perspectives with regard to graduates with international experience** changed significantly over time. While more than half of the respondents in the VALERA study claimed that graduates with international experience were as likely to take on tasks in their company with considerable responsibility as non-mobile employees, the majority (64%) of EIS respondents were of the view that graduates with an international background were assigned greater professional responsibility more frequently.

**Figure 3-36 Higher salary for internationally experienced graduates without work experience, employers in EIS vs. VALERA (in %)**



**Figure 3-37 Higher salary of internationally experienced graduates with five years of work experience, employers in EIS vs. VALERA (in %)**



**Compared to 2006, 100% more employers paid higher salaries to graduates with international experience**

Greater responsibility also usually translates into a higher salary. The employers' perception of graduates' salaries changed dramatically between the time of the EIS and the VALERA studies, to the benefit of mobile students. Although the majority of employers in EIS still claimed that young, internationally experienced graduates on average did not receive a higher salary, their share decreased from 90% in the VALERA study to 51% in EIS and from 79% to 61% respectively when considering graduates with five years' experience.

In EIS, 39% of the employers stated that graduates with international experience received a higher salary after five years of professional experience (compared to 21% in the VALERA study) and 18% (10% in the VALERA study) confirmed this for young graduates.

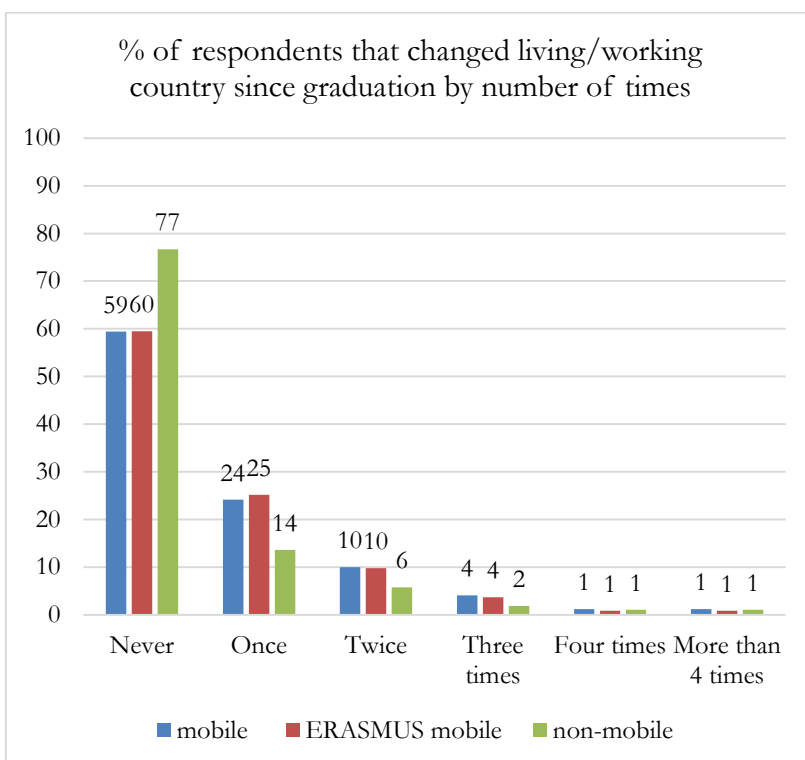
Overall, the substantial changes between 2006 and 2013, regarding the relevance and impact of international experience, can possibly be explained by the economic crisis, which possibly made employers more aware of the need to understand global developments and to diversify their markets better, which in turn needs staff prepared for such a task, i.e. with an international background. However, such an explanation can only be tentative and of a speculative nature.

**The percentage of employers stating that international experience leads to higher salaries increased by 85% since the VALERA study**

With regard to the three types of Erasmus mobility action on income, we could not find a strong correlation between the type of mobility and the alumni's assessment of their current salary. All groups of alumni considered their current salary to be more or less average compared to other professionals in their field.

Another aspect of career is mobility on the job market.

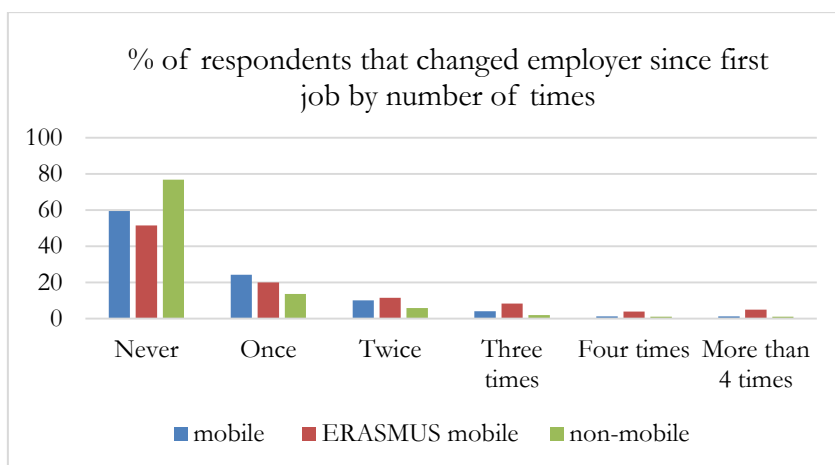
**Figure 3-38 Changes of country of residence/work, mobile vs. non-mobile (in %)**



**More than 40% of mobile alumni changed their country of residence/work. That are 18% more than among non-mobile alumni**

More than 40% of all mobile and Erasmus alumni respondents in EIS had changed their country of residence or work at least once. Of the mobile students, 59% never moved, compared to 77% of the non-mobile alumni. Clearly mobility during studies also fostered an interest in experiencing other countries at a later stage in life.

**Figure 3-39 Changes of employer, comparing mobile to non-mobile (in %)**

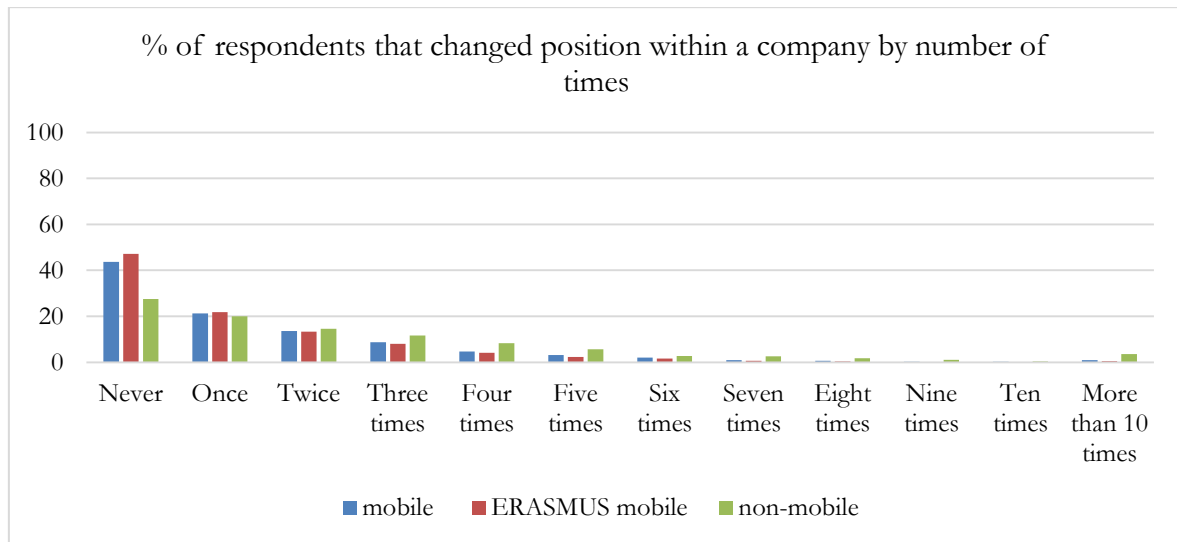


**Erasmus students were more than twice as likely to switch employer than non-mobile students**



The situation was similar with regard to a change of employer. Mobile students were far more likely to change their employer than non-mobile alumni, with Erasmus students being more willing to do so (7% more) than the overall mobile group. With regard to changing jobs, 40% of the mobile and 48% of the Erasmus students had changed jobs at least once, while 17% of Erasmus students even changed jobs three times or more. This means that the percentage of Erasmus students that changed jobs was double the percentage of non-mobile students.

**Figure 3-40 Changes of position within company, mobile vs. non-mobile (in %)**

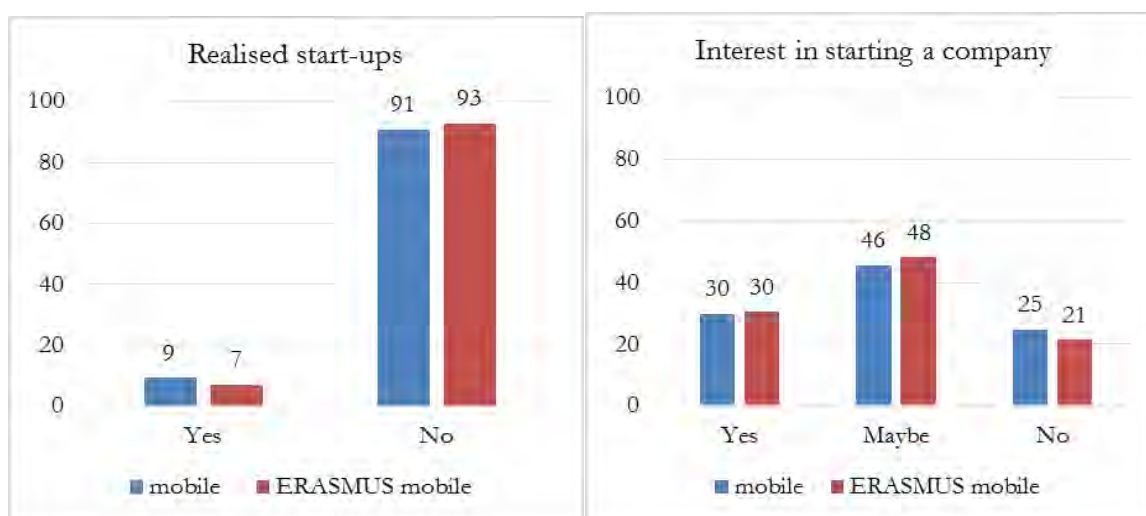


However, once in a company, mobile alumni, and even more so Erasmus alumni, tended to hold onto the position they had attained. Non-mobile alumni changed positions nearly twice as often within a company, while 44% to 47% of the mobile and Erasmus students did not. When they changed, they tended to change companies, while non-mobile alumni seemed to prefer to look for career opportunities within the same organisation.

Including the data on career development, and especially that on salary and prestige, it can be concluded that mobile students, in general, and Erasmus students, in particular, were in a better position to bargain for a new job, were more attractive on the labour market and therefore could more often choose a new position. The experience of mobility possibly also increased their willingness to take risks and to try something new, an assumption supported by the data on changing countries.

Finally, EIS analysed the effect on entrepreneurial interest.

**Figure 3-41 Start-ups by alumni with previous work placement abroad, realised start-up and interest in start-up (in %)**



7% of Erasmus alumni and 9% of all mobile alumni with experience of a work placement abroad realised a start-up, a much larger margin than would be expected given the usually extremely small percentage of graduates willing to risk a start-up activity. A total of 46% of all mobile students and even more Erasmus students could envisage starting their own business and around 30% definitely planned to do so. Overall more than three quarters of Erasmus alumni planned or could envisage starting their own company after having had a work placement abroad.

Overall mobility, in general, and the Erasmus programme, in particular, has a strong positive effect on all career-related aspects. We also see that especially students who participated in Erasmus actions did not give that much attention to income-related aspects, but were more interested in international working environments.

### 3.5. How does mobility influence the European attitude, the place to live and work, and relationships?

#### European identity

Another aspect of the analysis were the attitudes of respondents to their home HEI, city, country and, in particular, Europe.

**Table 3-21 Relation towards HEI, city, country and Europe; mobile vs. non-mobile students**

How strongly do you relate to...	Mobile	Erasmus	Non-mobile
very strongly/strongly	%	%	%
<i>Ex ante</i>			
...your home HEI?	59	54	69
...the city you live in?	67	68	68
...the country you live in?	73	72	75
...Europe?	81	84	70
<i>Ex post</i>			
...your university	56	59	
...the city you live in?	68	69	
...the country you live in?	70	70	
...Europe?	80	80	

**More than 80% of the mobile students and ERASMUS students felt a strong relationship to Europe**

Considerably more mobile (81%) and Erasmus (84%) students had strong relationships to Europe prior to departure than non-mobile students (70%). Those, in turn, had slightly stronger relationships to their home country and, considerably so, to their home HEI.

Although for mobile and ERASMUS students the relation to Europe decreased, this - as well as any other small changes from *ex ante* to *ex post* - was not statistically significant. This confirms the findings regarding the memo© factors, namely that mobile students were substantially different from non-mobile students from the outset.

**"I found it most exciting to see that we are all the same and that there is not much that differentiates us. People lump stereotypes together, the Spanish are like this, the Germans are like that, but in the end we are all alike... We are all young and motivated and adventurous and one experiences that in Erasmus"**  
**(Student, DE)**

**Table 3-22 Relation towards former HEI, city, country and Europe; mobile vs. non-mobile alumni**

How strongly do you relate to...	Mobile	Non-mobile
very strongly/less strongly (1-4)	%	%
...your former higher education HEI	67	59
...the city you live in	72	70
...the country you live in	74	77
...Europe	82	66

The long-term effects of international experience were, however, different. More significantly, years after their experience abroad, mobile alumni showed their affiliation to the home HEI, their city and Europe. Their relationship to the country, on the other hand, was significantly lower, which corresponded with the idea that a cosmopolitan attitude develops amongst such individuals. Again, a substantial difference occurred between the percentage of mobile (82%) and non-mobile (66%) alumni who felt a strong relationship to Europe.

With regard to the aspect of affiliation to the home HEI, city, country and Europe, one significant difference between the various Erasmus actions appeared in that students

on work placements showed significantly less of a bond with their home city. In all other respects, the differences were small and the development from *ex ante* to *ex post* views also did not differ significantly between the three types. However, while students on mobility for study lost most in their relationship to Europe and also had the lowest value for this item amongst the three groups in the *ex post* survey, the IP students had the highest value of the three groups by remaining at the same level.

**Table 3-23 Ex ante and ex post values for the relation of students towards HEI, city, country and Europe by Erasmus action type**

How strongly do you relate to...	Studies	Work placement	Intensive Programme (IP) abroad
very strongly/strongly	%	%	%
<i>Ex ante</i>			
...your home HEI?	54	55	59
...the city you live in?	68	62	67
...the country you live in?	72	71	73
...Europe?	84	83	83
<i>Ex post</i>			
...your former university	57	51	66
...the city you live in	68	63	67
...the country you live in	67	68	66
...Europe	77	83	81

There were high percentages of respondents in all three groups who affirmed their relationship to Europe pre and post, and although the percentage slightly declined for all groups the values were still substantially higher than for the home HEI, the city or country. The reasons for the decline can only be the subject of speculation, but it might be that the difficulties experienced abroad, especially in relation to organisational matters, could be one reason (especially for three to five months' stays), which was sometimes given in feedback in the interviews.

**Table 3-24 Relation of alumni towards former HEI, city, country and Europe by Erasmus action type**

How strongly do you relate to...	Studies	Work placement	Intensive Programme (IP)
very strongly/strongly	%	%	%
...your former higher education HEI	67	65	73
...the city you live in	73	69	70
...the country you live in	74	70	70
...Europe	84	82	85

The three types showed rather small differences in the alumni survey and none of them was significant. None of the three types of action seem to have had more influence than the others on the perception of Europe or the respondents' orientation towards their home city and country. Moreover, the slight differences found in the EIS student survey seemed to even out over time and the difference in the percentage of respondents who had stated that they had a strong relationship to Europe more or less disappeared (82% to 85%). It is also interesting that the values for Europe increased substantially compared to the *ex post* values of the students to their *ex ante* values. This can be one of the long-term effects of mobility.

**More than 83% of the Erasmus students felt more European after their stay abroad**

The type of Erasmus mobility activity did not play a relevant role in relation to the improvement in "feeling European". All groups of students in the different Erasmus actions showed very similar results, claiming that their European perspective was improved considerably by this experience of mobility. An improvement in their European perspective was experienced by 83% of those on mobility for study, 84% of those on work placements and 85% of participants in IP programmes.

*"Through the integration of international interns into the cooperation, the intra-organisational sensibility towards topics that relate to the European Community increases. Moreover, the degree of awareness concerning current issues that relate to the home countries of the international students increases as they talk about it. In consequence, you start to feel more as a European citizen. I think that this really helps to create a sense of solidarity within Europe."*  
(Employer, DE)

**Table 3-25 Improvement of European attitude by mobility experience, student perspective by Erasmus action type**

Please rate the following skills as to how you feel that they improved by your (last) mobility experience.	Studies	Work placement	Intensive Programme (IP) abroad
<b>very much improved/improved</b>			
To feel European, to have Europe-wide perspectives beyond the national horizon, to have a sense of European citizenship	83%	84%	85%

The qualitative study also put questions to the students about the Erasmus programme and the idea of Europe. For the majority of the students, the Erasmus programme offered the first opportunity to experience other European countries—other than for short vacations and city trips—and as a consequence to develop a European identity. As repeatedly pointed out by students during interviews, studying and living together supported not only better mutual understanding, but also sharpened their awareness of the problems and dangers confronting the European project. Several students confirmed that they had been confronted with prejudices or even experienced nationalistic attitudes during their stay abroad. The employers also confirmed this idea.

## Working and living abroad

**Table 3-26 Student perspective on their future; mobile vs. non-mobile**

How do you see your future?		Mobile	Non-mobile
agree/rather agree		%	%
<i>Ex ante</i>	I can easily imagine living abroad at some point in the future.	90	73
	I definitely want to work abroad for a while.	86	66
	I would like to work in an international context.	93	78
	I would like to live and work in my home country.	58	74
<i>Ex post</i>	I can easily imagine living abroad at some point in the future.	93	
	I definitely want to work abroad for a while.	91	
	I would like to work in an international context.	95	
	I would like to live and work in my home country.	52	

The percentage of mobile students that could imagine living abroad increased through stays abroad from 90% to 93% and for those who wanted to work abroad from 86% to 91%

Mobile students were better able to imagine themselves living abroad, working abroad and working in an international context. On the other hand, they were much less likely to live and work in their home countries than the non-mobile control group. Their inclination to live and work abroad or choose an international work environment was also increased by their experience abroad. 90% of mobile students could imagine living abroad and this percentage increased to 93% in the *ex post* survey.

Consequently, mobile students were also far less able to imagine themselves living in their home country after their experience abroad. Only 58% of the mobile and 74% of the non-mobile students would like to live and work in their home country (*ex ante* results). In line with this finding, the percentage of respondents who wanted to work abroad or in an international context was always substantially higher amongst the mobile (86% to 95%) than the non-mobile students (66% to 78%). Similar results could be observed if the results with regard to the students' relationship to their home HEI, city, home country or Europe were compared. While mobile students—prior to their departure—felt significantly more attached to Europe than non-mobile students, they felt less attached to their university and city. This seemed logical, as an attachment to the home city or university might hinder work-related mobility, rather than support it.

**Table 3-27 Student perspective on their future by Erasmus action type**

How do you see your future?	Studies	Work placement	Intensive Programme (IP) abroad
strongly agree/agree	%	%	%
<i>Ex ante</i>			
I can easily imagine living abroad at some point in the future.	94	95	90
I definitely want to work abroad for a while.	91	93	88
I would like to work in an international context.	96	98	95
I would like to live and work in my home country.	53	51	52
<i>Ex post</i>			
I can easily imagine living abroad at some point in the future.	93	90	88
I definitely want to work abroad for a while.	91	87	85
I would like to work in an international context.	95	97	85
I would like to live and work in my home country.	64	60	79

When analysing the various Erasmus actions, one could observe that students on work placements were able to imagine living abroad more easily before actually going abroad, they were more certain about wishing to work abroad and would, in general, most likely wish to work in an international setting. This seemed logical, as students who decide to do a work placement may give more serious thought anyway to the idea of living abroad for work than students who go abroad to study.

IP programmes had the lowest effect on these three items and this also seemed logical, since a decision to participate in a short-term activity abroad does not imply any inclination to live or work abroad later, as the commitment and risk are much lower. Consequently, they were the group which would like to work and live in their home countries most (79%). However, overall students in all Erasmus actions could very well imagine living abroad at some point in the future (90% to 95%). Of the students, 88% to 91% even said that they definitely wanted to work abroad for a while. Even if they did not go abroad immediately, the international context was important to students on Erasmus actions, especially those of a longer duration: 96% of students studying abroad and 98% of those on work placements can envisage working in an international context. However, in relation to all three actions the percentage of respondents who would like to live and work in their home country increased (from 53% to 64% for study, from 51% to 60% for placements, and from 52% to 79% for IPs) and the percentage of those wanting to work in an international context decreased slightly.

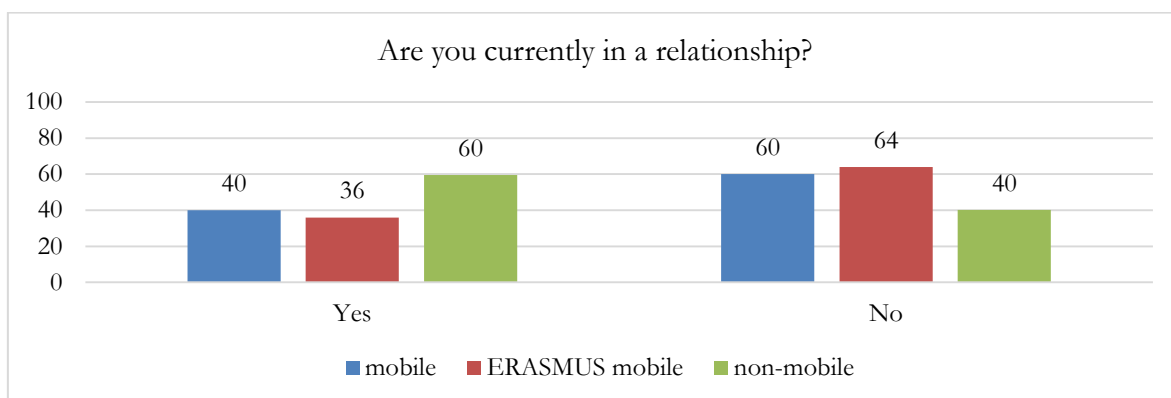
**95% of students studying abroad and 97% on work placements abroad could envisage working in an international context after a stay abroad**

**"My attitude towards working abroad changed. I am now willing to work abroad if opportunities arise."  
(WP Student, FI)**

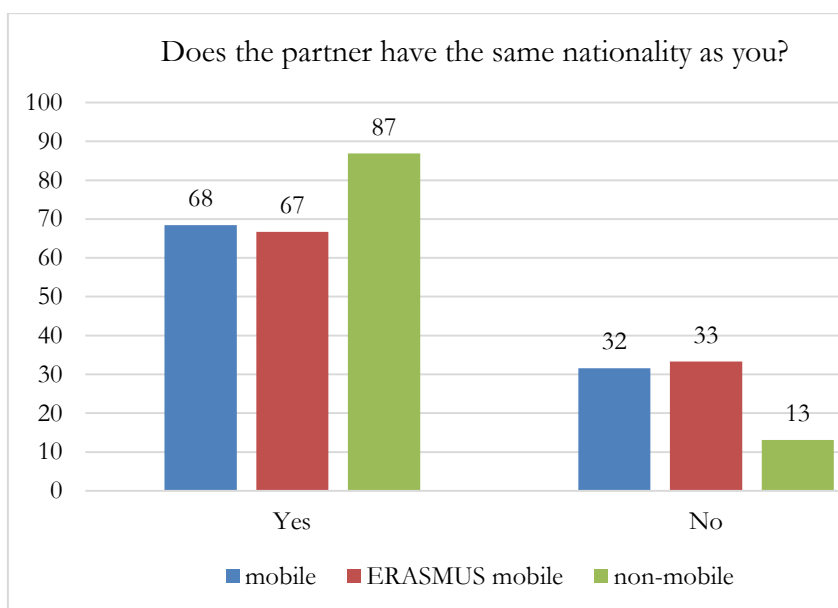
## Relationships

There was a correlation between going abroad and personal relationships. Nearly 50% more non-mobile than mobile alumni were in a relationship. This is also the case for mobile students while they are abroad, as confirmed by (Zimmermann and Neyer 2013), who found that mobile students tended to be single with fewer social bonds, some of which they even lost over time (national relationships), but they also gained others to a considerable degree (international relationships).

**Figure 3-42 Relationship status, comparing mobile and non-mobile alumni (in %)**



**Figure 3-43 Nationality of life partner, alumni perspective (in %)**

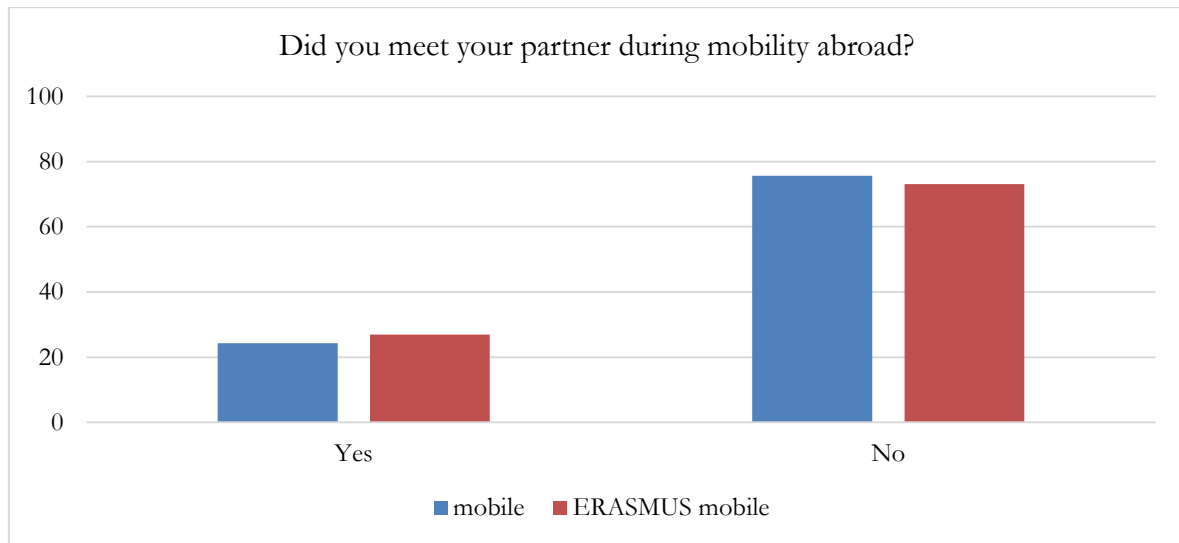


**32% of mobile alumni and 33% of Erasmus alumni had a life partner of a different nationality. This was nearly three times more than among non-mobile alumni.**

However, on the other hand, EIS proved that stays abroad also had an effect on long-term partnerships relevant in relation to stability, in that mobile students are far more likely to find an international life partner. Erasmus alumni were nearly three times more often in a relationship with a person of a different nationality than non-mobile alumni and 32% of the mobile alumni and 33% of the Erasmus alumni had a life partner of a different nationality, compared to 13% among the non-mobile alumni.



**Figure 3-44 Mobility abroad and life partner, alumni perspective (in %)**



Although not all these relationships were directly related to the period spent abroad, at least 24% of the mobile alumni and even 27% of the Erasmus alumni met their partner while studying abroad. This also means that the personal disposition towards relationships with people from other countries and cultures is much higher among people with international experience than among non-mobile alumni.

**24% of mobile alumni and 27% of Erasmus alumni met their life partner while abroad.**

### 3.6. Conclusions

The analysis of this chapter started by analysing the reasons that students gave for going abroad, as well as the main reasons for deciding against a mobility experience. Over 90% of the mobile students decided to go abroad to have the experience of living abroad, to develop skills, such as adaptability and to improve their language abilities. All of these aspects played a major role when analysing the skills and the career development of mobile students. On the other hand, only 14% of the non-mobile individuals replied that the reason for not going abroad was not having been selected, i.e. Erasmus is a rather non-selective mobility programme. For more than 50% of non-mobile students, the reasons for not going abroad were uncertainty in relation to costs, personal relationships and lack of financial resources.

Before looking into the results of skills development, it is worth noting that 61% of the employers included in the EIS considered international experience important for employability (from 37% in 2006). The general perception that a stay abroad is beneficial for employability has therefore increased substantially in recent years, which might be one explanation for the considerable career advantages of mobility, as will be described later. There was a substantial difference between mobile and non-mobile alumni regarding the relevance of international experience to recruitment, with 25% more mobile alumni considering this to be highly relevant.

### ***How do skills and competences relating to employability improve?***

The selected six memo(c) (Confidence, Curiosity, Decisiveness, Serenity, Tolerance of Ambiguity and Vigour) were confirmed to be relevant to employability by 85% of employers and around 80% of the alumni interviewed. Mobile students, in general, and Erasmus students, in particular, had two major advantages over non-mobile students. On the one hand, all mobile students had higher memo© values than non-mobile students and Erasmus students were at an even greater advantage. As the memo© factors measure what the employers considered relevant to employability, this means that mobile students had higher employability skills than non-mobile students before going abroad. On the other hand, mobile students increased this difference substantially through study abroad (+42% for Erasmus and +118% for all mobiles). As Erasmus students had better memo© factor values than the overall mobile sample before departing, the mobility experience brought the other mobile students on a par with the Erasmus students. Mobile students showed changes with Cohen d values above the threshold of small effect size. However, the change value for the Erasmus students was also relevant due to the usual smallness of changes in personality traits as a result of their stability and resistance to change, especially over a short period. This is also borne out by results from similar studies. Moreover, Erasmus showed higher memo© total averages than 65% of all students and overtook further 5% of the student population through their experience abroad.

Overall, 51% of all mobile students and 52% of the Erasmus students increased their memo© values and thus their measurable employability skills: they improved their ability to cope with different cultures and approaches, showed more openness to new perspectives, were more decisive, knew their strengths and weaknesses better, were more confident about themselves and increased their competence as problem-solvers. These improvements could be confirmed for all Erasmus mobility activities (study, work placement and IP). However, 80% of the students thought that they had experienced an improvement. In other words, nearly 30% of the students had an experience which at least could not be proven objectively using the memo© factors.

These findings strongly support the basic assumption of EIS that it is not enough to ask students for their perceived development, but it is necessary to counterbalance this with real measurements of a change of mind-set if one wishes to analyse change and the outcomes of mobility.

In addition to the innovative memo© approach of measuring the real effects of mobility, EIS also used the more traditional way of measuring perceptions. This was important for a number of reasons: firstly, it allowed for a comparison with former studies; secondly, it offered the possibility of comparing the perceptions of groups which could be analysed using the memo© factors (students, alumni and staff) and others who could not (HEIs and employers); and, thirdly, it allowed for a direct comparison between the real and perceived development of students. Additionally, more than 90% of the employers considered teamwork skills, planning and organisational skills, the ability to adapt, communication skills, analytical and problem-solving skills, reading and writing skills, critical thinking and the ability to cope with people from different cultures as very relevant to employability, and these skills needed to be and could only be assessed by analysing the perceptions of students, HEIs and employers.

Many more mobile students experienced an increase in skills than expected. For example, 24% of the mobile students, who did not expect an increase in tolerance, experienced it. While many mobile students (between 50% and 88%, depending on the skill) expected a positive development, substantially more students actually experienced an improvement in all of the skills except for openness/curiosity, where the expectations were higher than the assessment of the experiences. Overall, more

than 90% of the students stated that they had experienced an improvement in respect of various employability-related soft skills, such as knowledge of other countries, their ability to interact and work with people from different cultures, adaptability, foreign languages and communication skills. On the observer side, HEIs also perceived substantial improvement in their students, with the highest percentages for confidence (99%) and adaptability (97%).

The findings of the qualitative study strongly supported these quantitative findings. **Respondents across all the participating countries agreed that students' skills, like language skills, intercultural competences, teamwork skills, and other more hidden skills, like self-confidence, resilience, etc., seemed to improve significantly after exchanges.** Staff who worked with students seemed to recognise these skills quite easily. According to the focus groups, Erasmus mobility seemed to provide good opportunities for participants (students and staff) to acquire new theoretical and practical skills, to handle new technological equipment, to enhance their qualifications and academic profile, to develop new teaching methods and subject courses, etc. In general, the Erasmus programme enabled students and academic staff to gain insights into living and working in an international context. For students, the interviews showed that Erasmus mobility had an impact on personal rather than professional development. On the whole, Erasmus students interviewed emphasised the soft skills they had acquired through various mobility programmes. Students for studies mentioned better communication skills, language and presentation skills, openness, self-confidence, creativity, cultural and ethnic tolerance, self-understanding, self-organisation, a better understanding of others, responsibility, adaptability, teamwork, etc. The focus groups confirmed that the Erasmus experience had an enormous, positive impact on language, interpersonal and intercultural competences, and on a combination of so-called "soft skills" which the students recounted over and over again **through experiences and comparisons with the "then and now"**. On the role of **Erasmus mobility on students' skills or competences**, in comparison with other international mobility programmes, an Erasmus student culture or a new form of **identity appears to have evolved: "being Erasmus"**.

Furthermore, the qualitative study confirmed that mobile students also seemed to enhance their professional skills in their area of knowledge or acquire additional knowledge of various topics. The most important development was with regard to their language skills. Not only did students increase their knowledge of the language, they also acquired new intercultural competences, which concurrently had a positive impact on important factors, such as tolerance, adaptation to new environments or empathy. Students repeatedly referred to the importance of living immersed in the host country. It is within this topic that a complex issue with the integration of students arises. If the language of the exchange is English, both their language competences and academic knowledge seem to increase, yielding a greater academic impact. On the other hand, if the international experience is accompanied by learning the local language, a greater level of integration in the hosting society is attained, together with establishing deeper relationships with the community of both fellow Erasmus and local students. Students and staff seemed unable to solve this ambivalence, demanding improvement of language competence in order to make better use of the exchange, while calling for greater integration within the hosting societies.

In the quantitative data, more often than not differences between the programmes were minimal, except for some advantages which seemed to be linked to work placements. The qualitative study showed, however, that such differences *do* exist when it comes to the impacts and perception by the protagonists. It is worth stating that work placements were highly valued by students, alumni, and employers. This action emphasised the acquisition of further professional development and workplace

competences. Their responses also provided significant evidence of the development of **competences associated with employability**. The IP's held a higher standard of rigour and qualification, and their effect on academic and professional development was also valued very positively.

The standing and positive effects of the Erasmus programme were common to all the countries surveyed, while the economic crisis and high unemployment levels had changed the perspective of students and staff in countries of Southern Europe, as for them Erasmus had become the only opportunity to develop their professional experience. At the same time, students were aware of the fact that this professional experience gave them a competitive advantage over other students, a matter of special concern with the current levels of youth unemployment and scarcity of job opportunities. For this reason, the team would like to highlight the potential of Erasmus to avoid a greater divergence between European graduates. If, as observed, Erasmus had a positive impact on the employability of young graduates, then the implementation and maintenance of the programme, or more precisely its successor, in countries with difficulties in relation to entry onto the labour market may be a first-order policy in tackling unemployment.

### ***How does mobility affect employment and career?***

Mobility proved to have a positive influence on the employment situation of graduates. Firstly, the risk of long-term unemployment after graduation was 50% lower for mobile students than for non-mobile students. Even five years after graduation, the unemployment rate of mobile students was still 23% lower. Also 50% fewer mobile students (2%) than non-mobile students (4%) needed more than 12 months to find their first job. One could also see that the skills assessed above were of considerable importance when looking for a job. 90% of the alumni stated that communication skills, analytical skills and adaptability were significantly important when acquiring their first job.

Work placements seemed to be a particularly efficient way to obtain employment, with 36% of students on such work placements receiving job offers from their employers. This means that more than one in three students on a work placement had an entry onto the job market through this activity. This was also indirect proof of the quality of Erasmus work placement students.

The career situation also changed in recent years. The majority of employers were of the opinion that graduates with an international background were given greater professional responsibility more frequently. Of Erasmus alumni, 57% had a managerial position five years after graduation. While at this point in time the advantage over non-mobile alumni was minimal (53% of these alumni have managerial positions), the difference increased substantially over time. Ten years after graduation, 20% more Erasmus alumni than non-mobile students held managerial positions. The percentage of non-mobile alumni not holding a managerial position was nearly twice as high as for Erasmus alumni (44%). Ten years after graduation, 77% of the Erasmus alumni surveyed held positions with leadership components. Only 23% of the Erasmus alumni had no managerial responsibility ten years after graduation, 50% less than among the non-mobile alumni.

Moreover, mobility experience increased the likelihood of being assigned a higher level of responsibility within the company. The percentage of employers who stated that internationally experienced graduates were assigned greater responsibilities than non-mobile graduates has increased by 51% since 2006 and the percentage of those who stated that the level of responsibilities was the same has almost been halved.

The differences were even more obvious with regard to salaries. The percentage of companies stating that graduates with international experience received substantially higher salaries has doubled from 10% to 20% since the VALERA study of 2006. More strikingly, nearly 30% stated that they did not pay a higher salary because **international experience was a basic requirement of the job**. The percentage of companies for which international experience made no difference has halved since 2006, from 90% to 51%. Again, international experience paid off when looking at medium to long-term effects. Of the employers in EIS, 39% confirmed higher salaries for employees with international experience and again this percentage has nearly doubled since 2006 (from 21%).

Apart from employment, an entrepreneurial attitude was also promoted by mobility. 7% of the Erasmus alumni and 9% of all mobile alumni respectively with a work placement experience abroad started their own enterprise, a much larger margin than would be expected given the extremely small percentage of graduates usually willing to risk a start-up activity. More importantly, 46% of all mobile students stated that they could envisage starting their own business and around 30% definitely planned to do so.

Once again, these findings were confirmed through the qualitative study. Despite the fact that the learning outcomes are principally interpersonal, these might still affect the future employability of graduates. In fact, earlier studies<sup>62</sup> identified these acquired abilities as key factors when it comes to securing a job. Additionally, a delayed effect might exist, which could result in their unfolding in the long run. More importantly, the qualitative study could help to understand one of the phenomena of EIS: the changes in the relevance of employability in recent years amongst students. Although it is true that the qualitative study was based fundamentally on the perception of participants, frequent confirmation could be found that the impacts pointed out by students and staff were then transferred to the labour market. Without exception, employers greatly valued the appearance of Erasmus mobility in the CVs of applicants. Similar evidence was displayed in other good practices, such as the **"Recruiting Erasmus" programme conceived in Spain. As is apparent from the name**, this initiative comprises a number of Spanish and international firms which recruit from a pool of students who have participated in Erasmus mobility. It is difficult to think of a better way to verify the impact of Erasmus exchanges on employability and the competences acquired while studying abroad than an industry-based initiative to create and exploit a scheme to recruit alumni from Erasmus actions. Independence, confidence, assertiveness, security, empathy, communication skills—all these competences that Erasmus students previously recognised as impacts after their stays abroad—were in turn those which time and again were reflected in the opinions of businesses. For this reason, it seemed to be very much the case that those graduates with international experience developed a series of characteristics that improved their employability and increased the skills they required to develop a professional career with a greater chance of success.

### ***How does mobility affect the alumni's personal life with regard to their place of residence and work, their European identity and relationships?***

Mobility definitely supports the idea of living abroad in the future. 90% of all mobile students could imagine living abroad (17% more than among non-mobile respondents) and 93% of mobile students (compared to 78% among non-mobile students) would like to work in an international context. This attitude was even more pronounced among Erasmus students, with more than 94% of those on study abroad and nearly 96% of those on work placements being able to envisage living and

<sup>62</sup> Humburg M, *et al.*: The employability of Higher Education Graduates: The Employer's Perspective. Final Report. EU, 2013

working abroad. Of these students, 95% to 97% wanted to work in an international environment.

Moreover, mobility made individuals (57%) more likely to change their country of residence/work and 40% had changed countries during the years since graduation. 18% of the alumni in EIS actually worked abroad at the time of the survey, 40% more than among the non-mobile alumni (13%). In addition, 35% of the mobile alumni stated that their current job had at some point in their career made them change countries. On the other hand, in all three actions the percentage of respondents who preferred to stay in their home country, as their place of residence and work, increased after a stay abroad. This means, that such experiences can also have negative repercussions, especially if the students face organisational problems abroad or if the length of the stay leaves them in the phase of culture shock when going home.

These quantitative findings were confirmed in the qualitative study in that in the interviews students from all countries stated that Erasmus mobility clearly enabled them to gain an insight into living and working in an international context. Due to the professional organisation and the support services of the programme, a safe environment was usually created which allowed for intercultural experiences. Nonetheless, the quality of the stay abroad depended to a certain extent on the—often varied—support provided by the sending and receiving HEIs.

Mobility also promotes a European identity, more than 80% of the mobile students feel more European after their study. More than 80% of the mobile students, 10% more than among non-mobile respondents, also felt a strong relationship to Europe, although the share slightly decreased during the stay abroad. Thus for some respondents, to feel European did not necessarily mean to have a strong relation to Europe.

Finally, mobility also has a measurable impact on the private life of students and alumni. Nearly 32% of all mobile alumni and 33% of the Erasmus alumni had a life partner with a nationality different from their own, compared to 13% of non-mobile alumni. Moreover, 24% of the mobile students and 27% of the Erasmus students stated that they had met their current life partner during their stay abroad. (Zimmermann and Neyer, 2013) showed that such partnerships greatly reduced the psychological problems that students encountered while studying abroad.

## 4. The impact of student and staff mobility on the internationalization of HEIs and staff

### 4.1. Context

#### General background on institutional development and internationalisation of HEIs and the link to mobility

The impact of mobility on the institutional development of higher education can be analysed from two perspectives: either mobility can change the HEI itself, e.g. through new structures or a change of the mindset, or it can have an impact on the quality of education provided by these institutions, e.g. by new curricula or different teaching methods, which then in turn have an effect again on the internationalisation of such HEIs. In terms of the institutional impact, **Coleman's UK-based study** (Coleman 2011, 6) showed that an institution with lively international links gained in several published rankings: international profile counts in the *Times Higher Education* rankings (staff 3%, students 2%) and QS rankings<sup>63</sup> (staff/students 5% each). The employability of graduates, which is enhanced by work or study abroad, is reflected in the First Destination (DLHE) figures published by the Higher Education Statistics Agency (HESA) and in university guides published by several newspapers. This counts indirectly for 10% in the QS rankings, as it contributes to the reputation indicator amongst employers.

Beyond the impact on rankings, the 2008 EU-funded study *The Impact of Erasmus on European Higher Education: Quality, Openness and Internationalisation*<sup>64</sup> investigated the impact on quality at the institutional and systemic level by means of a literature review, surveys and 20 case studies. Although assessments of the impact of the Erasmus programme differed by country, the size of the institution and the professional position of respondent, the overall results were improved student services for incoming and potential outgoing students, intensified efforts in the area of institutional internationalisation strategies, increased promotion of student and staff mobility, increased internationalisation of teaching and learning, and improved transparency and transferability of student qualifications. According to this study, the Erasmus programme played a leading role in the internationalisation of national, European and international higher education and new EU Member States reported greater gains in quality from the Erasmus programme than older Member States.

A previous EU-funded study *The External Evaluation of Erasmus Institutional and National Impact*<sup>65</sup> had a somewhat different focus. Rather than assessing the effects of student mobility or the Erasmus programme in its entirety, it examined the impact on institutional policy in the era before the University Charter had been introduced. Results were intensified and more systematic internationalisation efforts and strategies, further developments and improvements regarding the recognition of qualifications, a clear focus on student mobility and, parallel to the findings of the 2008 study, a greater influence of EU policies on the institutions of countries which acceded to the EU in 2004.

The MAUNIMO project (2010-2012),<sup>66</sup> which aimed at mapping university mobility of staff and students, identified two important factors in improving, increasing and contextualising mobility, as a means of internationalisation and not simply as an end in itself: 1) the formulation of a strategy for all potentially mobile groups within

<sup>63</sup> One of the more popular global rankings, see <http://www.topuniversities.com/university-rankings>

<sup>64</sup> (CHEPS, INCHER and ECOTEC 2008)

<sup>65</sup> (CHEPS 2004)

<sup>66</sup> See (Colluci, Davis, Korhonen and Gaebel 2012).

institutions, comprising staff, researchers and students; and 2) the collection of mobility data to support strategic decision-making and to enhance transparency.

Despite obvious progress towards more openness, institutional development and the internationalisation of HEIs, at certain points and in certain respects, European countries remained stuck to their traditional national education systems, as was shown in a study commissioned by the EU on *Delivering Higher Education across Borders in the European Union*.<sup>67</sup> The research team, led by CHE Consult, identified considerable regional differences in the provision of cross-border higher education services. Some states, whose higher education systems were in need of modernisation, in particular in Southern Europe, were found to have higher levels of inbound cross-border higher education activity taking place within their borders. These cross-border educational services filled gaps in the domestic higher-education provision or served special niche markets.

### **Conclusions and implications for the present study**

The Europe 2020 Strategy defined support for the internationalisation of European higher education as an important goal with regard to cooperation between HEIs. The **European Commission's Modernisation Agenda (2011) accordingly aimed to design a specific strategy for the internationalisation of higher education and to create effective governance and funding mechanisms in support of excellence in higher education within the EU.**<sup>68</sup>

According to the revised studies and literature, Erasmus mobility actions enabled HEIs to engage in collaborative and international work, such as setting up joint study programmes across state borders. Transnational mobility as well as international cooperation between staff in higher education (teachers and administrators) both contributed to the internationalisation of HEIs and increase their openness. At the same time, international mobility and cooperation among HEIs promote networks and partnerships that significantly improved the quality of the education and training these institutions provide. Many HEIs, by taking part in Erasmus mobility actions, started innovating in key areas, such as teaching and learning, recognition of study periods abroad, student support services, cooperation with business, and institutional management.

Nevertheless, the focus of most of these studies was on the perception of HEIs in terms of their international reputation as the main role of internationalisation. The EC Communiqué on European Higher Education in the World (European Commission 2013c) on the other hand stated that mobility, partnerships and internationalisation at home were three pillars for its internationalisation policy, while reputation was not the main role but the enhancement of the quality of teaching and learning. In general, it is important to reiterate that mobility and internationalisation are not a goal in themselves but a way to enhance the quality of teaching, research and service to society of higher education. Therefore, EIS focuses on these aspects also in the analysis of the institutional perspective. In addition, the studies mentioned focused on either institutions or students (at a level of perception), but not on both, and they have not explored the link between the modernisation and internationalisation of HEIs. At this point EIS contributes by combining factual, perceptual and attitudinal items at both the individual and institutional levels and by exploring the links between mobility and the modernisation and internationalisation of HEIs.

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<sup>67</sup> See (Brandenburg *et.al.* 2013). Also: [http://ec.europa.eu/education/library/study/borders\\_en.pdf](http://ec.europa.eu/education/library/study/borders_en.pdf)

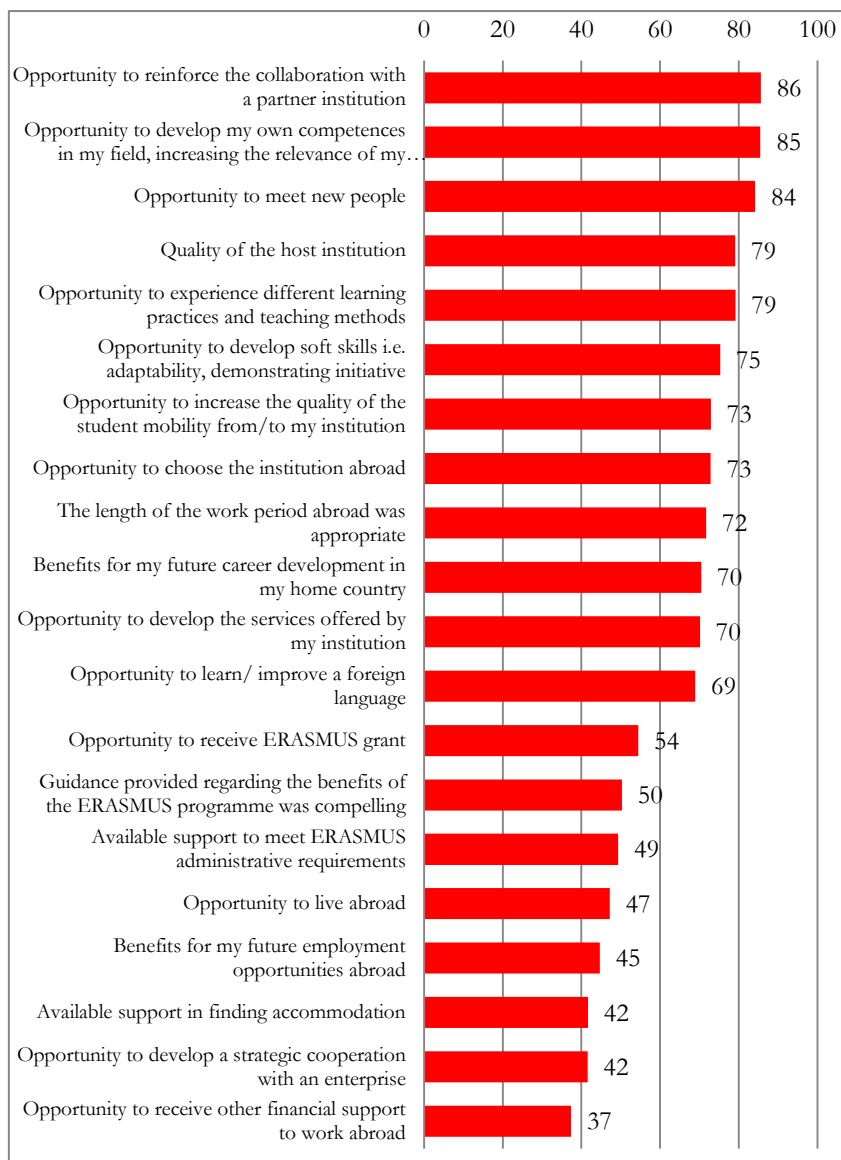
<sup>68</sup> See (European Commission 2011a, 14).



## 4.2. Impact of mobility on staff

### Reasons for staff mobility

**Figure 4-1 Important reasons for being interested in / undertaking staff mobility, staff perspective (in %)**

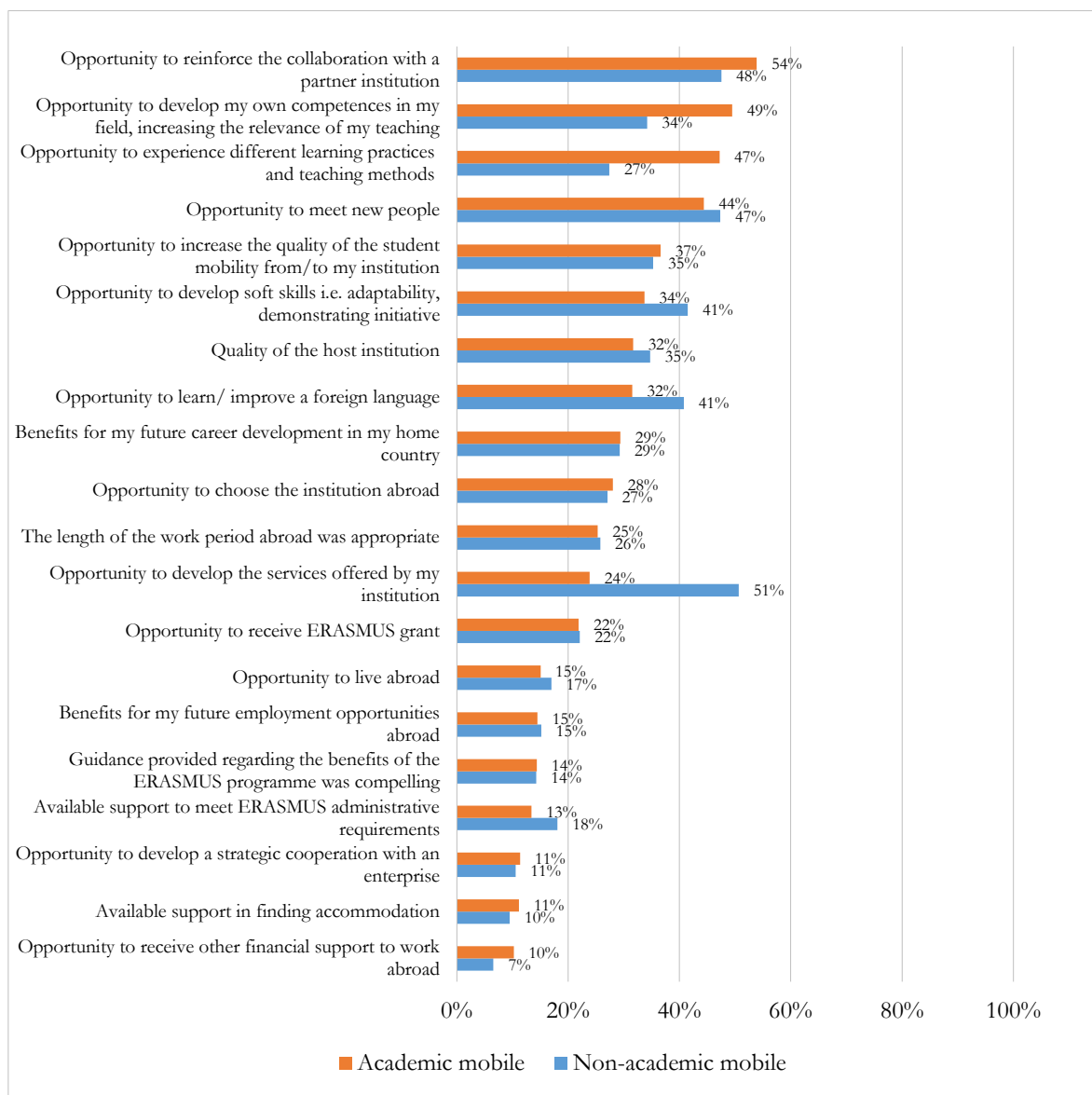


**86% of mobile staff agreed that mobility improves international collaboration with partner HEI**

EIS controlled for the reasons for staff mobility, which were slightly different from those stated by students. With regard to the motivation of staff members, the opportunities to strengthen collaboration with international partners (86%) and to develop competences (85%) ranked highest. The opportunity to meet new people (84%) ranked third, as it did in the students' hierarchy. This suggests that the social aspect of mobility was key for mobile respondents of all categories. The opportunity to experience different learning practices and teaching methods came at fifth place (79%) next to the quality of the host institution (79%). This is of specific relevance when we later look at the impact of such mobility precisely on teaching and the curriculum. On the other hand, while going abroad was increasingly important for students to better their standing on the international job market, the aspect of improving their chances for a job abroad was less prominent among staff but still

nearly half of the respondents (45%) considered this aspect a reason to participate in a staff mobility activity.

**Figure 4-2 Very important reasons for Erasmus staff mobility, academic vs. non-academic mobile staff**



EIS then differentiated between the two groups of staff: academic and non-academic. Both groups shared similar views on some reasons, such as the opportunity to reinforce partnership relations (48% non-academic, 54% academic), the opportunity to meet new people (47% non-academic, 44% academic) and the opportunity to increase the quality of student mobility (35% non-academic, 37% academic). They both also saw a gain for the quality of the host HEI as such (non-academic 35%, academic 32%).

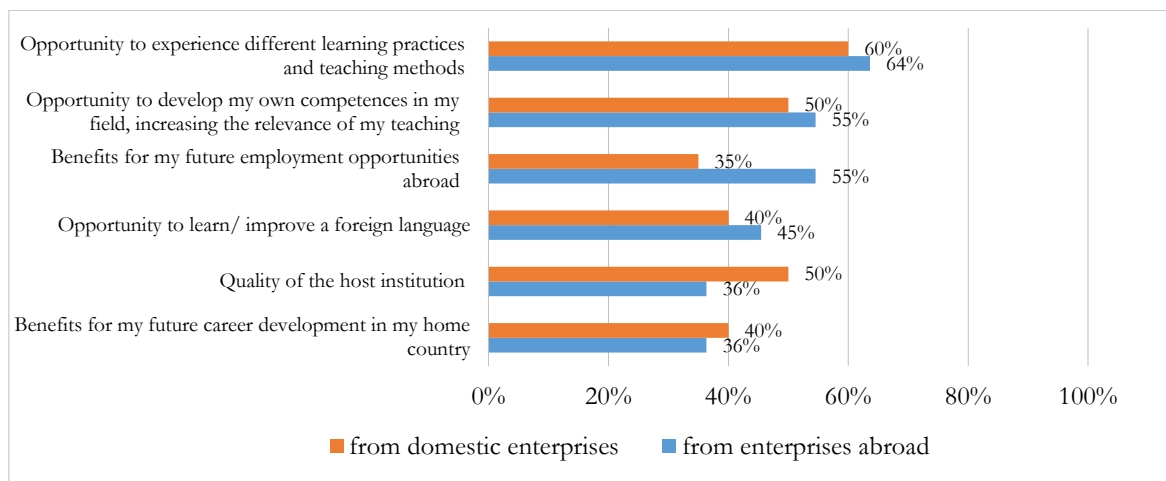
The discrepancies were usually related to the different priorities of the two groups. The opportunity to increase teaching and general academic competences was important to academic staff (49% and 47% respectively), an aspect considered relevant only by 34% and 27% of the non-academic staff respectively. On the other hand, the non-academic staff saw substantial value for the improvement of services at home (51%), a view shared only by 24% of the academic staff.

Staff perception of mobility was confirmed by the HEIs, as 54% of the responding HEIs agreed that the cooperation structures within the Erasmus programme depended on personal relationships, while more than 80% of the participants in the staff survey agreed that the Erasmus programme, in particular, improved relationships with peers abroad and facilitated international collaboration agreements. This collaboration involved multilateral Erasmus projects or networks (81%), the initiation of research projects (77%) or participation in research projects (73%).

EIS also included a sample of teaching staff from companies, either those from domestic companies going abroad or those from companies abroad. However, this sample was very small - in total, only 87 individuals participated. The results therefore do not carry much explanatory weight, but the number of respondents also shows that this kind of mobility is still a minority issue in the area of staff mobility.

Regarding the reasons why staff from companies engaged in teaching assignments, the respondents more or less agreed on most aspects. They considered it an opportunity to gain experience of different learning practices and teaching methods (60% to 64%), to develop competences (50% to 55%), to learn a foreign language (40% to 45%) and to benefit for the future career in the home country (36% to 40%).

**Figure 4-3 Reasons for staff from enterprises to engage in teaching\*<sup>69</sup>**



\* Answers "very important", selected items

They, however, differed regarding the quality of the host HEI which was more relevant to domestic staff (50%) than those from abroad (36%) and regarding benefits for a future career abroad which was more relevant to those from companies abroad (55%) than those from domestic companies (35%).

<sup>69</sup> For domestic staff this involved outgoing mobility, for international staff incoming mobility

## Memo© factors for staff

### The original memo© values

Next EIS analysed the difference in the mindset between mobile and non-mobile staff by controlling the results for staff in relation to the memo© factors. In the case of staff, the purpose of the memo© factors was to analyse whether a difference in the mindset of the mobile and non-mobile respondents could be observed, as these predispositions would then also have had an influence on recurring mobile. After all, as we saw among students, higher memo© values were not only the result of mobility, but also its predictor. An *ex ante-ex post* analysis of staff would not have been useful in the time frame of this study (only spring semester).

Moreover, staff may have a much longer history of mobility that influenced the individual staff member. For this reason, the memo© values for staff also helped in examining long-term effects of mobility.

**Mobile staff showed statistically significantly higher memo© values than non-mobile staff**

**Table 4-1 Memo© factor values for staff, mobile vs. non-mobile**

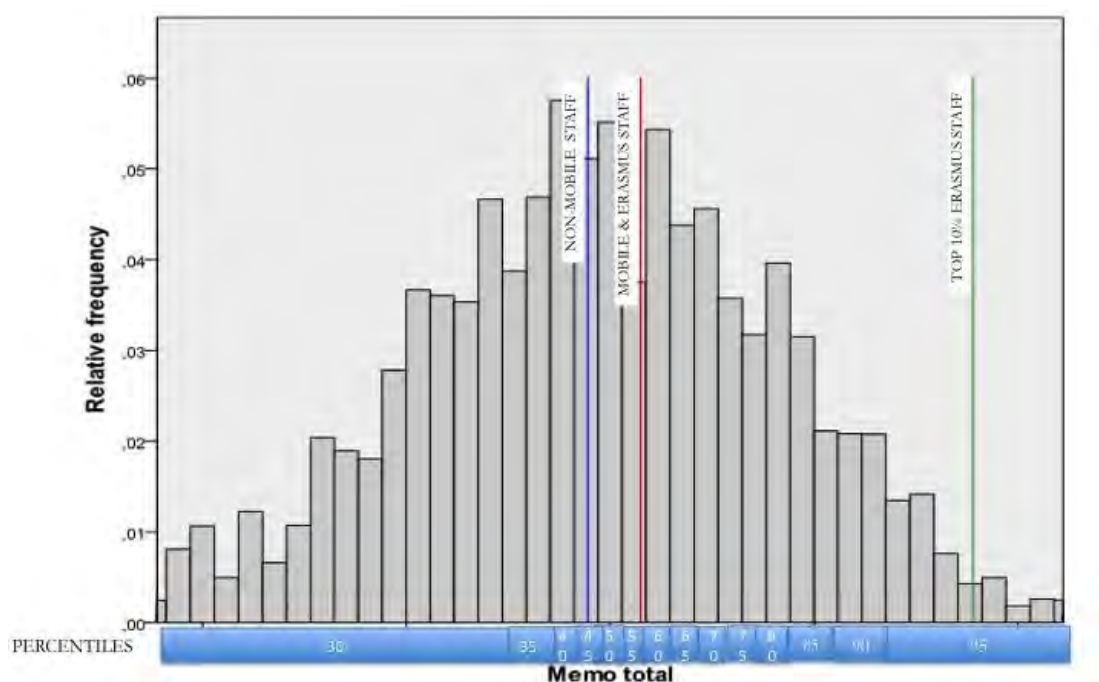
	Mobile	Erasmus	Non-mobile
	Mean	Mean	Mean
Memo© factor, Confidence	7.58	7.60	7.31
Memo© factor, Curiosity	7.89	7.92	7.49
Memo© factor, Decisiveness	7.07	7.13	6.70
Memo© factor, Serenity	7.33	7.33	7.04
Memo© factor, Tolerance of Ambiguity	5.67	5.56	5.69
Memo© factor, Vigour	7.35	7.40	7.10
Memo© total	7.15	7.15	6.89

Non-mobile staff showed lower values for five factors and practically the same for tolerance of ambiguity. Given that these results are all statistically significant (except for tolerance of ambiguity), mobile staff is indeed different from non-mobile staff. On the memo© total, the mobile staff (all and Erasmus) showed 4% higher values than the non-mobile staff. Here the same applies as with the psychometric-related values for students, i.e. small percentages do not mean that the difference is irrelevant but rather large differences would most likely mean that either the respondents had substantial psychological deviations or the methodology would be flawed.

The Cohen d value for a difference between the mobile and non-mobile staff group was 0.3, which translates into a small effect despite the limitations of the Cohen d value, as explained in chapter 2.

Moreover, the distribution of the means for both groups across percentiles provided another indication of an existing relevant difference.

**Figure 4-4 Distribution of memo© total values for mobile and non-mobile staff across percentiles**



The average for the mobile group was very close to the 60% quantile, whereas the average for the non-mobile group was located in the 45% quantile close to the 50% quantile, as was to be expected. Thus we see a difference of a 10% quantile between the mobile and non-mobile staff. As can be observed, on average the top 10% of the mobile group showed higher memo© total values than 95% of the all staff.

Comparing the Erasmus mobility actions, significant differences in tolerance of ambiguity could be observed with the highest value in the case of IPs and decisiveness with the highest value in the case of staff mobility for teaching assignments (STA). Apart from that, no relevant differences could be detected that could be explained by the type of action. What matters therefore is not so much the type of Erasmus mobility than mobility as such.

**Table 4-2 Memo© factor values for staff by Erasmus action type**

Staff	STA	STT	IP
	Mean	Mean	Mean
Memo© factor, Confidence	7.59	7.62	7.65
Memo© factor, Curiosity	7.95	7.92	7.92
Memo© factor, Decisiveness	1.65	7.12	6.99
Memo© factor, Serenity	7.36	7.36	7.35
Memo© factor, Tolerance of Ambiguity	5.67	5.49	5.91
Memo© factor, Vigour	7.42	7.36	7.35
Memo© total	7.20	7.15	7.20

The qualitative research confirmed these findings. Erasmus mobility for staff, as for students, seemed to improve the staff’s way of teaching and researching, to increase the participants’ awareness of the world and to improve interpersonal skills like communication, interaction and adaptation to different people from different cultural backgrounds. In the opinion of the interviewees, mobility allowed them to meet interesting people and places, to take part in new experiences and to acquire new perspectives. The interviewed staff reiterated that Erasmus was the most well-known and valued teaching mobility programme, and that one of its great advantages was that it enabled the individuals to compare teaching methods, acquire new techniques and create networks and contacts that, besides improving teaching, served to reinforce the international cooperation of teachers and HEIs in research projects.

EIS also controlled for differences in the memo© values for the two types of staff from enterprises (those from domestic companies and those from companies abroad). However, both achieved more or less the same values on all memo© factors and due to the very small number of respondents, these small differences proved to be insignificant.

**Skills and competences besides the memo© factors**

On the other hand, significant differences with regard to the perceived gain in competences occurred. In relation to all four aspects, the IP participants claimed the highest gain and all differences were significant.

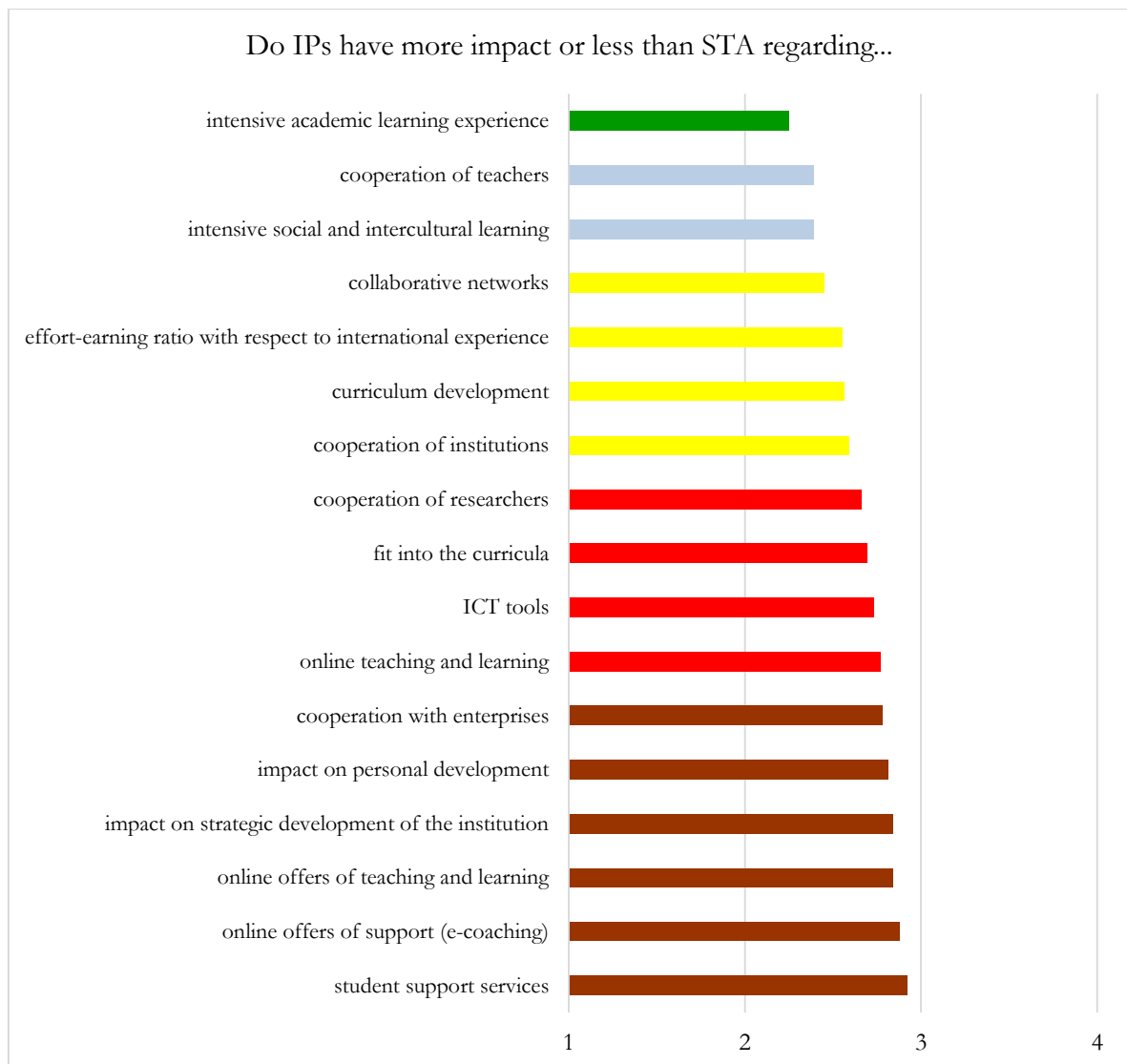
**Table 4-3 Competences gained during stays abroad by Erasmus staff mobility action type**

To which extent did you gain competences during your own stay(s) abroad?	STA	STT	IP
significant gain/gain	%	%	%
Field-specific knowledge	86	92	93
Non-field-specific knowledge, like languages	78	84	89
Personal manner, personality	85	87	92
Social competences, intercultural competencies	93	94	96

Of the staff in the three actions, 78-96% claimed to have improved on all four areas of competences (field-specific, non-field specific, personal, social) with social competences being perceived to have the greatest benefit from a mobility experience (93% to 96%). The percentages for STA were always slightly lower than those for STT and IP.

The relatively positive perception of IPs by staff was confirmed by the assessment by the HEIs of the respective impact of mobility on the various institutional aspects.

**Figure 4-5 Outcomes of IP compared to STA, HEI perspective**



The closer the value was to 1 the more influence was given to IPs rather than STA. Only the impact on intensive academic learning experience (2.3), cooperation of teachers (2.4) and intensive social and intercultural learning (2.4) were clearly below the level of indifference of 2.5. Some aspects were also considered to be more effectively addressed by STA, such as student support services (2.9), online offers (2.9) and the impact on the strategic development of the HEI (2.8).

### **European identity and the relation to one's own HEI, home town and home country**

Another personal aspect of staff mobility is the relationship with the HEI, city, country or Europe as such. Here, significant differences between mobile and non-mobile staff could be observed.

**Table 4-4 Relation to HEI, city, country and Europe, mobile vs. non-mobile staff**

How strongly do you relate to...	Mobile staff	Non-mobile staff
<b>very strongly/strongly</b>	<b>%</b>	<b>%</b>
...your HEI	88	78
...the city you live in	78	71
...the country you live in	80	75
...Europe	85	69

The relationship of mobile staff to the home HEI, city and country was stronger for mobile than non-mobile staff (5% to 10% more) and substantially stronger towards Europe (85% to 69%). The differences in relation to the home HEI and Europe were also statistically significant.

**85% of mobile staff have a strong affiliation to Europe**

**Table 4-5 Relationship to HEI, city, country and Europe by Erasmus staff mobility action type**

How strongly do you relate to...	STA	STT	IP
<b>very strongly/strongly</b>	<b>%</b>	<b>%</b>	<b>%</b>
...your HEI	91	88	88
...the city you live in	80	81	78
...the country you live in	81	83	82
...Europe	88	87	89

For the Erasmus actions, no significant differences occurred. The strongest affiliation across actions was to be found for the home HEI (88% to 91%), followed by the affiliation to Europe (87% to 89%). The relationship to the city (78% to 81%) and country (81% to 82%) the staff lived in were less relevant.

**A special case: staff from enterprises**

*Staff* from enterprises experienced a number of positive effects of a teaching activity abroad, ranging from the opportunity to experience various learning practices and teaching methods, through future career benefits and competence development to learning a language. Regarding the impact such experience had on the quality at the host HEI, outgoing staff from domestic companies were more positive than staff that came from abroad to the HEI which contacted them for the survey.



### 4.3. How does mobility influence teaching methods, curricula and research?

#### Influence on teaching methods and curricula

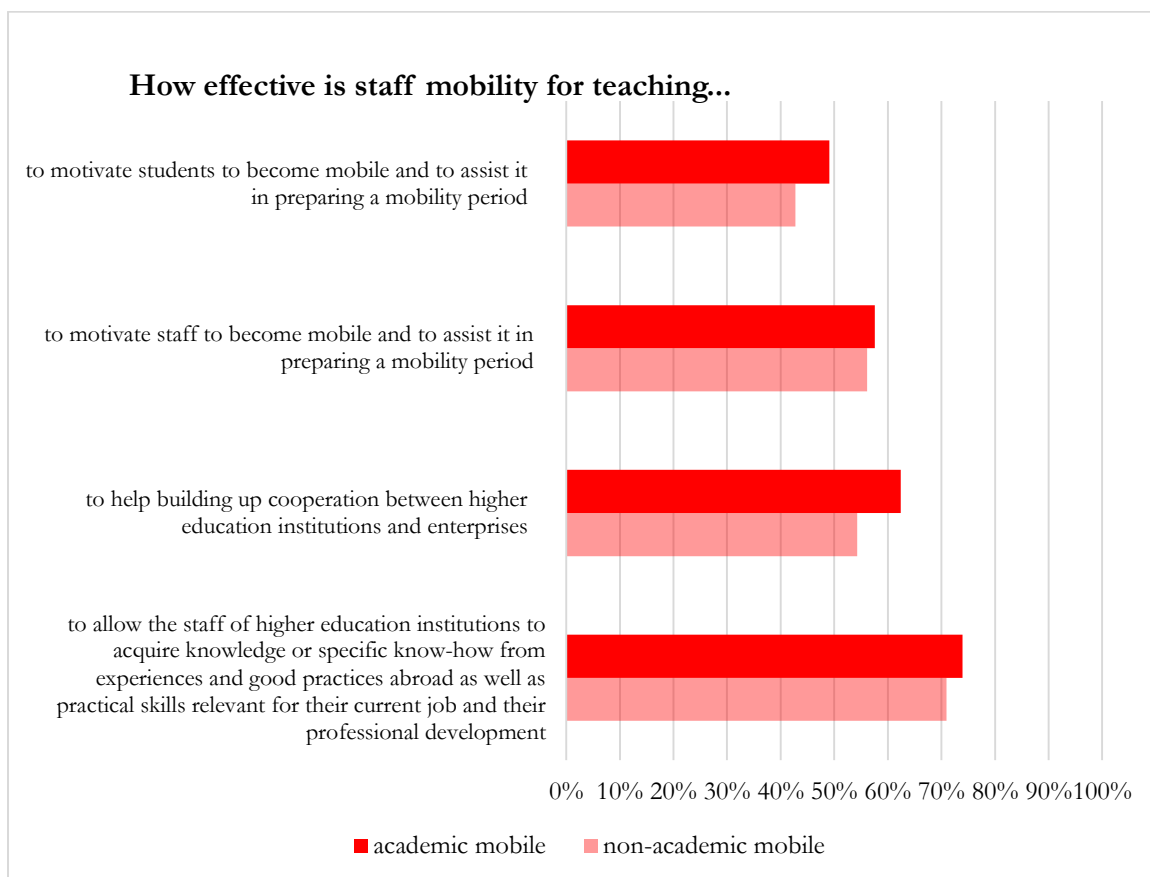
Staff members stated that mobility in relation to teaching motivated other staff to become mobile, as it did students, although to a somewhat lesser degree. Staff members thought that it was of considerable benefit to the HEIs in helping them to build cooperation with companies. However, the most important effect of staff mobility, with more than 70% of the staff agreeing to this, was the gain in knowledge of good practice and new skills for the (home) HEI. This was especially true of academic staff. The mobility of teaching staff did, in fact, have the important effect that it was supposed to have from the perspective of the academic staff, namely promoting new ideas and methods, as well as teaching skills.

Academic staff also observed beneficial effects on the quality of teaching (81%) and multidisciplinary and cross-organisational cooperation (81%), and on international cooperation, in general (91%), but fewer on the use of ICT (64%) and knowledge transfer between HEI and companies (only 62%).

**More than 70% of mobile staff observed a gain in knowledge of good practice and new skills**

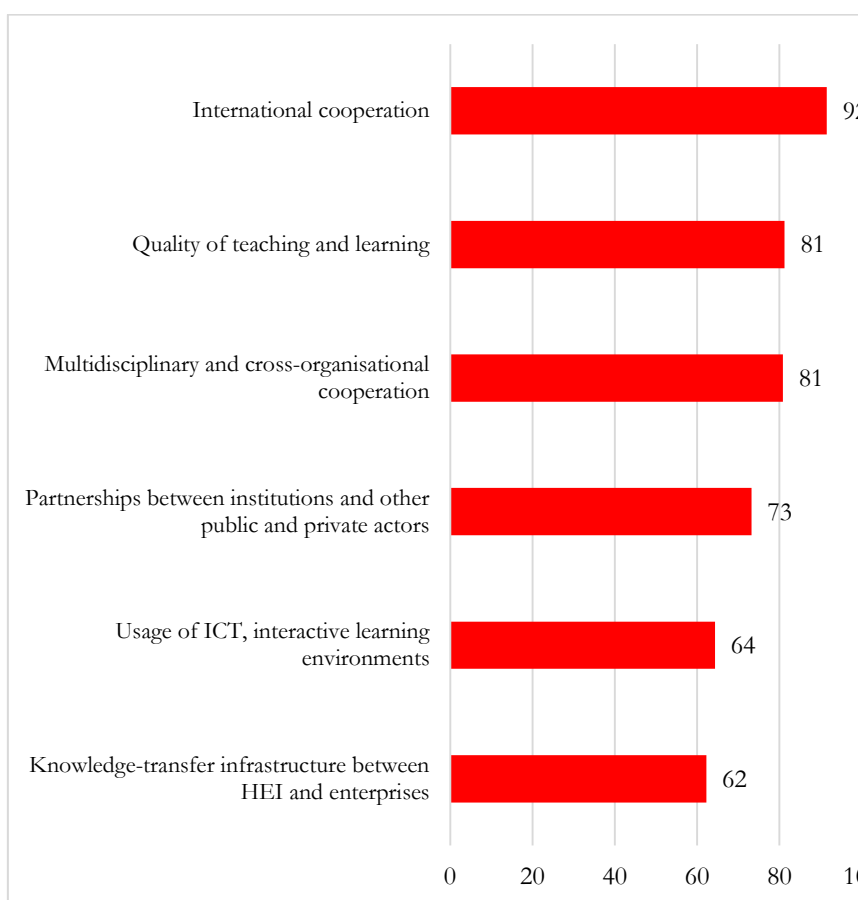
**81% of mobile academic staff observed an improvement in the quality of teaching**

**Figure 4-6 Effectiveness of staff mobility for teaching\***



\* Answers "very effective"

**Figure 4-7 Impact of staff mobility for teaching, academic staff perspective\* (in %)**



**92% of HEIs regarded staff mobility as effective for international cooperation, 81% for quality of teaching and multidisciplinary and cross-organisational cooperation**

\* Answers "high" or "very high"

HEIs, as an important second perspective on staff mobility, also considered staff mobility to be a very effective tool for enhancing the internationalisation of teaching. HEIs themselves regarded staff mobility as important in relation to motivating students to become mobile (94%) and providing some kind of international experience to students who did not wish or were not able to participate directly in international mobility actions (95%). They saw benefits for the promotion of exchange of expertise and experience on pedagogical methods (93%) as well as motivating staff to become mobile (93%). Staff mobility was also seen as encouraging HEIs to broaden their offers and enriching their courses (93%), as well as providing links with suitable partner HEIs and enterprises (86%) and promoting mobility in general.

***"Erasmus mobility has created an opportunity to develop new cases and to apply them at our home institutions."***  
**(Staff, LT)**

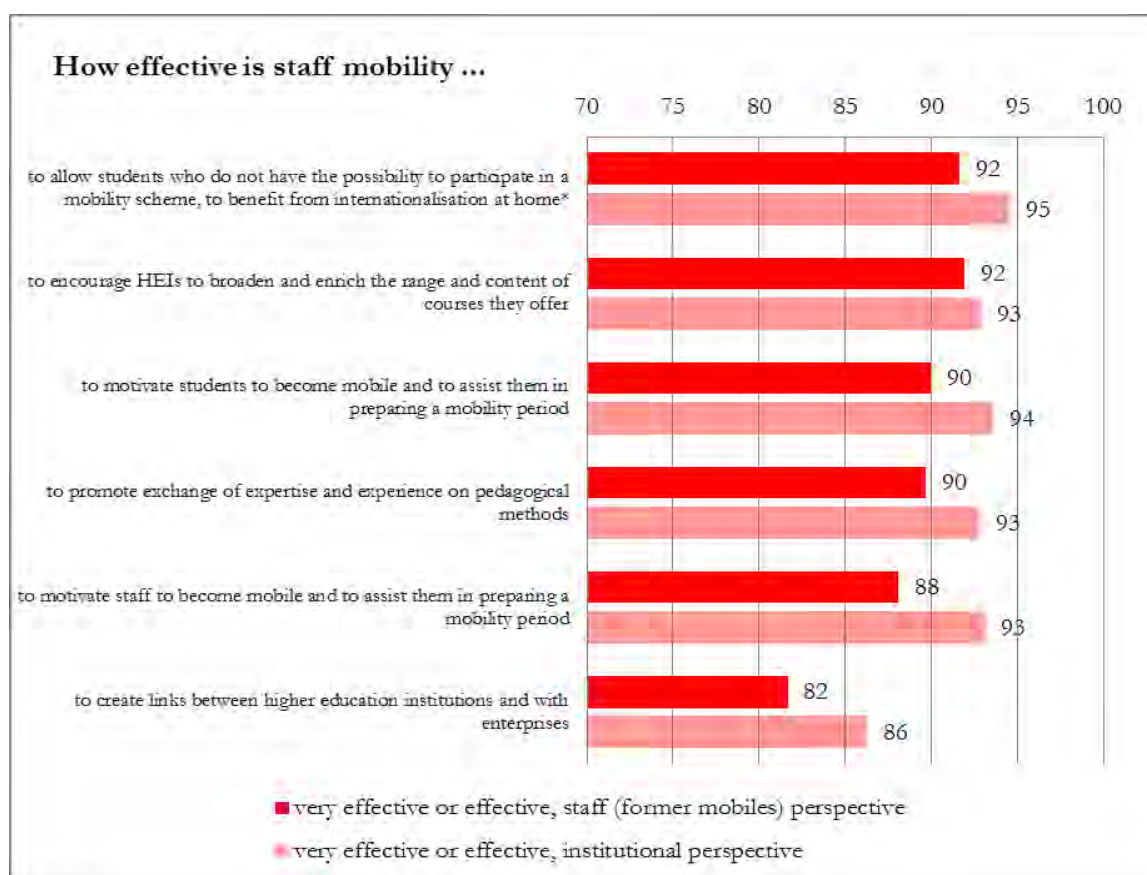
The qualitative study additionally showed that the "star" impact of Erasmus on academic staff lay in the strengthening of "Internationalisation at home" processes. Teachers were aware that all this information and acquisition of skills would have an impact when they returned home, in that the Erasmus effect would be extended to non-mobile participants.

**Table 4-6 Effectiveness of staff mobility for different teaching objectives, HEI perspective**

As how effective for reaching the following objectives would you judge staff mobility for teaching?	HEIs
<b>very effective/effective</b>	<b>%</b>
To allow students who do not have the possibility to participate in a mobility scheme, to benefit from the knowledge	95
To motivate students to become mobile and to assist them in preparing a mobility period	94
To promote exchange of expertise and experience on pedagogical methods	93
To motivate staff to become mobile and to assist them in preparing a mobility period	93
To encourage higher education institutions to broaden and enrich the range and content of courses they offer	93
To create links between higher education institutions and with enterprises	86

Except for the creation of links between HEIs and enterprises (86% of the HEIs saw staff mobility as effective for this objective), more than 90% of the HEIs consistently regarded staff mobility as effective in achieving major objectives such as internationalisation at home (95%), the motivation of students to go abroad (94%), the promotion of new pedagogical methods (93%), the motivation of other staff to go abroad (93%) and the enrichment of their course offerings (93%).

**Figure 4-8 Effectiveness of staff mobility for teaching regarding institutional goals, perspective of former mobile academic staff vs. HEI (in %)**



\* Answers "high" or "very high"

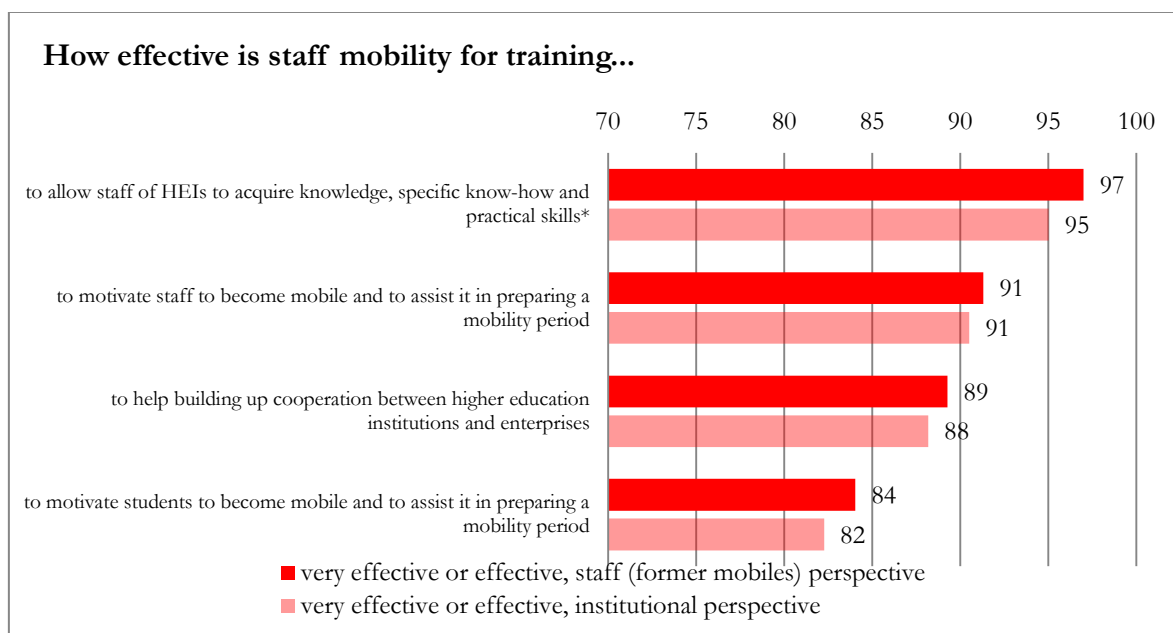
Both groups, staff and HEIs, regarded the opportunity to internationalise the learning experience of non-mobile students as a major positive effect of staff mobility, followed by the encouragement of the HEIs to broaden and enrich the range and content of the courses offered. Moreover, it was considered important that students are motivated to go abroad and that staff members exchange expertise.

When considering the effects of various types of mobility, both HEIs and staff also agreed that staff mobility in relation to teaching assignments (incoming and outgoing) **could be very effective in promoting students' internationalisation at home and enriching/improving the quality of teaching.**

The greatest discrepancy between the two perspectives can be observed with regard to the effect of mobility in motivating other staff to become mobile (88% staff, 93% HEIs), the motivation of students to become mobile (90% staff, 94% HEIs), as well as creating links between HEIs and companies (82% staff, 86% HEIs).

There were slightly different results with regard to the effects of staff mobility for training.

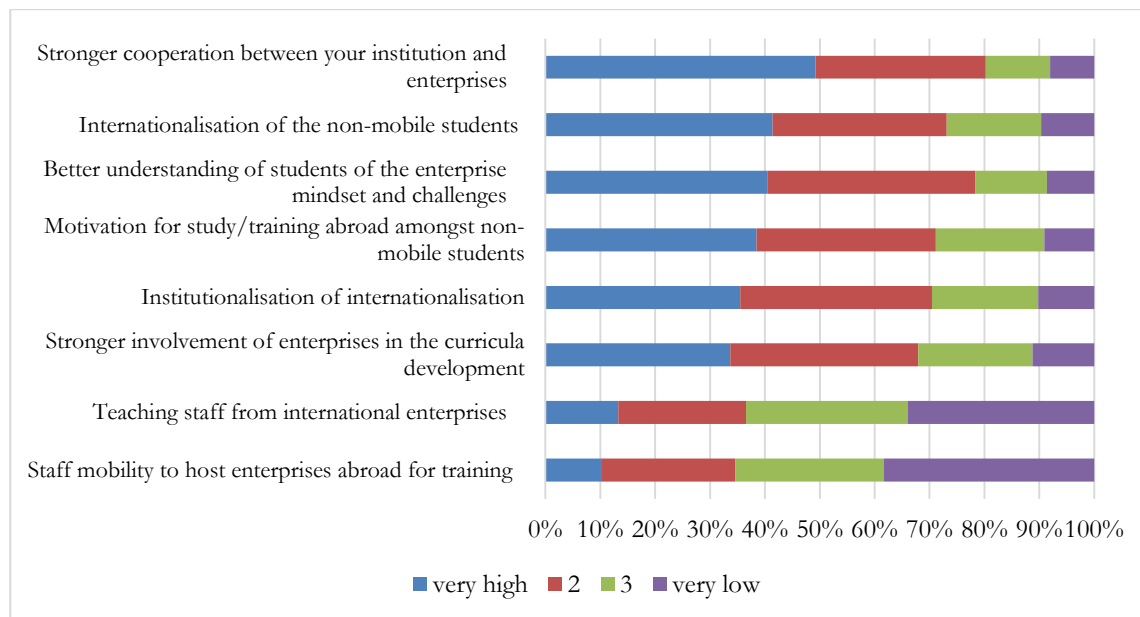
**Figure 4-9 Effectiveness of staff mobility for training regarding institutional goals, perspective of former mobile staff vs. HEI (in %)**



Again the opinions of staff and HEIs were largely similar. However, in this case it was the staff who was more optimistic about the impact than the HEIs in relation to all aspects. Both agreed that this mobility allowed staff of the home HEI to acquire knowledge, specific expertise and skills (97% staff, 95% HEIs), to motivate other staff to become mobile (both 91%),<sup>70</sup> to build cooperation with enterprises (89% staff, 88% HEIs) and to motivate students (84% staff, 82% HEIs).

<sup>70</sup> The difference in the graph is due to rounding effects.

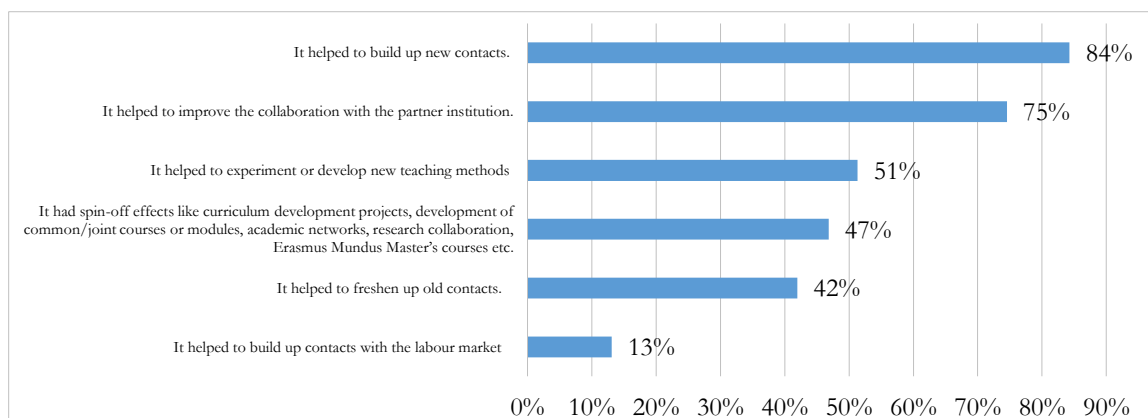
**Figure 4-10 Impact of staff from enterprises**



EIS again controlled for possible effects of staff from enterprises. Due to the extremely low percentage of such staff, the impact on teaching might be considered negligible within the larger picture of staff mobility from a purely quantitative perspective.<sup>71</sup> The HEIs, however, saw the involvement of staff from companies in STA or IPs as a way to strengthen cooperation with business and industry and to have a positive effect on students by improving their understanding of companies. More than 30% of the participating HEIs also observed that staff from companies had an impact on internationalisation.

Individuals who participated in IPs as lecturers claimed that it had affected their teaching (51%) and curriculum development (47%). Again 47% were of the view that the IP brought about spin-off effects, such as curriculum development projects, the development of common/joint courses or modules, academic networks, research collaboration, Erasmus Mundus Master’s courses and other such activities.

**Figure 4-11 Role of IPs in supporting the creation of professional networks, IP teachers perspectives**



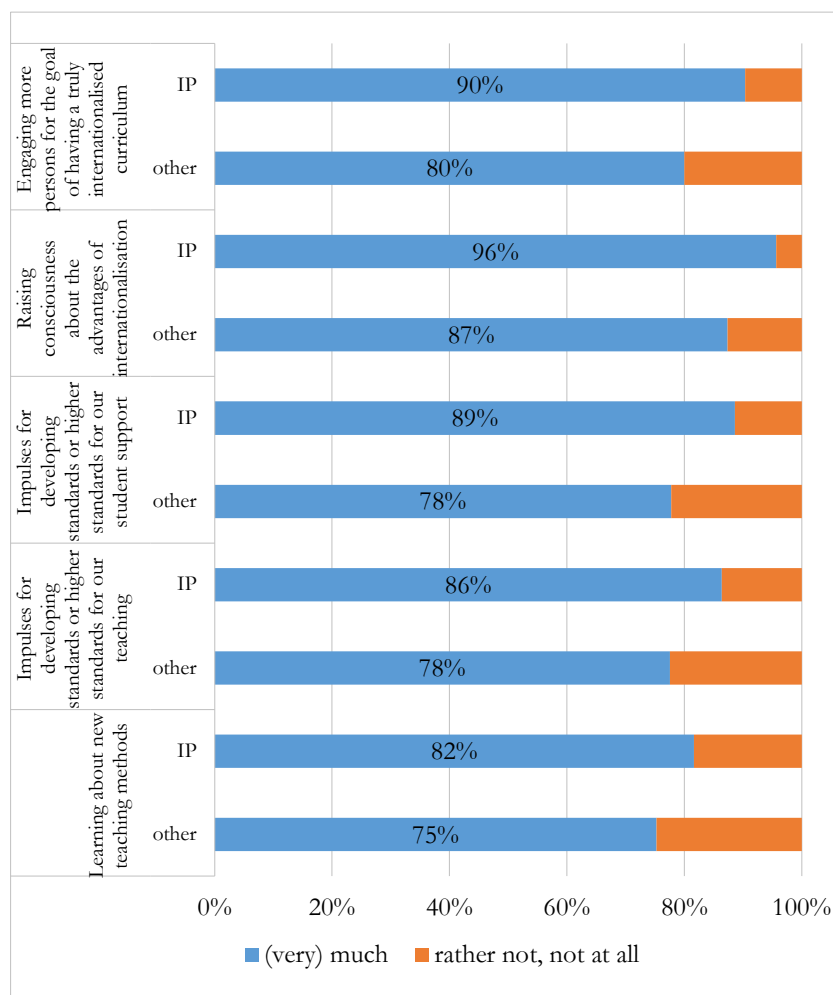
<sup>71</sup> This might, however, be different for specific subtypes of HEIs (e.g. the Ecole des Mines in France) where the ratio of non-HEI teaching staff can be as high as 90%.

Academic staff with experience of IPs regarded them as especially effective in establishing new contacts (84%), but less for reinvigorating old contacts (42%). Very few respondents saw them as a means of increasing contacts with the labour market (13%). Staff also saw improvements of collaboration with partner institutions (75%). Less observed support for new teaching methods (51%) and for spin-off effects on curricula (47%).

Substantially more IP participants assigned a high value to the impact of staff mobility than those with experience of other forms of staff mobility in relation to teaching and curriculum development (90% to 80%), developing higher standards for student support (89% to 78%), developing higher standards for teaching (86% to 78%) and learning about new teaching methods (82% to 75%).

**90-96% of mobile staff were of the view that IPs had a strong impact on the internationalisation of the curriculum and on raising awareness of internationalisation**

**Figure 4-12 Impact of staff mobility in IPs on teaching aspects, staff perspective**



*"I think that this international teaching experience had greatly improved my CV and has made me a more interesting candidate for future positions in academia. Many new opportunities have emerged and I will collaborate with the colleagues I met during this exchange."*  
(Finnish IP)

*"My mobility was useful in terms of enhancing and consolidating relations with academic staff"*  
(IP staff, PT)

IPs were regarded as a more effective means than other short programmes for engaging people in the internationalisation of the curriculum, raising awareness of the advantages of internationalisation, creating incentives to develop standards for student support, and teaching or learning about new teaching methods. However, whereas practically every respondent regarded IPs as highly effective in raising the awareness of internationalisation, the aspect of new teaching methods - which could be expected to rank amongst the most important effects - received the lowest rating though still high, with a rating of 75%.

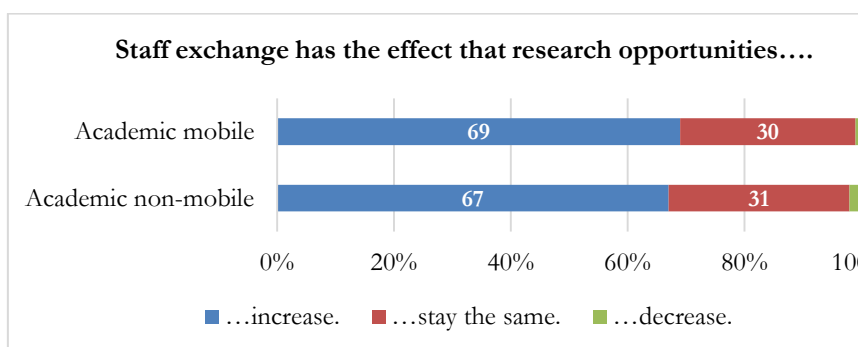
The qualitative interviews showed how international experience seemed to improve the CV of IP staff and to boost their job and career development opportunities. IPs also seemed to enhance **participants' social networks and led to further participation of staff** in other IPs. Erasmus staff mobility seemed to develop some kind of European academic awareness that positively impacted on both participating staff and HEIs.

**Nearly 70% of mobile staff regarded staff mobility for teaching assignments as effective in initiating new research opportunities**

### Influence on research

Academic staff was also asked to assess the impact of staff exchanges on research opportunities.

**Figure 4-13 Impact of staff mobility for teaching assignments on research opportunities, academic mobile vs. non-mobile academic staff**

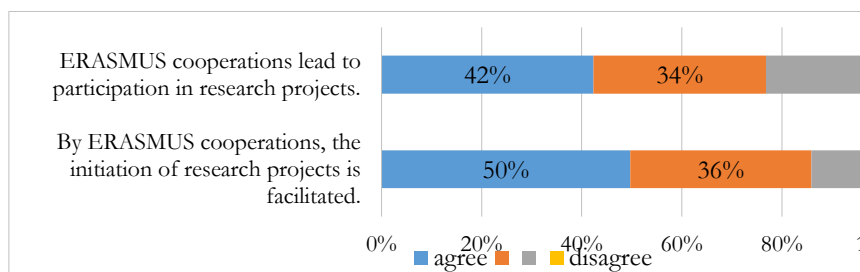


In this regard, mobile and non-mobile staff was rather unanimous in their views, with 69% of the mobile academic staff and 67% of the non-mobile academic staff agreeing that staff exchanges increased research opportunities and were perceived as an important asset in strengthening research capacity in HEIs. In the opinion of 68% of respondents, their staff exchange experience in IPs increased their research opportunities. Although this might not be the primary aim of IPs, it is definitely an important outcome. An explanation might be that the invitation to an IP abroad is often based on an academic interest and the time is also used for discussing research interests and possibly meeting other academics and developing new ideas. Several interviewees in the qualitative study reported that programmes were enriched through exchanges which furthered the links with other institutions and resulted in generating more exchanges, which in turn enriched the programmes with different geographical expertise. Of the participants in IP programmes,

***"In many cases, there is a strong link between staff mobility and research cooperation because staff mobility for training gives an initial push in expanding the cooperation, writing research papers together or starting research projects together. It is an excellent way to generate new cooperation. In that sense, the five days can be very valuable to both universities."***  
(Staff, FI)

76% agreed that cooperation within the framework of an Erasmus action led to participation in research projects in general. Of these respondents, 86% agreed that it facilitated the initiation of research projects.

**Figure 4-14 Effects of IPs on research projects, IP participants' perspective**



***"Double degree programmes started between our HEIs and HEIs in Poland and the Czech Republic. Common projects, research and new cooperation agreements were implemented after IP programmes, during staff training and teaching mobility."***  
**(Staff, LI)**

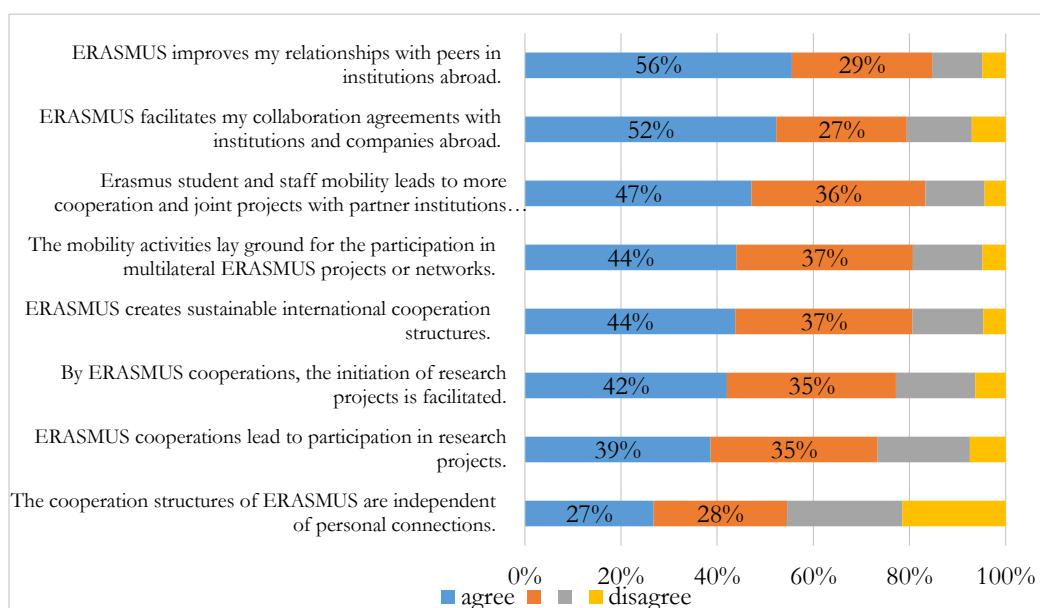
#### 4.4. How does mobility affect the cooperation of HEIs?

##### The Erasmus programme in general

Staff regarded the Erasmus programme as a major driver of internationalisation. This is not surprising as the programme is by far the largest of its kind in Europe and can be considered the most relevant programme for many HEIs, as the interviews particularly in Central and Southern Europe also confirmed.

Staff considered the Erasmus programme to be very relevant in improving relationships with peers abroad (85%), in stimulating more cooperation and joint projects (83%), and in laying the foundations for multilateral projects or networks (81%). Many also saw an effect in facilitating individual collaboration agreements (79%) and research (77%). Furthermore, in the opinion of staff, the structures of the Erasmus programme depended to some extent on personal relationships (55%).

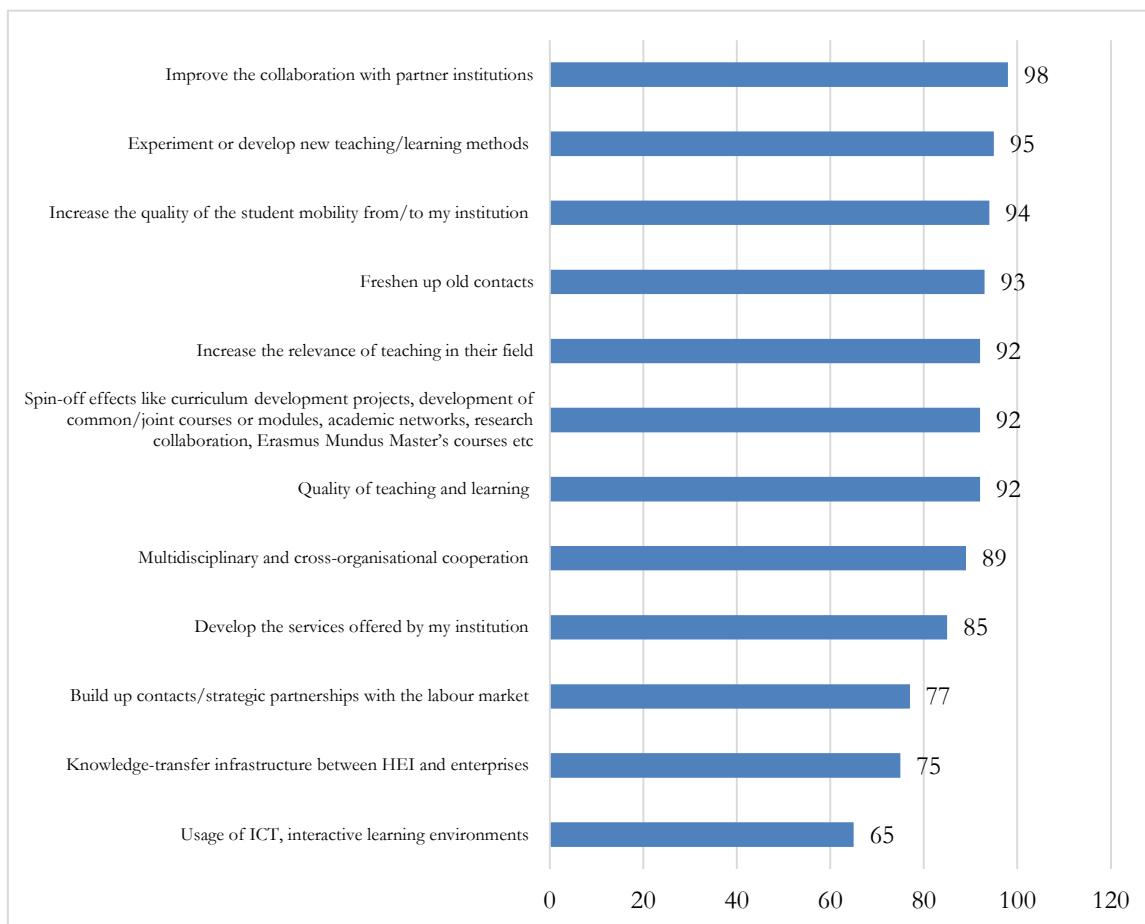
**Figure 4-15 Level of facilitation of international collaboration through Erasmus actions, staff perspective**





## Staff mobility

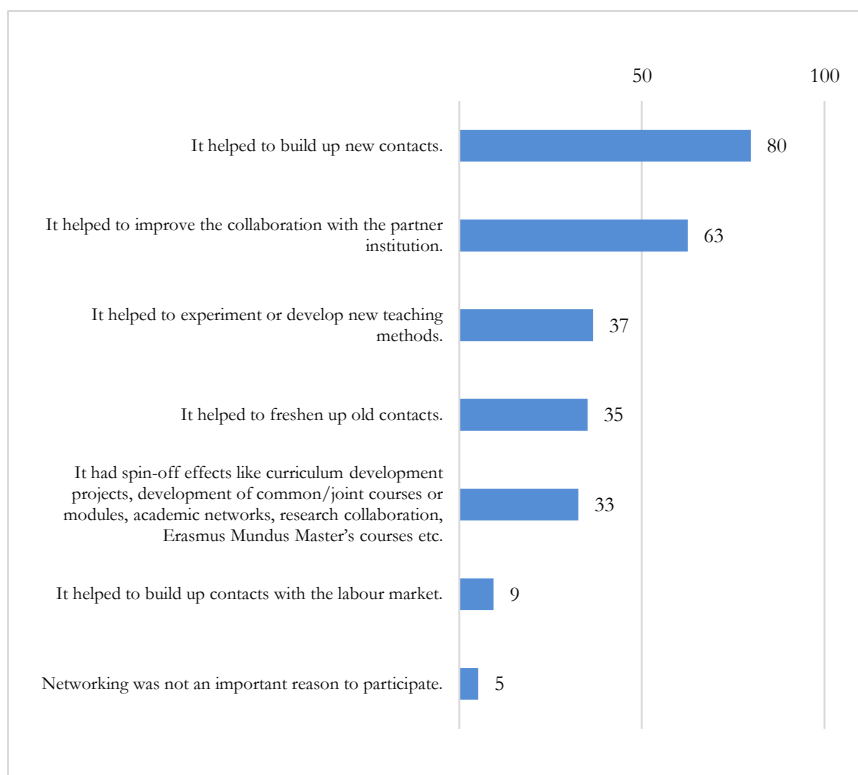
**Figure 4-16 Expected effects of staff mobility, HEI perspective (in %)**



With regard to the effects of staff mobility, the HEIs seemed to be very optimistic. For most aspects, more than 90% of the HEIs saw clear effects of staff mobility. The only aspects lagging behind were increased usage of ICT (65%), as well as effects relating to relations with employers/industry, such as partnerships developed with the labour market (77%) and the infrastructure for knowledge transfer between HEIs and companies (75%). On the other hand, staff involved in international mobility was less convinced about certain effects of their experience. Staff members largely agreed that a period abroad helped them establish new contacts (80%) and improve collaboration with partner HEIs (63%), although only about one third of respondents observed positive effects relating to joint degrees. The most striking difference between the institutional and staff perspectives was found in their views with regard to the impact of mobility in establishing contacts with parties on the labour market (77% of the HEIs compared to 9% amongst the staff). The low percentage for staff can be explained in that, except for those who had that as an explicit role, this was not a reason to be mobile.

***"New and/or stronger relationships between companies and universities around the world, improves the universities' image internationally through successful traineeships, and brings international employers straight to the students."***  
**(WP student, BG)**

**Figure 4-17 Effects of staff mobility, staff perspective (in %)**

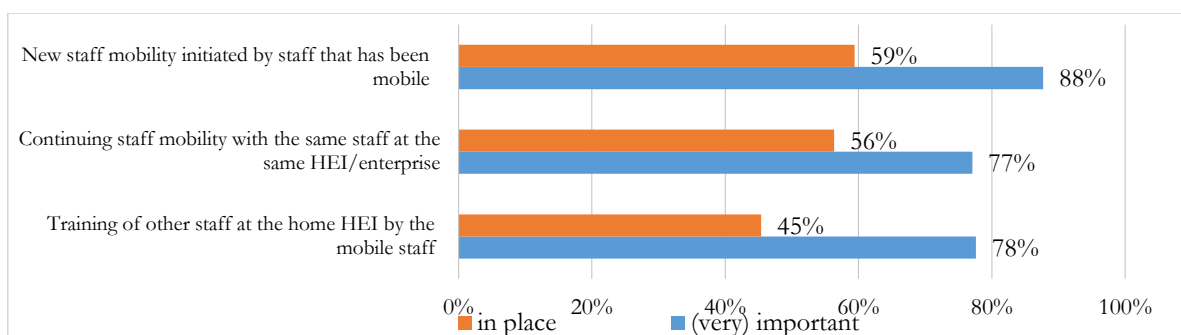


**Most aspects aimed at achieving sustainability were considered important by more than 90% of HEIs, but far fewer of them have as yet implemented them**

***"Our University has put even more emphasis on international partners and to further improve its own international image." (IP staff, FI)***

Any new contacts need to be sustainable if they are to have long-term effects. From the perspective of the HEIs, there were several ways of achieving sustainability that were already in place. The initiation of new mobility by formerly mobile staff, in particular, was considered an important means of achieving such sustainability.

**Figure 4-18 Activities to achieve sustainability of cooperation between home and host institution / enterprise after staff mobility, HEI perspective (in %)**



In the view of HEIs, the greatest potential for creating sustainability lay in the promotion of new staff mobility by staff who had already been mobile (88%). Substantial potential also seemed to lie in the training of other, so far non-mobile, staff by mobile staff (78%) and the continuation of existing staff mobility (77%). However, the HEIs were far more sceptical about the extents to which such measures were already being implemented. Here the estimates were approximately 20% to 30% below the importance assigned to this aspect. This indicates that HEIs saw considerable room for improvement in this area.

The interviewed students who had taken part in Erasmus IPs and study mobility underlined that Erasmus mobility brought in new cooperation activities and new links between participating students, as well as between their home and host institutions. Student mobility for work placements sometimes led to more university-business cooperation and to closer relationships between students and potential employers.

In the focus groups and interviews, there were many examples of university-business cooperation, such as EU-funded research projects enabled on the basis of prior cooperation agreements for student work placements. Staff mobility also generated new research cooperation activities between participating staff and HEIs from different European countries. Erasmus for teaching also provided an effective way to reinforce links with existing partner HEIs. During an Erasmus for teaching mobility, participating staff were often able to discuss and get involved in research projects, allowing HEIs to broaden their collaborative research activities.

HEIs claimed that it was their aim to intensify cooperation activities with other universities from other countries in order to keep stable or even increase the flows of outgoing and incoming Erasmus students and staff. Some institutional coordinators indicated that their efforts to establish networks with HEIs from other countries would not have been possible without the funding provided by Erasmus mobility. The Erasmus+ programme, for example, was seen as a new opportunity to maintain and continue the cooperation with established partner HEIs from other countries or to establish more strategic partnerships.

In many countries like Spain, Portugal, the Czech Republic or Finland very stable and active networks of International Relations Offices from various HEIs could be found. These networks were based on stable professional relationships, regular meetings, and best-practice sharing, and constituted important support networks for new HEIs which joined Erasmus mobility. Many of the HEIs under scrutiny would welcome more opportunities for financing these networking activities between HEIs at the local or national levels (sharing experience and information, regular meetings etc.).

On several occasions, mobile staff members became ambassadors of their HEI and its educational system abroad, and when they returned they came to mobilise non-mobile student and staff to go on exchanges. Informal accounting of exchange experiences (word of mouth) or experience sharing in the classroom seemed to be more effective than other more formal mechanisms.

Since the establishment of partnerships usually happened at the individual level (e.g. out of personal contacts with other scientists, out of existing research cooperation), the maintenance of such cooperation depended strongly on the investment (in terms of means and human resources) made at the organisational level. Thus, participating staff and coordinators pointed out difficulties in maintaining relations with partner universities, since these usually depended on the initiative and efforts of a single person. According to some of the participants, revisions of existing partnerships should take place regularly in order to strengthen successful partnerships.

Academic staff pointed out that a central administration and coordination of staff mobility within HEIs could serve as an example of best practice. Previous experience showed that this often led to a better and time-saving organisation of mobility. Furthermore, it allowed for interdisciplinary partnerships (beyond departments). International office representatives agreed that networking was enhanced through the standardisation of Erasmus contracts.

***"Erasmus mobility has generated national and international cooperation between HEIs, exchanges of good practice within and between countries, and practical cooperation consortiums or networks between various HEIs at the local level."***  
**(Non-academic staff, FI)**

### Intensive Programmes

The EC also wished to study the impact of IPs on new activities involving cooperation between lecturers and HEIs.

**Table 4-7 Development of new, international and inter-sectoral cooperation through IPs, staff perspective**

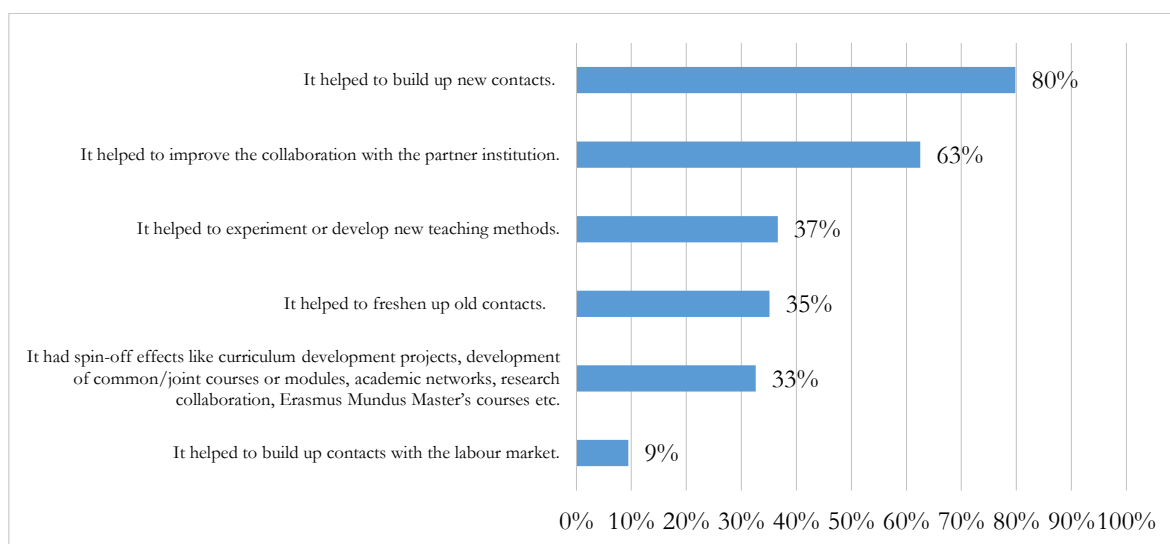
<b>To what extent have Intensive Programmes (IPs) developed new, international and inter-sectoral cooperation activities of the participating teachers and their HEIs?</b>	<b>%</b>
not at all	1
to some extent	47
to a considerable extent	39
very much	13

Half of the respondents stated that IPs had some impact, 39% even thought that they had a substantial impact. However, compared to other parts of the institutional survey, the number of respondents who gave an answer to this specific question was rather low, so that the team was cautious about attributing significance to the answer. The same held true for the estimated impact of IPs on external relationships. Again, the majority of respondents considered IPs to have some or considerable impact on the development of such relationships (82%).

**Table 4-8 Impact of IPs on initiating new partnerships, staff perspective**

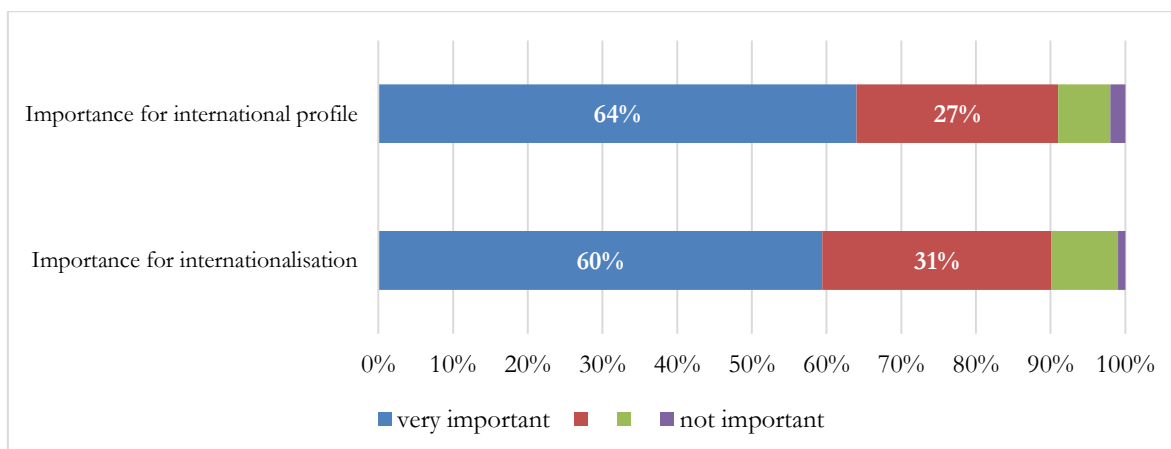
<b>To which extent have IPs initiated new partnerships between HEIs and other HEIs/organisations, business and industry?</b>	<b>%</b>
not at all	9
to some extent	49
to a considerable extent	33
very much	9

**Figure 4-19 Impact of IPs on teaching and contacts, staff perspective**



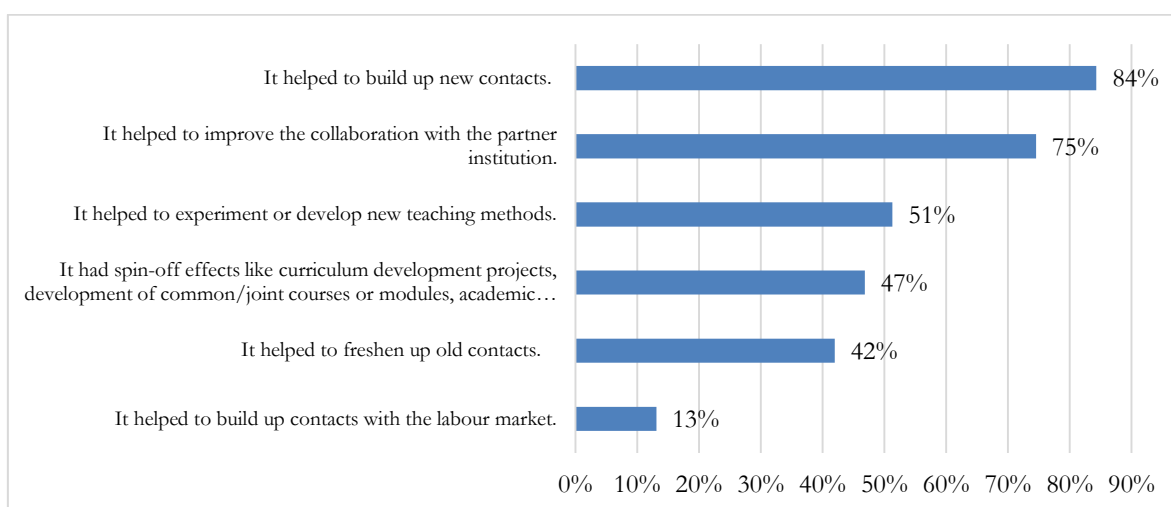
In the opinion of staff who participated in IPs, their advantages lay particularly in establishing new contacts (80%) and improving the collaboration with partner HEIs (63%). Moreover, only a very small minority (9%), saw it as an option in developing contacts with the labour market.

**Figure 4-20 Importance of IPs for HEIs**



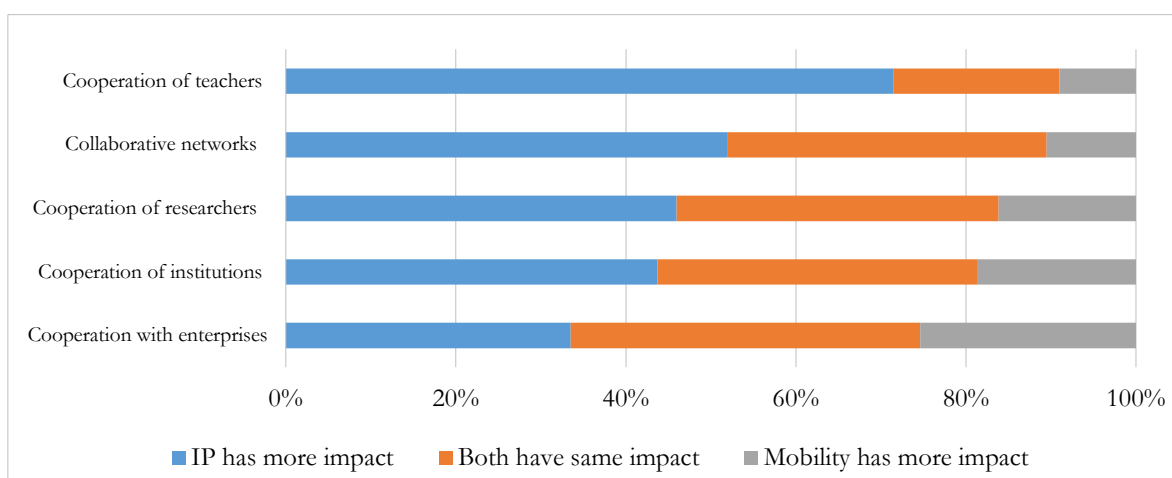
Actual experience in IPs, however, was not widespread within the sample. Only 31% of the participating HEIs had experience with Erasmus Intensive Programmes. Of these HEIs, 91% regarded IPs as very important or important for the international profile of their HEI and its internationalisation.

**Figure 4-21 Impact of IPs on professional network building, perspective of IP teachers**



In the case of staff members of HEIs who indicated that they took part in an IP, the most important effect of their experience of mobility was that it helped to establish new contacts (84%), closely followed by improvements in collaboration with the partner HEI (75%). Of these respondents 42% regarded IPs as a good opportunity to cultivate old contacts. However, only 13% saw IPs as an effective way of establishing contact with the labour market. This could be explained again by the fact that such contacts were not the reason to be involved in IPs in the first place for the vast majority of staff members.

**Figure 4-22 Impact of IPs vs. study mobility on areas of importance, HEI perspective**



IPs, however, were considered to be more effective than student mobility in promoting cooperation between lecturers (72%). Of the respondents, 52% rated the impact of IPs on collaborative networks higher than that of student mobility. IPs were also considered to have a greater impact on cooperation between HEIs (44%) and researchers (46%). Opinions were more divided with regard to the impact of IPs on cooperation with enterprises (34% in favour of IPs, 25% in favour of student mobility). However, in most respects a substantial percentage of the respondents did not see any differences between the two types of mobility.

#### 4.5. What is the perception regarding support services of HEIs for mobility?

##### Student mobility

In relation to their assessment of the conditions for internationalisation at the students' home HEIs, mobile students seemed to be more aware of the existence of so-called "mobility windows"<sup>72</sup> in their study programmes which facilitate studying abroad (72%), compared to non-mobile students. They were also satisfied with the information and level of support provided to potential outgoing students (68%). Non-mobile students were less convinced that their home HEI would ensure recognition of ECTS credits gained abroad (76% compared 86% of the mobile students), which also featured as one of the possible reasons for not opting to participate in a mobility action among non-mobile students (see chapter 3). As far as the international experience of staff was concerned, mobile students tended to believe that the international experience of staff contributed to enhancing both the level of student support services and the quality of teaching (72% each).

**68% of all mobile students had positive experience of support services and information but only 49% for work placements and 40% for IPs**

In general, mobile students evaluated the organisation of mobility and the supporting activities provided by their home HEI more positively than non-mobile students and all

<sup>72</sup> A mobility window is defined as a semester or period in a study programme that is well suited to going abroad.

of the differences stated were statistically significant. As these students must have had more experience with these services than the non-mobile students, such a positive evaluation is even more interesting.

**Table 4-9 Conditions for internationalisation at home HEI, mobile vs. non-mobile student**

<b>Please assess the following statements concerning the conditions for internationalisation at your (home) HEI.</b>	<b>Mobile</b>	<b>Non-mobile</b>
agree/rather agree	%	%
I am convinced that my study programme recognises ECTS credits from a host HEI abroad.	86	76
In my study programme, there is a semester well suited to go abroad.	72	59
The quality in teaching at my HEI profits from the staff's international experiences.	72	63
There is a lot of information and support for students who want to study abroad.	68	60
The student support services profit from the staff's international experiences.	70	56
There is a lot of information and support for students who want to go abroad for an internship / traineeship / work placement	49	47
There is a lot of information and support for students who want to participate in an Intensive Programme or similar summer school	40	40

However, only 49% of the students thought that the HEIs provide a lot of information regarding placements abroad compared to 68% who agreed to this statement regarding study abroad. Obviously there is room for improvement regarding information for work placements abroad.

In relation to the assessment of the conditions for internationalisation, there were no major differences between the three activities of the Erasmus programme.

**Table 4-10 Conditions for internationalisation at home HEI, student perspective by Erasmus action type**

<b>Please assess the following statements concerning the conditions for internationalisation at your (home) HEI.</b>	<b>Studies</b>	<b>Work placement</b>	<b>Intensive programme (IP) abroad</b>
agree/rather agree	%	%	%
I am convinced that my study programme recognises ECTS credits from a host HEI abroad.	88	88	87
The quality in teaching at my HEI profits from the staff's international experiences.	72	74	74
In my study programme, there is a semester well suited to go abroad.	71	78	75
The student support services profit from the staffs international experiences.	71	75	75
There is a lot of information and support for students who want to study abroad.	69	74	70
There is a lot of information and support for students who want to go abroad for an internship / traineeship / work placement	47	64	53
There is a lot of information and support for students who want to participate in an Intensive Programme or similar summer schools	39	44	52



The majority of respondents in all groups agreed that their study programme would recognise ECTS credits from the host HEI (87% to 88%). Equally, the quality of teaching was thought to profit from staff mobility (72-74%) and the fact that mobility windows were created (71% to 78%). Here students on work placements were the most confident group (78%). Support services (71-75%) and information on going abroad for studies (69% to 74%) were also widely thought to exist. Students were less sure about information for work placements (47% to 64%) and especially IPs (39% to 52%). Even IP participants

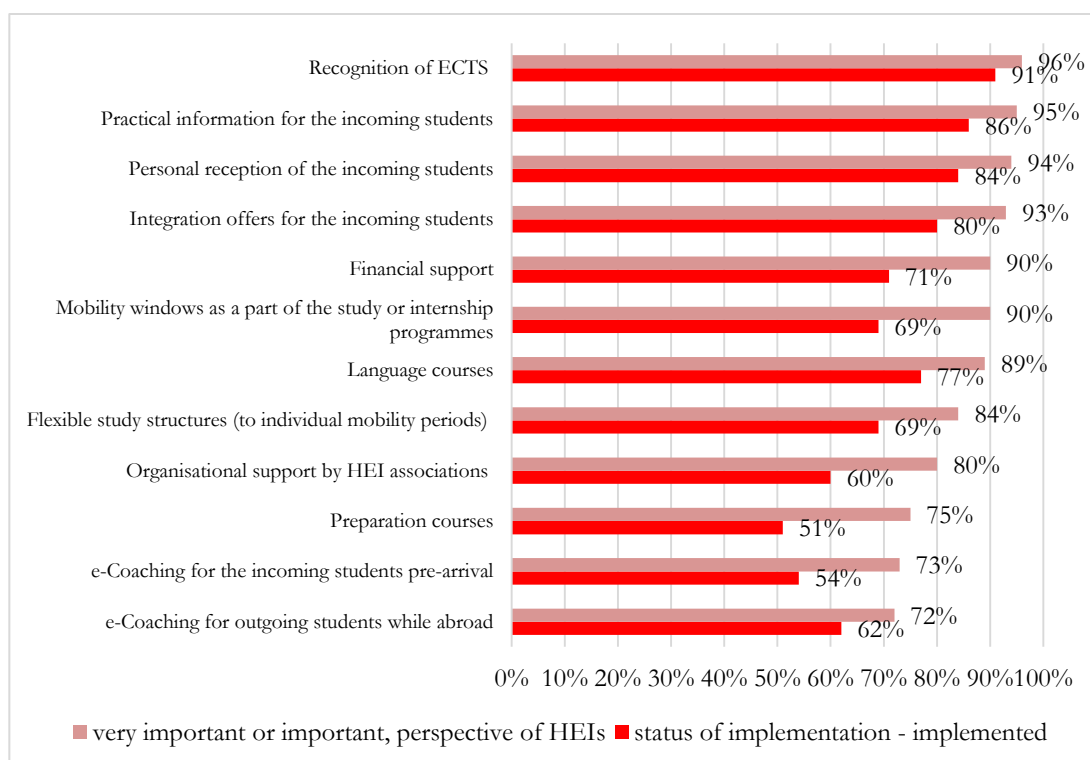
**For 96% of HEIs, recognition of ECTS was the most important aspect of organisational framework of mobility**

themselves gave the lowest vote of confidence to this aspect.

The results of the EIS survey indicate that the recognition of ECTS was the most important aspect of the organisational framework with regard to student mobility from the HEI perspective (96% of HEIs considered it important) and was also the most commonly implemented one—90% of HEIs declared that they recognised credits from host institutions abroad and 85% of the students were convinced that their study programme recognised ECTS credits from a host HEI abroad.

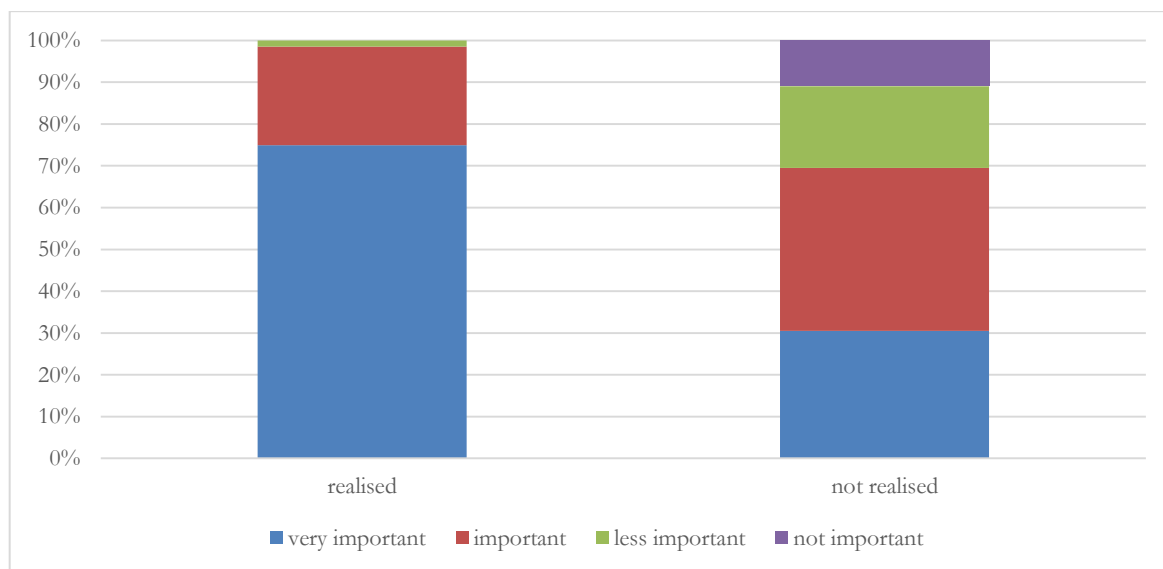
**90% of the HEIs estimated that windows of mobility were important, 69% had them implemented**

**Figure 4-23 Organisational framework of student mobility, HEI perspective regarding importance vs. implementation status**



Fewer HEIs were of the opinion that such a desirable framework of preconditions was being implemented. While 91% had implemented recognition of ECTS, 86% provided practical information for incoming students, 77% provided language courses, 71% had additional financial support for mobility, 69% had established windows of mobility and flexible study structures. Even less common were e-coaching for outgoing (62%) and incoming participants (54%) and, in particular, preparation courses (51%).

**Figure 4-24 Importance of mobility windows as a part of the study programme or work placement<sup>73</sup>**



The mobility window, i.e. a built-in opportunity to study abroad as part of a curriculum, was a special focus of the institutional survey. Here the assessment of the HEIs was almost unanimous: 90% of the participating HEIs estimated that windows of mobility were important or very important. Even more importantly, in the case of 69% of the HEIs, windows of mobility had already been realised and of these, that is of the HEIs with experience of such a feature, only 7% regarded them as less important and none as unimportant. Of the HEIs and students respectively, 70% agreed that the study structures/programmes were suited to international mobility, an issue related to windows of mobility. Given that 86% of the mobile and 87% to 88% of the students on the various Erasmus actions were mostly satisfied with the existence of such a window (see tables 4-9 and 4-10), one could argue that the strategic aims of the HEIs seem to have been realised over the last decades, especially those relating to the Erasmus programme. However, around 30% of students on study mobility did not feel that their programmes were well suited for going abroad and this seems to indicate room for improvement.

Finally it should be pointed out that most elements of the organisational frameworks were considered relevant by over 80% of HEIs. The only aspects that lagged behind were e-coaching and preparation courses (the latter being also the least implemented element of all and provided by only 51% of HEIs that responded). In general, gaps between the importance attributed to this and the levels of implementation persist, most notably in relation to financial support, organisational support by associations and mobility windows.

**Nearly 30% of students on study mobility were not convinced that their study programme was well suited for mobility**

<sup>73</sup> Comparison of the perspective of HEIs that realised such windows („realised“) vs. those that did not („not realised“)

Regarding qualitative study, the results were quite consistent. In some countries, international students pushed faculties and departments to offer better support services. Representatives of international offices in several countries confirmed that the Erasmus programme was an important driver in the professionalisation of support services. The increasing number of incoming (and outgoing) students through Erasmus led to a rising awareness of the necessity of support services and the streamlining of administrative procedures. In many universities, this led to the establishment and/or further strengthening of support services for outgoing and incoming students. Tools that were originally developed for Erasmus (e.g. transcript of record, learning agreements) were used by many universities to professionalise and streamline other mobility programmes.

There was confidence among coordinators that the further adaption of ECHE standards was also going to affect other areas of organisational processes and in the long run would lead to the standardisation and quality enhancement of general administrative processes (e.g. enrolment, registration for courses, issuing of certificates etc.). Many Erasmus students interviewed (for studies, IPs and placement) emphasised the positive impact of the Erasmus programme on credit recognition across borders. Nevertheless, recognition of credits was sometimes problematic as the credit points differed between universities and countries and many universities had yet to streamline their processes with regard to binding learning agreements and subsequent automatic recognition.

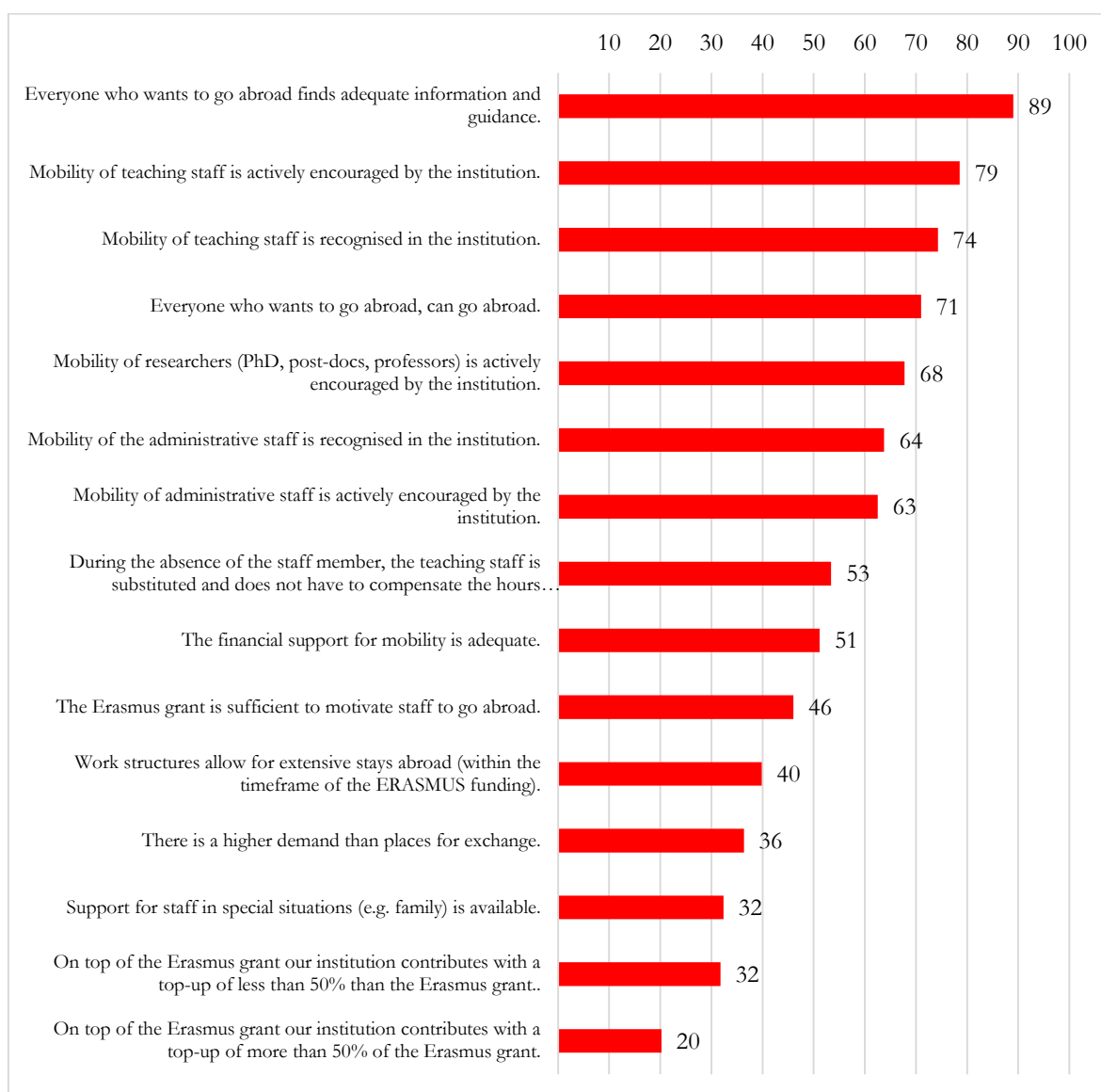
In general, expectations in relation to HEI support services differed vastly among countries and institutions. While in some countries HEIs were solely responsible for providing teaching and learning, in others they offered support in the organization of all aspects of student life, such as housing or job searches. Erasmus led to the development of an internationalisation infrastructure at many universities. Erasmus had a huge impact on the development of services for both outgoing and incoming students, such as the establishment of international students clubs, buddy systems etc.

Many HEIs were willing to maintain and strengthen their focus on Erasmus mobility, but with a shift from quantity to quality and a better recognition of the courses taken abroad at all levels of student graduation. Another positive effect of Erasmus mobility on the development of HEIs seemed to be the growth of the international affairs sector. The non-academic staff interviewed was generally convinced of the positive impacts of Erasmus mobility on the development of their HEIs though there were some complaints about the lack of *ex post* quality control.

### **Staff mobility**

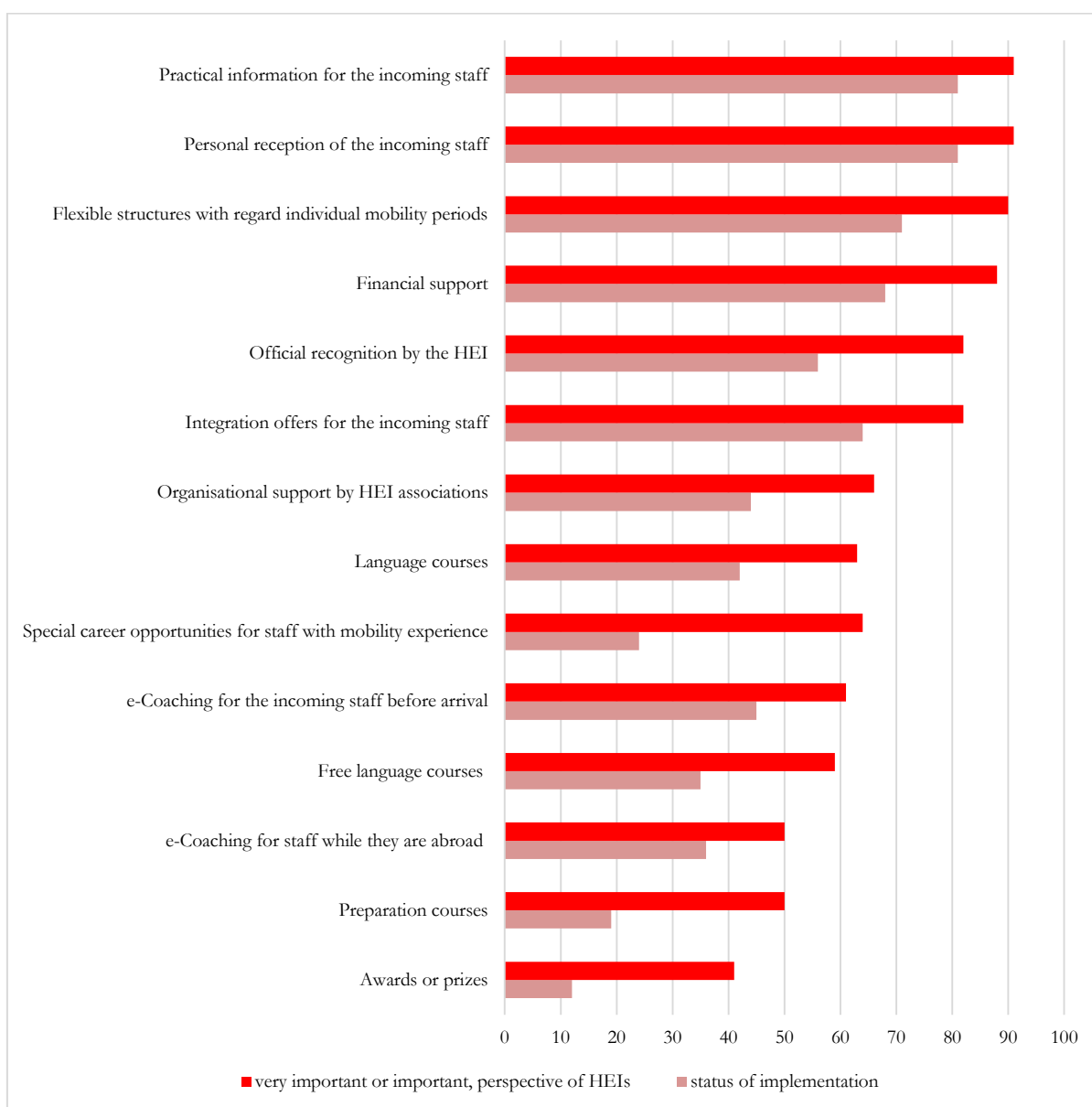
The findings of the EIS clearly showed that the organisational framework for staff mobility was perceived as less important by HEIs and less developed, if compared with student mobility. The fact that only 89% of HEIs were of the opinion that they provided staff with adequate information and support, while this value was 97% in the case of students, best exemplifies this phenomenon. Nevertheless, the top four elements relating to the conditions for internationalisation were the same for both student and staff mobility.

**Figure 4-25 Conditions and organisational framework for staff mobility, HEI perspective (in %)**



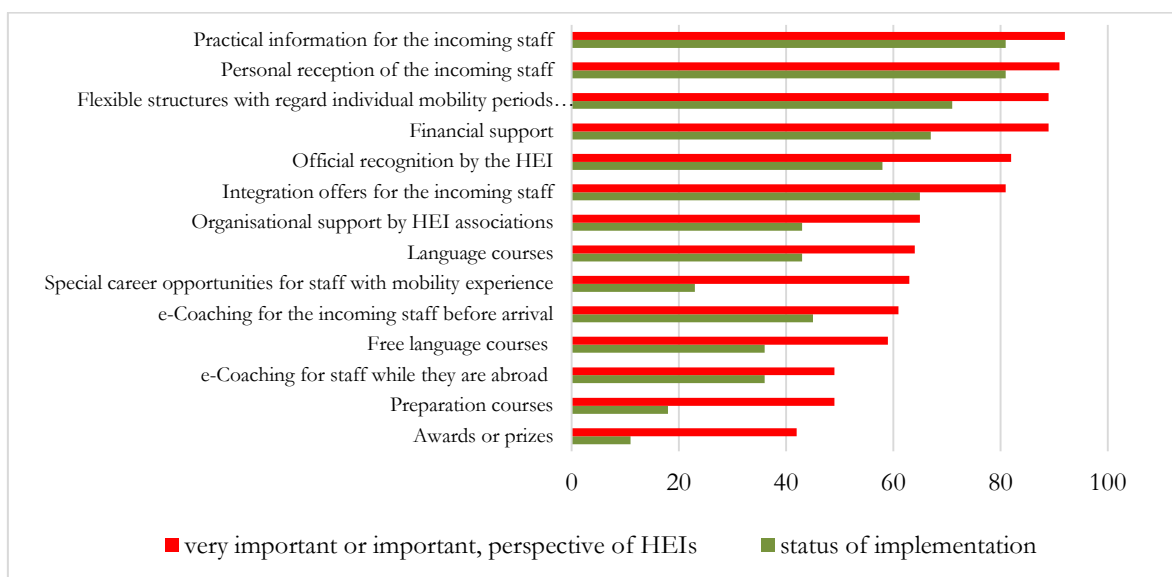
The conditions also differed among staff categories, with 79% of HEIs actively encouraging the mobility of academic teaching staff and 74% recognising it, but only 63% actively encouraging the mobility of administrative staff and 64% recognising it. While the level of implementation within the institutional framework was generally higher with regard to the mobility of academic staff, the levels of declared importance to the HEIs did not differ significantly. The lists of the most important elements of the institutional framework were practically the same as well as largely similar to the list referring to student mobility. In particular, the preparatory courses for staff were indicated as one of the least important and least implemented elements, while the lowest level of implementation related to awards and prizes. Special career opportunities for staff with international experience were also not common, despite the rather high relevance that staff attributed to this aspect (the largest gap). Considerable gaps were again apparent with regard to financial support and HEI associations. All in all, financial support (for all target groups, including students) and career opportunities relating to staff mobility seemed to be areas requiring improvement.

**Figure 4-26 Organisational framework for non-academic staff mobility, HEI perspective regarding importance vs. implementation status (in %)**



There were discrepancies between the importance assigned to a certain aspect of staff mobility and its implementation with regard to non-academic staff mobility. Information and reception of incoming staff was considered important by 91% of the HEIs, respectively, but only 81% had such services implemented. While flexible structures and financial support were also considered relevant by more than 80% of the HEIs only 71% and 68% respectively provided such services. On the lower end, preparation courses for non-academic staff were considered relevant by only 50% of the HEIs and implemented by 19% while awards or prizes were the least common measure in place (12%) and also considered the least important (41%).

**Figure 4-27 Organisational framework for academic staff mobility, HEI perspective regarding importance vs. implementation status (in %)**

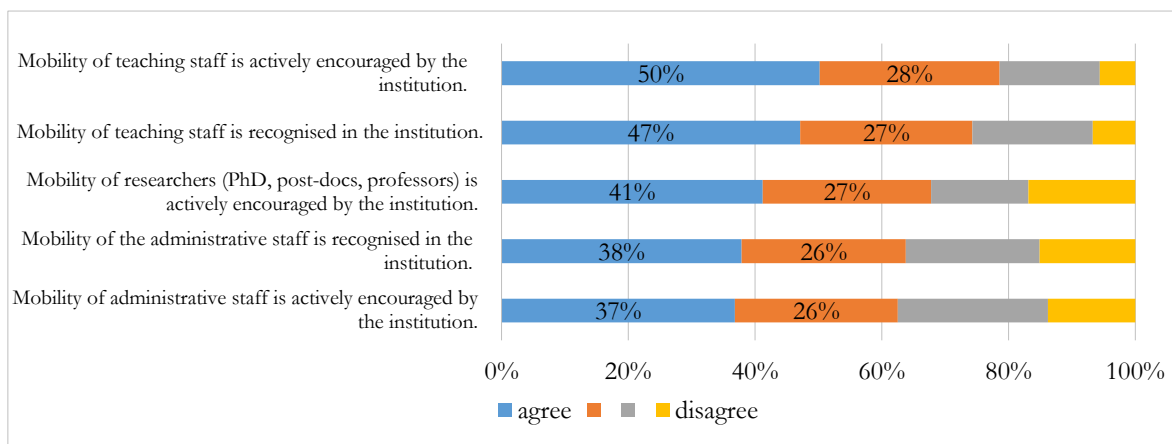


There were similar discrepancies between the acknowledged importance and the level of implementation of academic staff mobility. Of the HEIs, 92% agreed that practical information for incoming staff was important but only 81% also provided it. The numbers were similar for information for outgoing staff (91% to 81%). Of the respondents, 89% considered flexible structures for individual mobility periods important but only 71% had them implemented. The biggest gaps existed between the importance attributed by HEIs to special career opportunities (63%) in relation to their implementation (23%) and the offer of awards or prizes (42%), which were the least implemented (11%).

**For all forms of staff mobility, there were substantial discrepancies between the importance of support activities and their level of implementation**

Of the HEIs, 78% that participated in the survey actively encouraged teaching staff mobility and 74% also recognised it, while 68% actively encouraged research mobility. The level of encouragement was substantially lower for administrative staff mobility (63%) and its recognition (64%).

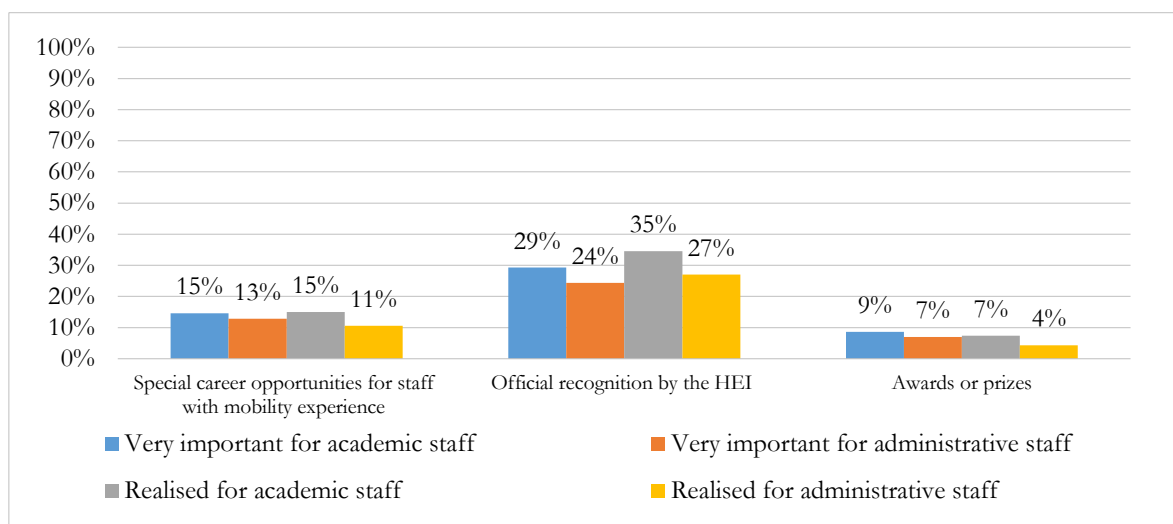
**Figure 4-28 Institutional stance on staff mobility, HEI perspective**



Compared to the assessment of the impact of staff mobility on all types of innovative and future-oriented aspects of the development of higher education, the percentage of HEIs which considered incentives important and also established them was rather low. Only 27% to 29% considered recognition relevant and, although more widespread than the other incentives, only 35% of academic and 27% of non-academic staff received recognition for their mobility experience. Only approximately 7% to 9% considered awards or prizes relevant and a meagre 4% to 7% had implemented them. Of the HEIs, 13% to 15% saw the value of special career options, but only 11% to 15% offered them. In other words, these measures were seldom in place and not thought to be of specific value to the HEI.

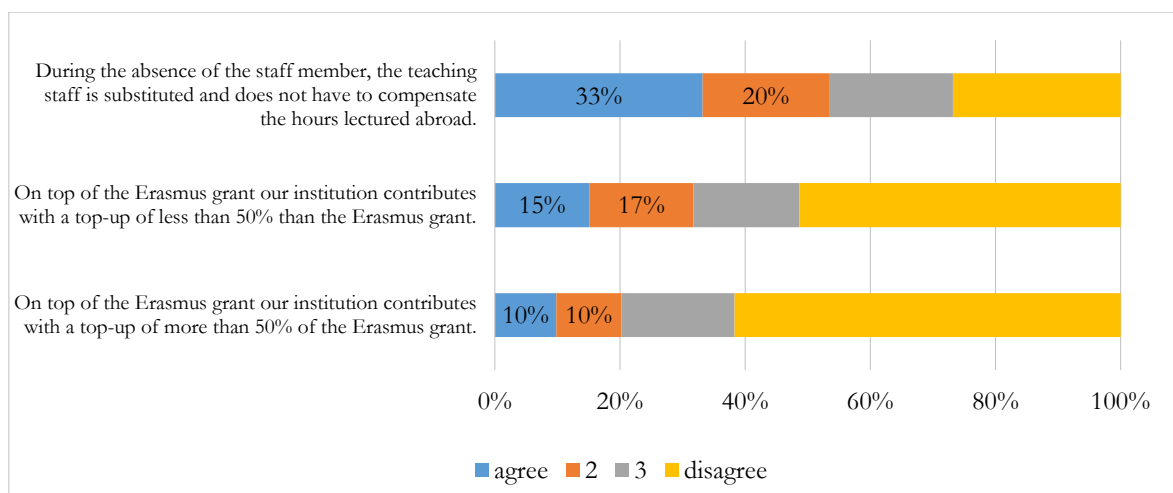
**Incentives for staff mobility were implemented rather seldom**

**Figure 4-29 Incentives for non-academic and academic staff**



Regarding more concrete incentives for staff mobility, a minority of HEIs had any such incentives in place at this point in time. 53% of the HEIs ensured that teaching staff was reliably substituted while abroad and 32% provided a top-up grant. Only 20% of the HEIs contributed a top-up grant amounting to more than 50% of the Erasmus grant.

**Figure 4-30 Specific incentives for academic staff mobility, HEI perspective**



Again, the qualitative study supports our findings. Academic staff as well as central coordinators complained that the realisation of staff mobility required considerable time and effort. Obstacles to greater staff mobility were mainly seen in terms of time limitations, workload and lack of support from home institution. The effort that teaching exchange implied was usually not recognised by the home institution. On the other hand, teaching mobility was often perceived by both the institution and non-mobile academic staff as a kind of “hobby” and an optional add-on. There was usually no support available to cover courses when lecturers were engaged in a mobility period. As a result, other commitments were frequently given higher priority than staff mobility. In several cases, there was also limited awareness of mobility grants among academic staff. As a consequence, the connection between staff mobility and the administrative support and information available was not clear.

***"Lately, teachers are aware that staff mobility is not valued"***  
**(Staff, PT)**

#### **4.6. How does mobility affect internationalisation of HEIs and its strategic aspects?**

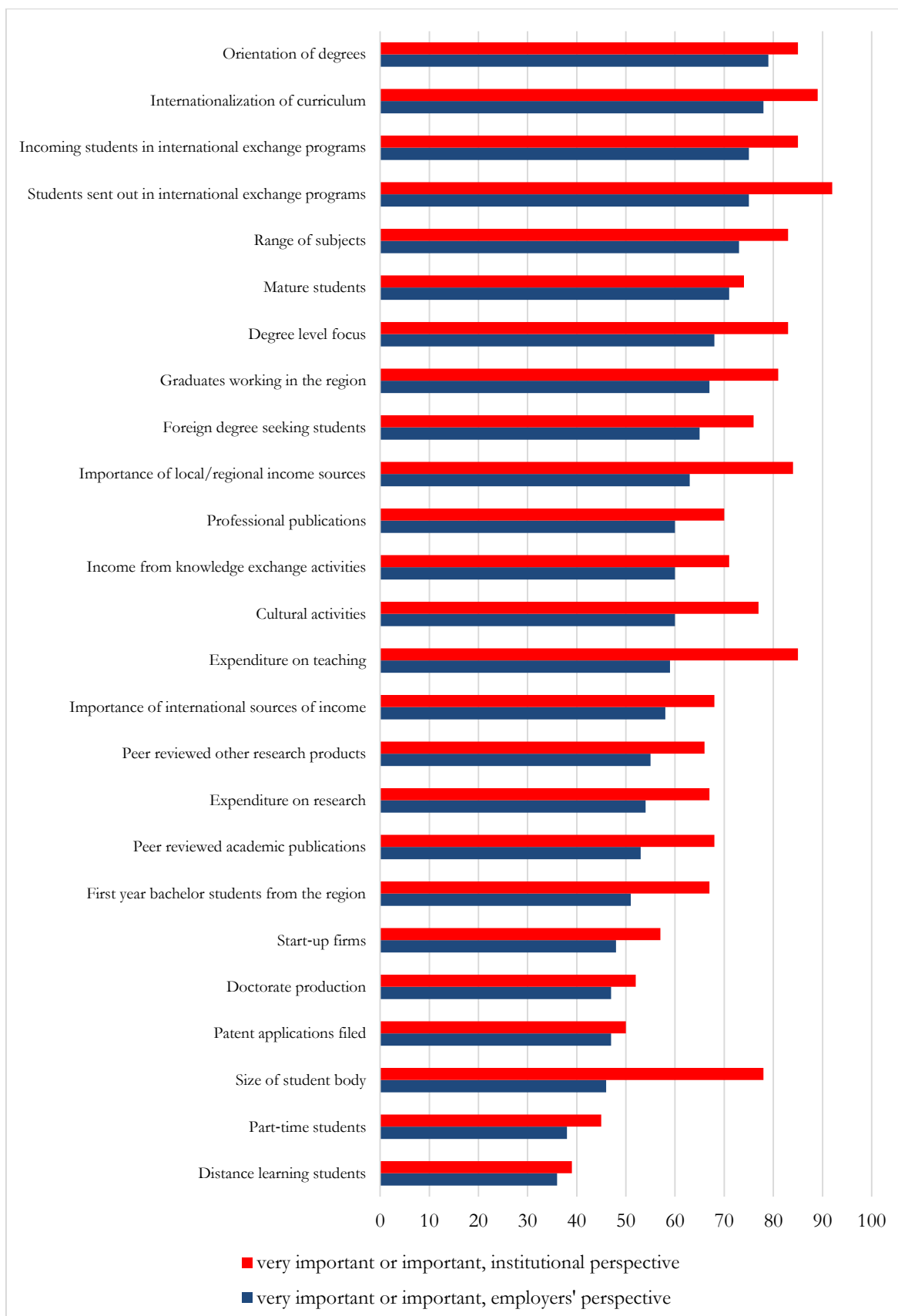
Before analysing the effects of mobility on internationalisation of HEIs, it is worthwhile to control how important mobility and internationalisation are for the profile of HEIs. EIS wanted to differentiate, in particular, between the views of employers in relation to HEIs and the views of HEIs themselves. With regard to the important characteristics of HEIs, the perception of employers differed only slightly from the point of view of the institutions themselves. In particular, the orientation of degrees seemed to be the most important factor for employers, when looking for a partner with which to cooperate (with 79% assessing this aspect as important), while HEIs declared student outgoing mobility to be of prime importance to them. Employers, in contrast to HEIs, attached much greater value to incoming rather than outgoing student mobility. Based on the results of the survey, the internationalisation of the curriculum ranked second in importance to both target groups. The possibility of distance learning, on the other hand, despite the growing attention to e-learning, in general, and MOOCs, in particular, was unanimously regarded as the least important aspect.

The most significant differences in perceptions could be observed with regard to the size of the student body (perceived as relevant by 78% of HEIs and only 46% of employers) and expenditure on teaching (87% compared to 59%). As a rule, HEIs perceived all items listed to be much more important to their actual situation than employers did.

With regard to internationalisation, all aspects relating to this area were more important to the HEIs than to the companies. However, as one saw in the previous chapter on student skills, competences and employability, these internationalisation activities strongly enhanced the skills and competences needed and expected by the companies. These priorities of the HEIs within their characteristics therefore served the purposes of the companies.

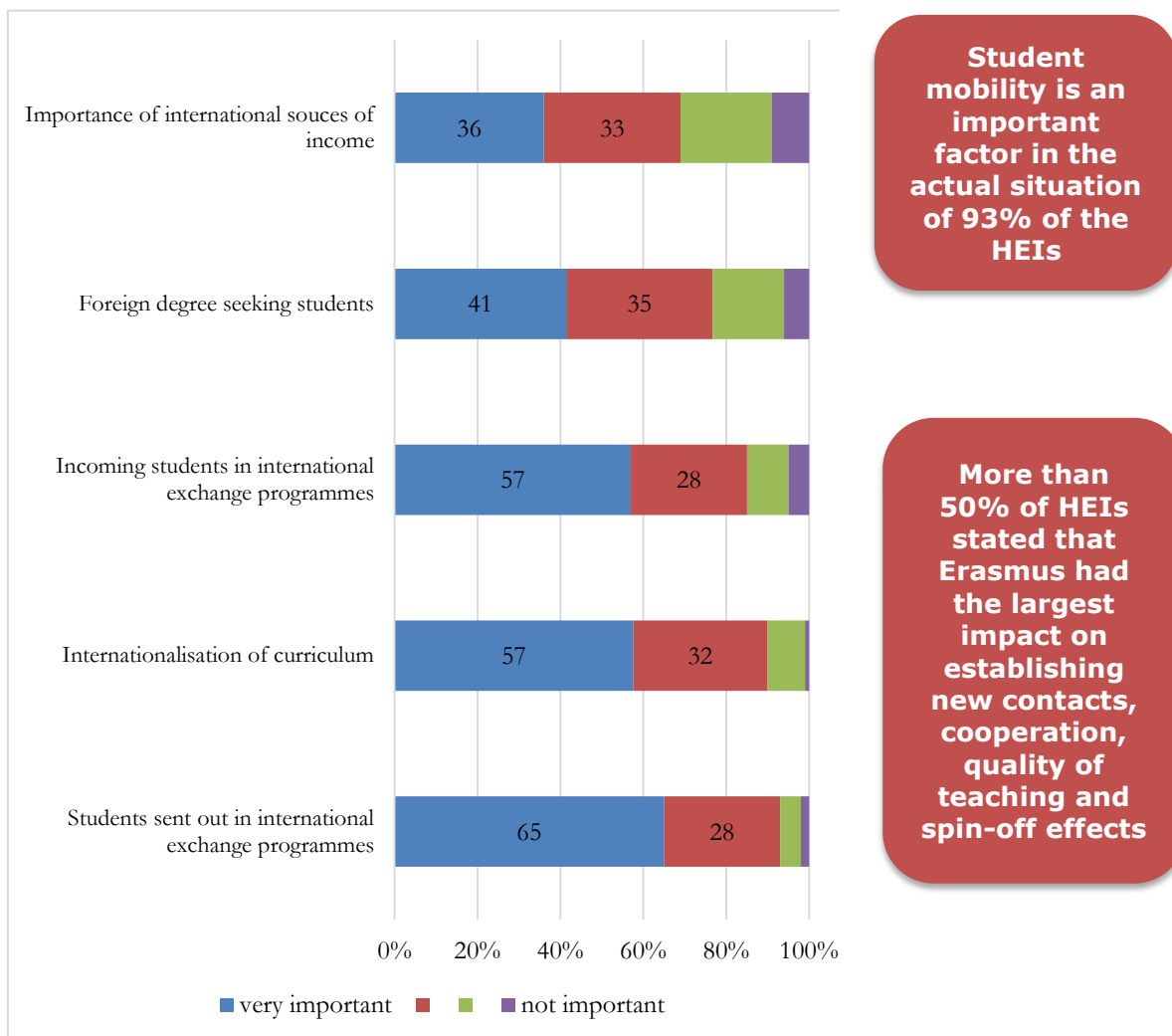


**Figure 4-31 Important characteristics of HEIs, employers vs. HEI (in %)**



## Internationalisation activities, in general, and Erasmus, in particular

**Figure 4-32 Aspects of relevance for the actual situation of the respective HEI**



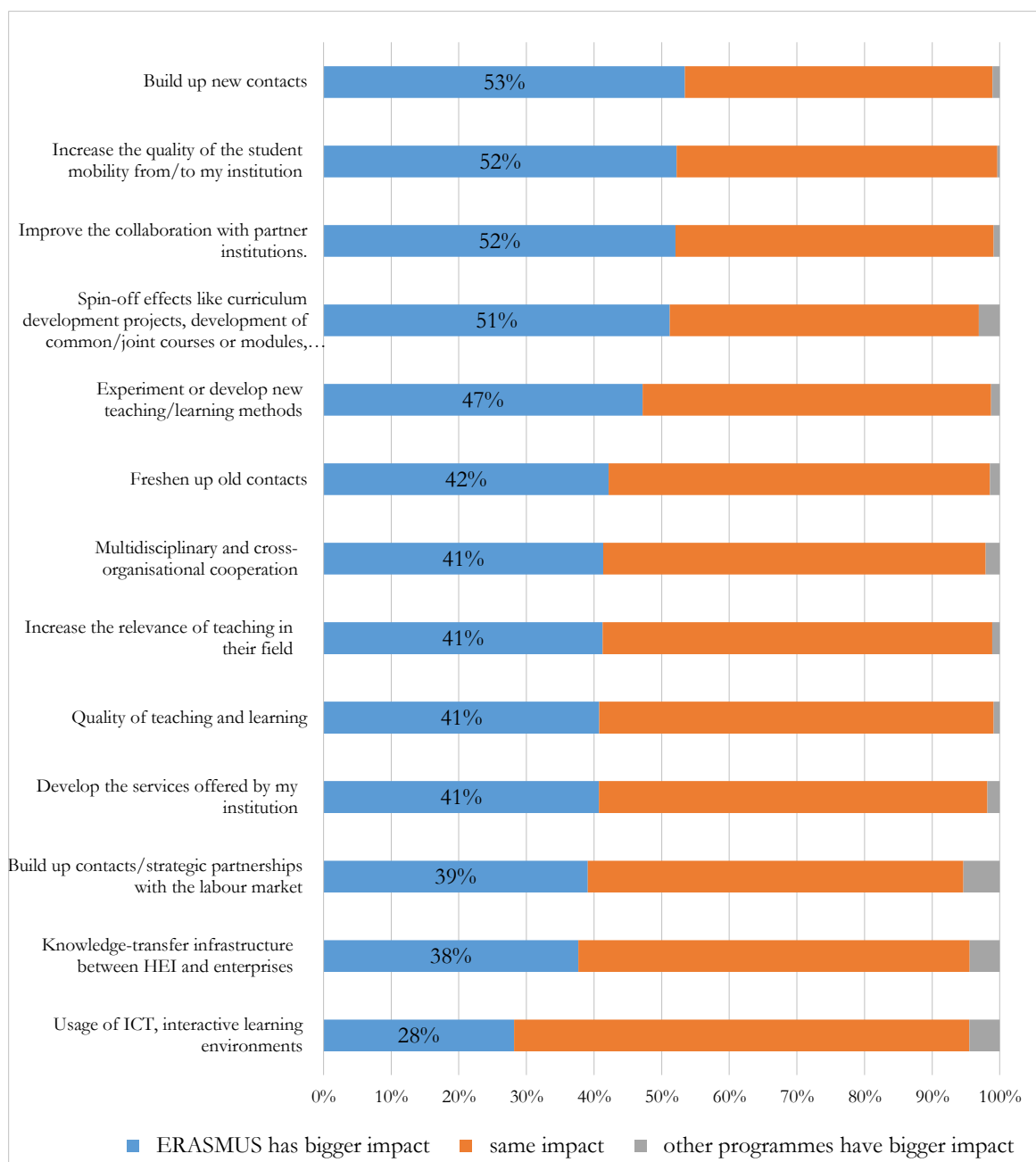
The vast majority of HEIs that responded were of the view that internationalisation in its various aspects was of considerable importance in their present situation.

The most important factor in relation to the present situation of HEI's was student mobility (more than 90% regarded this as important or very important), followed by the internationalisation of the curriculum. The desire for an international degree and international exchanges were next on the list of important aspects. This is fully in line with the newest IAU global survey (Egron-Pollak and Hudson, 2014) which stated that student mobility was one of the most important driving rationales of internationalisation also outside Europe.

If internationalisation in the areas mentioned was considered important or even very important, this could be related to the assessment of the effect of the Erasmus programme in this specific area.

For a majority of HEIs the Erasmus programme was considered to have a greater impact on the HEIs than other programmes in four areas: establishing new contacts (53%); increasing the quality of the HEI's own student mobility (52%); improvement in the cooperation with other partners (52%); and spin-off effects, such as joint degrees or modules (51%).

**Figure 4-33 Institutional impact of Erasmus, HEI perspective**



However, in all other cases, the majority of the respondents saw no difference in impact between the Erasmus programme and other programmes, although the group of respondents, which attributed a greater impact to Erasmus, was always larger than that which perceived an advantage in other programmes in respect of all aspects under scrutiny, including bilateral programmes.

**Table 4-11 Aspects of Erasmus with relevance for the internationalisation process and international profile of an HEI, HEI perspective**

Relevance of the following aspects of the Erasmus programme for the internationalisation process and the international profile of your HEI?	Internationalisation process	International profile
very important/important	%	%
Erasmus study mobility	83	80
Erasmus traineeship/work placement mobility	74	68
Erasmus teaching staff mobility (for teaching and training) STA	72	67
Erasmus administrative staff mobility (for training) STT	53	51
Erasmus Intensive Programmes (IP)	42	45

In the case of the HEIs, all the Erasmus actions were considered important with regard to both the internationalisation and their international profile, as one saw in the previous section. However, of the various types of actions, study mobility was considered to be the most important, both for the HEIs' internationalisation process (83%) and for their international profile (80%), which did not come as a surprise given the volume of that action. In second place were work placements (74% and 68%), followed by teaching staff mobility (72% and 67%). It should be noted that work placements did not yet appear to be that common, especially at large research universities, which was also reflected in the EIS data. The other two actions received substantially lower percentages, with administrative staff mobility at 53% and 51% for internationalisation and international profile respectively, with IPs bringing up the rear (42% and 45%). In the light of the findings of the qualitative study, namely that staff mobility and, in particular, academic staff mobility were not infrequently perceived as "a hobby", the low level of implementation of incentives and, in particular, support structures was confirmed, in that staff mobility always ranks lower than student mobility. Given the influence of staff mobility on student decision-making, as was observed previously, this might indicate room for improvement.

**Staff mobility was not considered as important as it probably should be given its impact on student mobility**

### Relation of staff to home HEI, home city, home country, and Europe

There were differences between the two types of staff with regard to their relationship to their home country, Europe or their own HEI and all of them were statistically significant.

**Table 4-12 Relation to HEI, city, country & Europe, mobile vs. non-mobile staff**

How strongly do you relate to...	Mobile	Non-mobile
very strongly/strongly	%	%
...your HEI	88	78
...the city you live in	78	71
...the country you live in	80	75
...Europe	85	69

**85% of mobile staff strongly related to Europe**

The results were slightly different from the student perspective in that mobile staff related more strongly to each of the four aspects than non-mobile staff, whereas in the case of students, mobile students showed a markedly stronger relationship to Europe. The difference between mobile and non-mobile staff was largest for the relationship to Europe, with 85% of mobile staff (compared to 69% of non-mobile staff) have a strong relationship to Europe. The differences with regard to their relationship to their own HEI and Europe were also statistically significant.

On the basis of the data regarding attitudes towards Europe from the previous chapter on the competences of students (chapter 3), one could compare the attitude towards Europe across three groups of respondents: students, alumni and staff.

**Table 4-13 Comparing students, alumni and staff regarding relation to Europe, different types of mobility**

How strongly do you relate to Europe <sup>74</sup>	%
agree/rather agree	%
Mobile students <i>ex ante</i>	81
Mobile students <i>ex post</i>	80
Non-mobile students	70
Mobile alumni	82
Non-mobile alumni	66
Mobile staff	85
Non-mobile staff	69

**More than 80% of all mobile students, alumni and staff showed a strong affiliation to Europe**

There were striking similarities. All three mobile groups had a strong affiliation to Europe (80% to 85%). This share was also always about 12% to 15% larger than the comparable share among non-mobile individuals of these three groups and the differences are all statistically significant.

The type of Erasmus mobility action did not play a relevant role in relation to an **improvement in “feeling European”**. All groups of students showed very similar results, claiming that their feeling European was improved considerably by this experience of mobility. With regard to their feeling European, 83% of those on mobility for study, 84% of those on work placements and 86% of participants in IP programmes experienced an improvement in their European perspective.

<sup>74</sup> If not mentioned otherwise, values are always *ex ante*, as in most cases participants were only asked once.

**Table 4-14 Relation to Europe, by Erasmus action type**

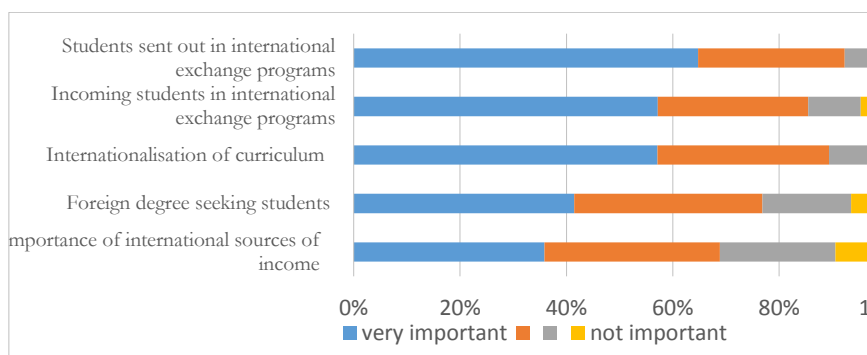
How strongly do you relate to Europe?	Studies	Work placement	IPs
very strongly/strongly	%	%	%
Students <i>ex ante</i>	84	83	83
Students <i>ex post</i>	77	83	81
Alumni	84	82	85
	STA	STT	IP
Staff	88	87	89

**More than 80% of all respondents (students, staff, alumni) across all Erasmus actions displayed a strong relationship to Europe**

In all of the groups, except for students after a study-abroad experience, more than 80% of the respondents had a strong relationship to Europe, with the lower end being occupied by students of studies (*ex post*) at 77%; at the top end one could find staff in IP programmes with scores of 89%. In general, in all categories, about 4% to 5% more staff than students or alumni claimed to have a strong relationship to Europe.

**Internationalisation of HEI**

**Figure 4-34 Aspects of importance for the actual situation of the HEI, HEI perspective**

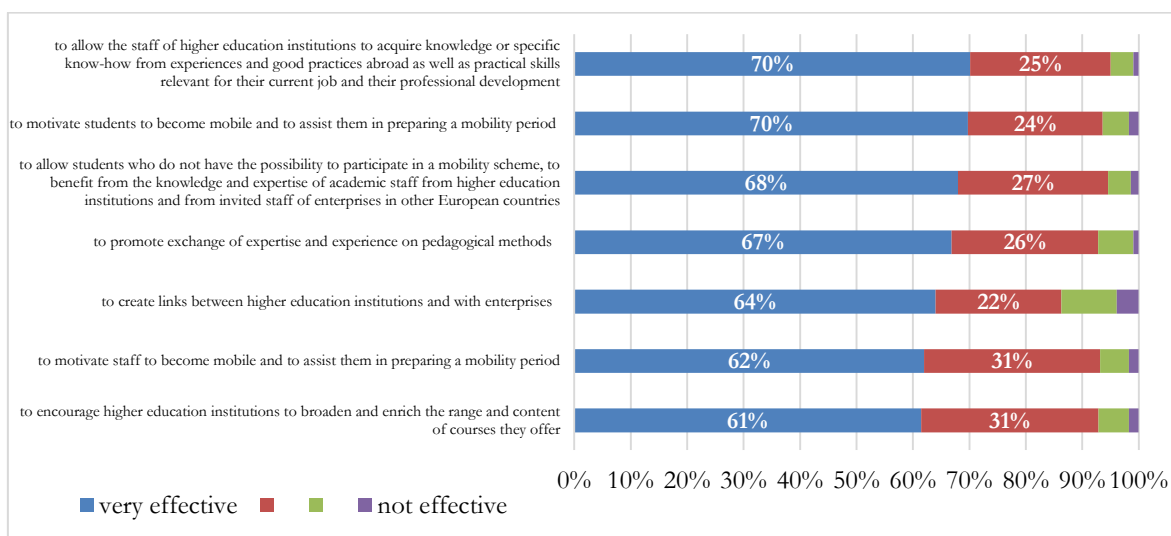


**All internationalisation aspects were relevant for 93% of responding**

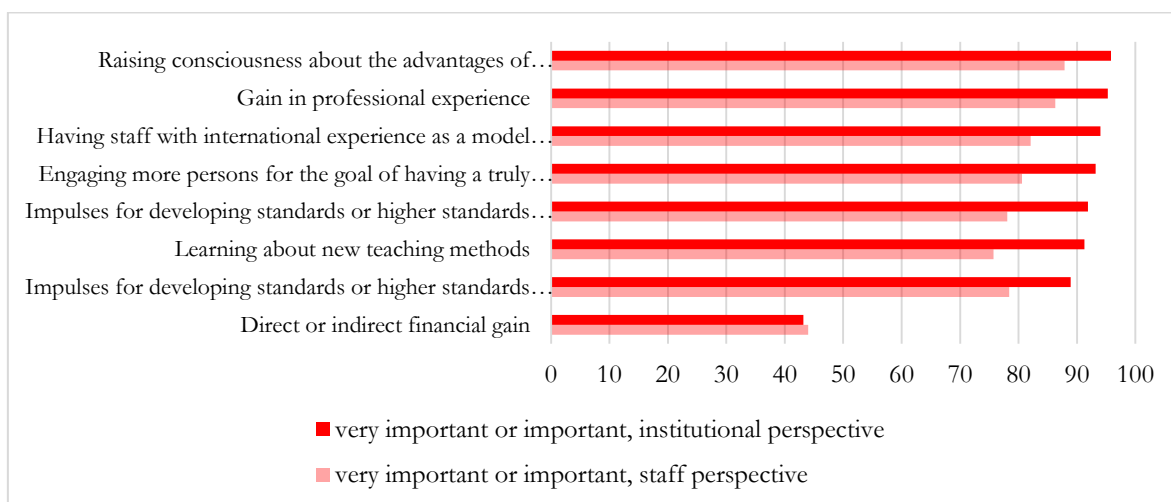
Of the participating HEIs, 65% considered international student exchanges to be very important for their HEI's situation, 57% acknowledged the role of the internationalisation of the curriculum and 57% regarded incoming exchange students as very important. Foreign degree students and international sources of income were very important for only 41% or 36%, respectively. The majority of HEIs saw international staff mobility as very effective when it came to the acquisition of new knowledge (95%), to motivate students to become mobile (94%), to support internationalisation at home (95%) and to promote new methods (93%). Staff mobility was also considered very effective in creating links with other HEIs and enterprises (86%), motivating staff to become mobile (93%), and broadening the range of courses offered by HEIs (92%).

**Study mobility was the most important Erasmus action for the internationalisation process (83%) and the international profile (80%) of HEIs**

**Figure 4-35 Effectiveness of staff mobility for teaching regarding the achievement of major goals; HEI perspective**



**Figure 4-36 Institutional benefits and reasons to engage in staff mobility, HEI vs. staff perspective (in %)**

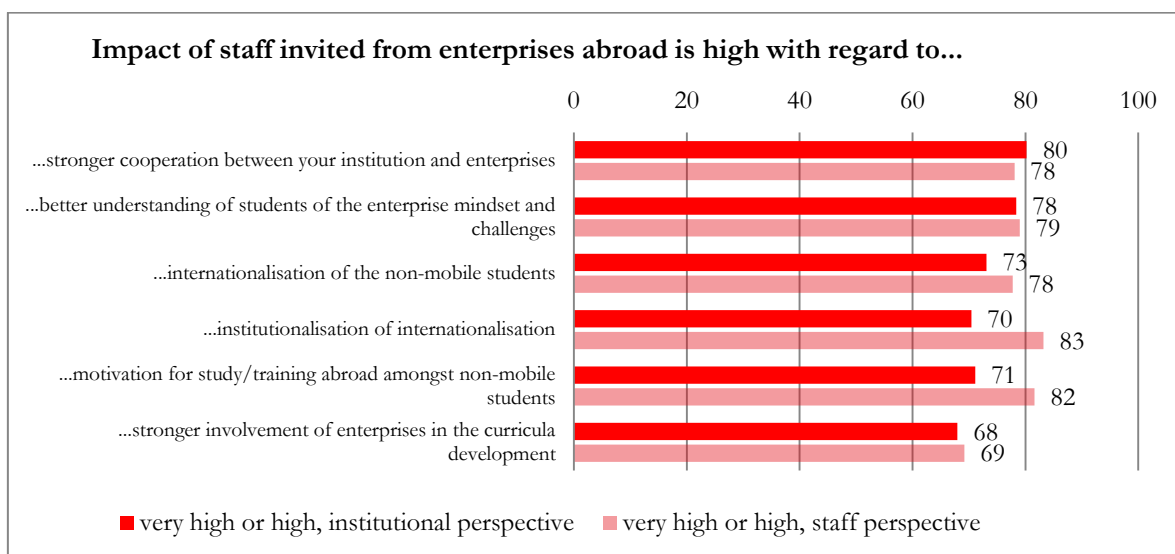


The hierarchy of potential benefits and reasons for HEIs to engage in staff mobility was almost identical, in the opinion of the HEIs and staff. The most important benefits and reasons seemed to lie in raising awareness of the advantages of internationalisation, allowing staff to gain professional experience and having staff with international experience serve as a role model for students. The least important factor, in the unanimous opinion of both target groups, was the financial gain from mobility.

The EIS study also examined the effect of staff from foreign companies. Here the assumed impact was high for both groups (HEIs and staff).

**95% of HEIs regarded staff mobility as very effective in the acquisition of knowledge and in support of internationalisation at home**

**Figure 4-37 Impact of staff invited from enterprises abroad, HEI vs. staff perspective<sup>75</sup> (in %)**



While for the HEIs the most relevant aspects were stronger cooperation between the HEI and companies, followed by providing students with a better understanding of the mindset of companies, in the opinion of staff this form of mobility had the most relevant impact on the institutionalisation of internationalisation and the motivation of non-mobile students to go abroad. Both aspects were rather low on the list of the HEIs.

These findings coincided with the results of the qualitative focus groups and interviews. The experience of learning in a different educational system and culture promoted students' predisposition towards internationalisation, either by

continuing their studies abroad or as a form of career development. Likewise, the mobile students interviewed acknowledged the transformation of their HEIs in accordance with an internationalisation strategy that promoted work placements and studying periods abroad for students and enhanced international teaching experience and student exchanges. Moreover, this strategy was considered positive and modern, giving a quality bonus to the HEI in question. The internationalisation strategy of HEIs was seen as promoting curricular adaptation of courses and subjects to international students. In turn, these changes provided added value to receiving HEIs that were consequently able to attract more international students. Non-mobile students also seemed to be aware of the impact of Erasmus mobility on the internationalisation of their home institution in terms of increased diversity, openness and innovation. They benefited from incoming Erasmus students by broadening their perspectives on learning and life.

***"Erasmus students need more cultural and social contact. We need to learn everything about the country we move to"***  
(Student, ES)

***"We should help more Erasmus students to integrate into the university life with the local students and not only with the other Erasmus students."***  
(Student, DE)

<sup>75</sup> This is the staff perspective of all staff with regard to the aspect of staff invited from enterprises.



They could also take advantage of international guest lecturers, for example through the so-called “**internalisation at home**” programmes. Guest lecturers also served to internationalise the curricula of receiving HEIs in a way that may benefit both, students and academic staff.

Internationalisation was seen as a process in which all the actors involved ended up taking on new roles, and in which change in attitudes was almost an obligation. Both, student and staff opinions moved between more support for courses and degrees in English (to get more academic profit from the stay abroad) and the promotion of local languages and cultures, on the one hand, and undifferentiated treatment of Erasmus and local students (that favours the original spirit of Erasmus mobility and the idea of exchange and immersion) on the other.

The international dimension of HEIs was considered to be embedded in all key institutional documents and practices, and significantly expanded the circle of institutional partnerships and agreements. Although in some countries there were other international mobility programmes, internationalisation of HEIs seemed to rely heavily on Erasmus

mobility, and its formal procedures were usually applied to other international or cooperation programmes and agreements. For many HEIs, Erasmus mobility had been and still was the most significant form of openness to the outside world and the most important basis for designing an internationalisation strategy. This became even more evident in the case of new or private universities, for which Erasmus was the “umbrella” strategy which supported and encouraged their internationalisation.

***“Erasmus is the backbone of the internationalisation of higher education and we can see this at the national level as well; for example, when the bilateral Russia-Finland programme was developed, Erasmus was a sort of role model.”***  
(Staff, FI)

***“Erasmus mobility represents the capstone of the internationalisation for Czech HEIs.”***  
(Staff, CZ)

## 4.7. Conclusions

### ***What impact has international background of staff?***

Regarding personality traits and competences, EIS broke ground by analysing, for the first time, the psychometry-related mind-set differences between staff with a mobility experience and non-mobile staff. In general, mobile staff had better memo© values than non-mobile staff and that this difference was statistically significant. The Cohen d value showed a small effect and the distribution over percentiles showed the mean average of mobile staff had an advantage of 5% over non-mobile staff of two quantiles. All this showed that there was a measurable difference and that it mattered.

EIS also looked at the perceptions of staff regarding their attitudes towards skills acquisition through mobility. The overwhelming majority of academic and non-academic staff who had mobility experience thought that staff mobility in relation to teaching helps staff to acquire expertise and new skills. The perceived gains in relation to the personal competences of the staff involved in all the mobility actions were most impressive. Of the staff involved in the three Erasmus actions, 78% to 96% claimed to have improved in all four areas of competence, with social competences benefiting most from a mobility experience (93% to 96%).

Feeling European is also enhanced through the mobility experience of staff, as 85% of the mobile staff claimed to have a strong relationship to Europe, compared to 69% of non-mobile staff. Mobility of staff also seemed to strengthen ties with the other dimensions, as in contrast to students mobile staff also had stronger relationships to their own HEI, city and country than non-mobile staff.

Non-academic and especially academic staff agreed that staff mobility in relation to teaching supports cooperation building between HEIs and companies. While both groups usually agreed on the reasons for staff mobility, there was also a remarkable difference in the assessment of staff mobility within the framework of the Erasmus programme as a driver for change in the services of the home HEI. While more than 50% of the mobile non-academic staff regarded this as an important reason for staff mobility within the Erasmus programme, less than 25% of the mobile academic staff agreed with this statement. This, however, can be explained by the fact that non-academic staff are predominantly concerned with the improvement of services, while this aspect is of much less relevance to academic staff.

Staff perception of mobility was confirmed by the HEIs. Of the HEIs, 54% agreed that the cooperation structures within the Erasmus programme depended on personal relationships, while more than 80% of the participants amongst the staff surveyed agreed that the Erasmus programme, in particular, improves relationships with peers abroad and facilitates international collaboration agreements. This collaboration involved multilateral Erasmus projects or networks (81% agreed or rather agreed), the initiation of research projects (77%) or participation in research projects (73%).

### ***How does mobility influence teaching methods, curricula and research?***

For more than 70% of the staff, the most important effect of staff mobility was the gain in knowledge of good practice and skills for their work at their home HEI. The academic staff also saw substantial effects on the promotion of new ideas and methods, as well as on teaching skills, resulting from the mobility of teaching staff. Furthermore, academic staff also observed beneficial effects on the quality of teaching (81%), while 92% saw effects on multi-disciplinary and cross-organisational cooperation as well as international cooperation, in general. Fewer saw effects on the use of ICT (64%) and knowledge transfer between HEIs and companies (only 62%).

The qualitative study confirmed these findings. With regard to staff in general, teachers also indicated an overall positive experience of the Erasmus programme, but were slightly less enthusiastic than students. Experiences abroad were (in contrast to students) mostly academic and professional. Cultural and personal experiences were mentioned less often. Experiences and reviews were very positive within this framework, although there seemed to be a general complaint about the lack of academic, institutional and curricular recognition of this kind of exchange.

This viewpoint was shared by the HEIs. More than 90% of the HEIs regarded staff mobility as effective in achieving major objectives, such as the motivation of students to go abroad, internationalisation at home, the promotion of new pedagogical methods, the motivation of other staff to go abroad and the enrichment of their course offerings. More than 90% of staff and HEIs were also of the view that staff mobility for teaching supported internationalisation at home.

Finally, academic staff mobility also fostered research cooperation to a considerable extent. Of the mobile academic staff, 69% agreed that staff exchanges increased research opportunities and are perceived as an important asset in strengthening the research capacity of HEIs.

IPs were considered a particularly effective instrument of internationalisation. More than 90% of formerly mobile staff evaluated IPs as having a strong impact on the internationalisation of the curriculum and raising awareness for internationalisation and 68% of academic staff with IP experience observed an increase in research opportunities. One explanation for this might be that the invitation to participate in an IP abroad can be assumed to be based often on an academic bond between the academics who issue the invitation and the academics invited and that during the period in which the IP is held research interests are discussed and possibly meetings occur with other academics and new ideas are developed.

Overall, the qualitative study confirmed all these findings regarding the influence on Erasmus on teaching and curriculum development. In many countries and fields of study, Erasmus represents the only opportunity for teachers to travel abroad and there was a strong consensus among the interviewees that these mobility actions in relation to teaching had an impact on cooperation in research as well as the development of teaching methods and new curricula. Staff mobility was considered to be of assistance in developing foreign language proficiency, usually English. According to the staff interviewed, teaching students with different educational and cultural backgrounds required reflection and the experience of teaching in intercultural contexts thus had a strong potential to lead to more comprehensive teaching competences on the part of the mobile academic staff.

However, there is also evidence from staff and students that staff mobility had an effect on the internationalisation of the curricula of the home institution. Especially in the UK, where staff visits to mobile students appeared to be more commonplace, there was evidence that these visits were being used to learn how study programmes at the home institution could be improved. Effects of student mobility on the development of teaching methods and new curricula was naturally considered much smaller and evidence of such effects came mainly from smaller, Northern European HEIs. Staff mobility also claimed to generate new research cooperation activities between participating staff and colleagues from other European countries. Indeed, in many cases there was a strong link between staff mobility and research cooperation through the expansion of cooperation in relation to staff mobility for training and increased motivation to write joint research papers or to start research projects. Staff mobility thus provided an effective way to develop and reinforce links with existing partner HEIs.

### ***How does mobility affect the cooperation of HEIs?***

Staff mobility was considered to be of the utmost importance to the advancement of cooperation between HEIs. Of all HEIs, 98% expected improvement in the collaboration with partner institutions. Of the staff, 80% agreed that a period abroad helped them establish new contacts and for 63% this mobility improved collaboration with partner HEIs, although only about one third of staff respondents observed positive effects relating to joint degrees. Staff mobility is also thought to give rise to new mobility among other staff as a spin-off effect.

However, regarding cooperation between HEIs, 42% of the HEIs regarded IPs as more effective than staff mobility, while 47% of them saw similar effects of both activities. Regarding collaborative networks, 49% of the HEIs gave more weight to IPs and 55% considered them more effective for teacher cooperation.

IPs also had an impact on other aspects of cooperation. Of the respondents, 89% stated that IPs had some or substantial impact on new activities involving cooperation between lecturers and HEIs. Furthermore, 41% of the respondents thought that IPs had a considerable or large impact on the initiation of new partnerships between their HEIs and other HEIs or businesses/organisations, although due to the low response to this particular question the interpretative value of this finding was limited.

Although IPs were considered important in many ways, the actual involvement in such IPs did not live up to these expectations. Only 31% of the participating HEIs stated that they had had experience of IPs. Of these HEIs, 64% regarded IPs as very important for the international profile of their HEI and 60% for the internationalisation of the HEI. Given the importance that was attached to IPs and the positive feedback, both in the perceptions of staff and HEIs, on the one hand, and the memo© results (also for staff), on the other hand, IPs seemed to be an extremely efficient instrument of internationalisation that fostered employability and cooperation between HEIs and therefore may deserved more attention.

Cooperation was one of the core aspects of the focus groups. The interviews and the feedback again confirmed the quantitative findings. Especially the large number of incoming and outgoing staff and students had a visible impact on inter-institutional networking of the HEIs which participated in Erasmus.

As a general rule, according to the interviewees, cooperation between universities grows with the number of exchanges of students between them. There were also many examples of university-business cooperation, such as EU-funded research projects enabled on the basis of prior cooperation agreements for student work placements. Student mobility for work placements sometimes led to more university-business cooperation.

Often cooperation between HEIs was said to start with staff and student exchanges and then to evolve through joint research projects to double-degree programmes and larger research cooperation, with staff training and teaching mobility activities providing the context for coordination and preparation. In many countries, the team found very stable and active networks of International Relations Offices from various HEIs. These networks were based on stable professional relationships, regular meetings, and the sharing of best practice.

The possibility of relying on Erasmus and other European funding seemed to be an important enabling factor for cooperation between HEIs in Europe. Erasmus mobility programmes led HEIs, particularly from UK and Finland, to focus much more on cooperation with other European countries and HEIs than they would otherwise have done.

### ***What is the perception regarding support services of HEIs for mobility?***

Of the participating HEIs, 90% estimated that mobility windows were important. 69% of the HEIs responded that such windows had already been realised and of this group only 7% regarded them as less important and none as unimportant. Given that the students were mostly satisfied with the existence of such a window, the strategic aims of the HEIs seemed to have been realised over the past decades.

For 96% of HEIs, recognition of ECTS was the most important aspect of the organisational framework with regard to student mobility and it is also the most commonly implemented one—90% of HEIs declared that they recognised credits from host institutions abroad and 85% of students were convinced that their study programme recognises ECTS credits from a host HEI abroad. In the majority of cases, the existing study structures/programmes were considered well suited to international mobility (agreed upon by 70% of HEIs and students).

68% of mobile students stated that every student interested in studying abroad received adequate information and guidance. Only 49% of the students said that the HEI provided a lot of information regarding placements abroad, showing some room for improvement.

Most elements of the organisational frameworks were indicated as relevant by over 80% of HEIs. The only aspects that lagged behind were e-coaching and preparation courses (the latter being also the least implemented element of all and provided by only 51% of HEIs that responded). In general, gaps between the importance attributed and the levels of implementation persist for all aspects, most notably in relation to financial support, organisational support by associations and mobility windows.

The organisational framework for staff mobility was perceived as less important by HEIs and was less developed if compared with student mobility. 89% of HEIs stated that they provided staff with adequate information and support; these were 8% less than in the case of information on student mobility. The conditions also differed among categories of staff, with 79% of HEIs actively encouraging the mobility of teachers, but only 63% doing the same for administrative staff.

There was also still a gap between the perception of the relevance of several support activities to foster staff mobility and their implementation. Of the HEIs, 89% stated that they considered financial support to be very important, while only 67% had implemented it for the mobility of academic staff and 68% for the mobility of administrative staff. 82% of HEIs considered official recognition of a mobility experience as relevant, but only 58% had implemented it for academic staff and 56% for administrative staff.

Only a minority of HEIs had more concrete incentives for staff mobility in place at the time of analysis. A third of the HEIs ensured that there was reliable substitution of teaching staff who went abroad and only 25% provided a top-up grant. Only 10% contributed a top-up grant amounting to more than 50% of the Erasmus grant. Overall, 68% to 80% of HEIs still considered the financial level of incentives for staff mobility to be too low. A gap could be observed between the importance of certain activities and their implementation. Of the HEIs, 88% considered new staff mobility to be important in achieving sustainable internationalisation, while less than 60% observed that it had been implemented.

All these findings were again confirmed in the focus group meetings and interviews. There was a visible impact of the Erasmus programme on the internationalisation of higher education institutions. The large number of outgoing and incoming Erasmus students created a critical mass of demands for new and improved support services in many institutions. In many HEIs, this led to the standardisation and streamlining of processes such as credit recognition, which, albeit still in many cases problematic, greatly improved due to the use of ECTS and learning agreements. In many universities, the experience acquired through the use of tools that were originally developed for Erasmus (e.g. transcript of record, learning agreements) were used to professionalise and streamline other mobility programmes as well.

While Erasmus led to the development of an infrastructure for internationalisation at many universities, (expectations with regard to) the type and quality of HEI support services still vastly differ among countries. Where in some countries HEIs were solely responsible for providing teaching and learning, others offered support for the organisation of all aspects of student life, such as housing or job searches. Support **services were thus frequently confronted with mobile students' expectations. However,** in some Southern European countries, the quality of support services still suffered from a relatively low level of English language proficiency.

While staff mobility for training of administration personnel was still relatively rare in comparison to student mobility, there was evidence that where this did take place, it served to greatly improve the administrative support for courses taught at the respective department/HEI. In some countries, the lack of support service capacity may be a bottleneck for further expansion of mobility and exchanges of administrative personnel could enable the HEIs in these countries to advise students better and assist them in obtaining further qualifications.

While administrative support services have been established and professionalized, at many HEIs the development of a coherent internationalisation strategy was still at an early stage. At present, different strategies were pursued within HEIs to maintain existing cooperation activities and agreements. Since the maintenance of numerous partnerships posed a challenge in terms of time and human resources, the development of a coherent internationalisation strategy by HEIs will certainly be a major concern in the coming years. To improve the quality of Erasmus mobility, HEIs were aware that they should develop partnerships more strategically, and plan staff and student exchanges with a focus on academic quality, and not only on quantity and credit points. Nonetheless, HEIs profited from the structures and tools that were established at the organisational level in the context of the Erasmus programme. In addition, the experience within the Erasmus mobility programme seemed to have strengthened the interest in new partnerships within the European Union, as well as with HEIs in Asia, Northern and Latin America.

### ***How does mobility affect the internationalisation of HEIs and its strategic aspects?***

Exchanges and the internationalisation of the curriculum were relevant to the strategic development of more than 85% of HEIs, while financial aspects and degree-seeking students were only relevant to 69% to 76% of HEIs. Among all the different programmes or approaches available, Erasmus was considered the most relevant strategic asset. It was considered by the majority of institutional respondents to have a greater impact on HEIs than other programmes in four areas: establishing new contacts (53%), increasing the quality of the HEI's own student mobility (52%), improving cooperation with other partners (52%), and offering joint degrees or modules (51%).

While all Erasmus actions were important in relation to the strategic goals of HEIs, study mobility was the most important Erasmus action for the internationalisation process (83% of HEIs) and the international profile (79% of HEIs).

One of the core strategic interests of mobility in Europe is the promotion of a European identity. Here EIS shows that mobility has a strong effect. All three mobile groups (students, staff, alumni) had a strong affiliation to Europe, whereas all three non-mobile control groups assigned a statistically significant lower value to this. The percentage of people assigning such a high value to a European identity was also very similar amongst mobile students, alumni and staff, with values of 81% to 85%, respectively. This share was also always about 12% to 15% higher than the comparable share among the non-mobile respondents of these three groups and 80% of Erasmus students reported a positive attitude towards Europe.

The participants in the group meetings and interviews confirmed that the Erasmus programme made a valuable contribution to the internationalisation of students, staff and HEIs themselves. Erasmus is of crucial importance in internationalising HEIs. This was mentioned, in particular, by small, new or private HEIs, as they claimed that they did not usually have the funds to offer various mobility programmes. The Erasmus programme was the main enabling factor that supported and encouraged their internationalisation. Larger HEIs sometimes used Erasmus mobility to finance compulsory years of study abroad, which would not be possible if it were not for the

Erasmus programme. The brand name “Erasmus” is so strong that in many countries it became synonymous with international student mobility and even prospective students inquired about “Erasmus” opportunities before opting for a particular university. Indeed, the existence of the Erasmus programme allowed many HEIs to develop an internationalisation strategy in the first place and was a major driving factor in its further development.

The interviews showed that the presence of international students drove HEIs to adapt curricula and courses to make them more suitable to international participants. In turn, these changes provided added value to HEIs in attracting more international students. Also non-mobile students seemed to be aware of the impact of Erasmus mobility on the internationalisation of their home institution in terms of increased diversity, openness and innovation. They ultimately benefited from incoming Erasmus students, who broadened their perspectives on learning and life. International guest lecturers also supported the internationalisation of the curricula of receiving HEIs.

Due to the sheer number of Erasmus mobile students, for the vast majority of institutions the programme represents the point-of-departure and backbone of their internationalisation strategy. Even in countries with significant national mobility programmes (such as those organised by Germany’s DAAD), HEI representatives agreed that without Erasmus, internationalisation would never have taken on such an important role in their university’s strategy. Furthermore, in most European countries Erasmus was the role model upon which other mobility programmes were designed.

The substantial increase in international student numbers and its accompanying developments have increased the pressure on HEIs to formulate a more explicit internationalisation strategy. HEIs stated that they needed to address issues such as the conflict between offering more courses and services in English, as opposed to promoting local languages and cultures, the criteria used to select their international partners, or the form of internationalisation which best serves their mission and vision. This process is currently beginning in several European HEIs that participated in the qualitative study.

Furthermore, for institutional coordinators or other administrative staff involved in Erasmus mobility, there was always the hope of less bureaucracy, more flexibility in the use of funding, and financed follow-ups to Erasmus Mundus, as well as more national encouragement to implement the Bologna process fully.

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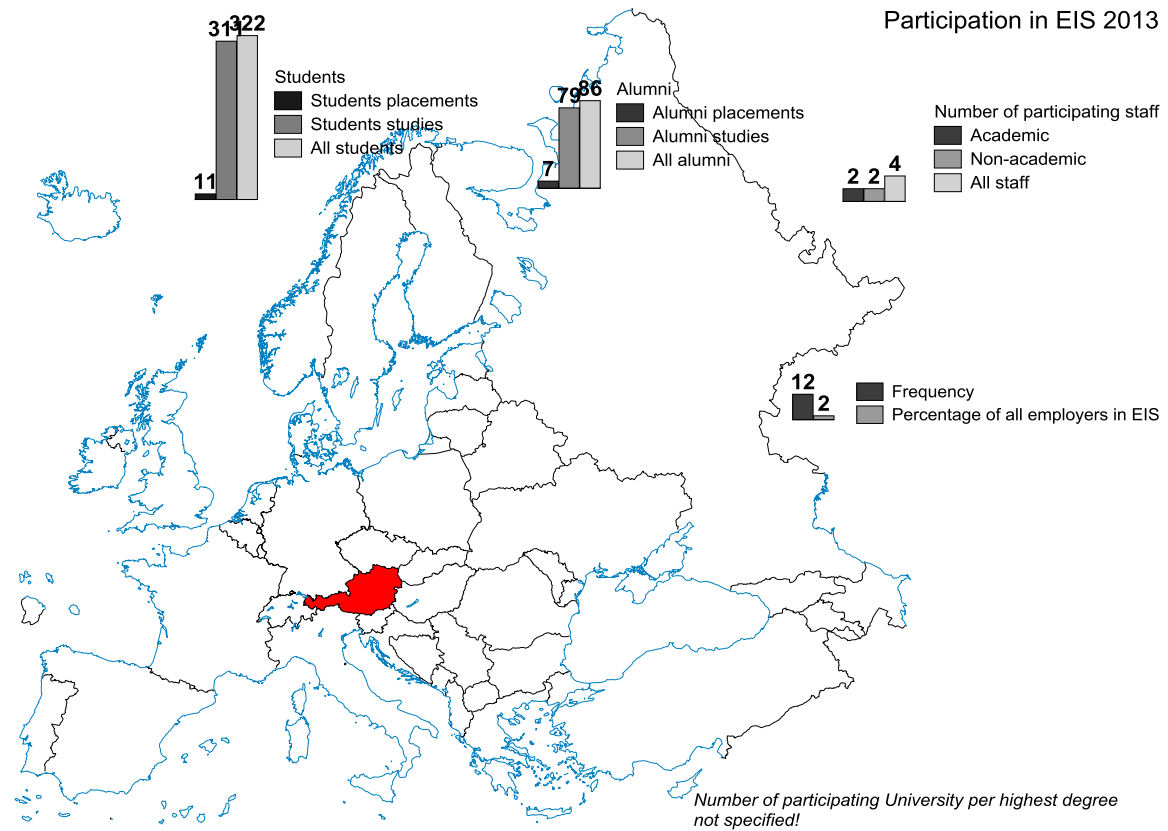
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# ANNEX: Country data sheets<sup>76</sup>

Austria

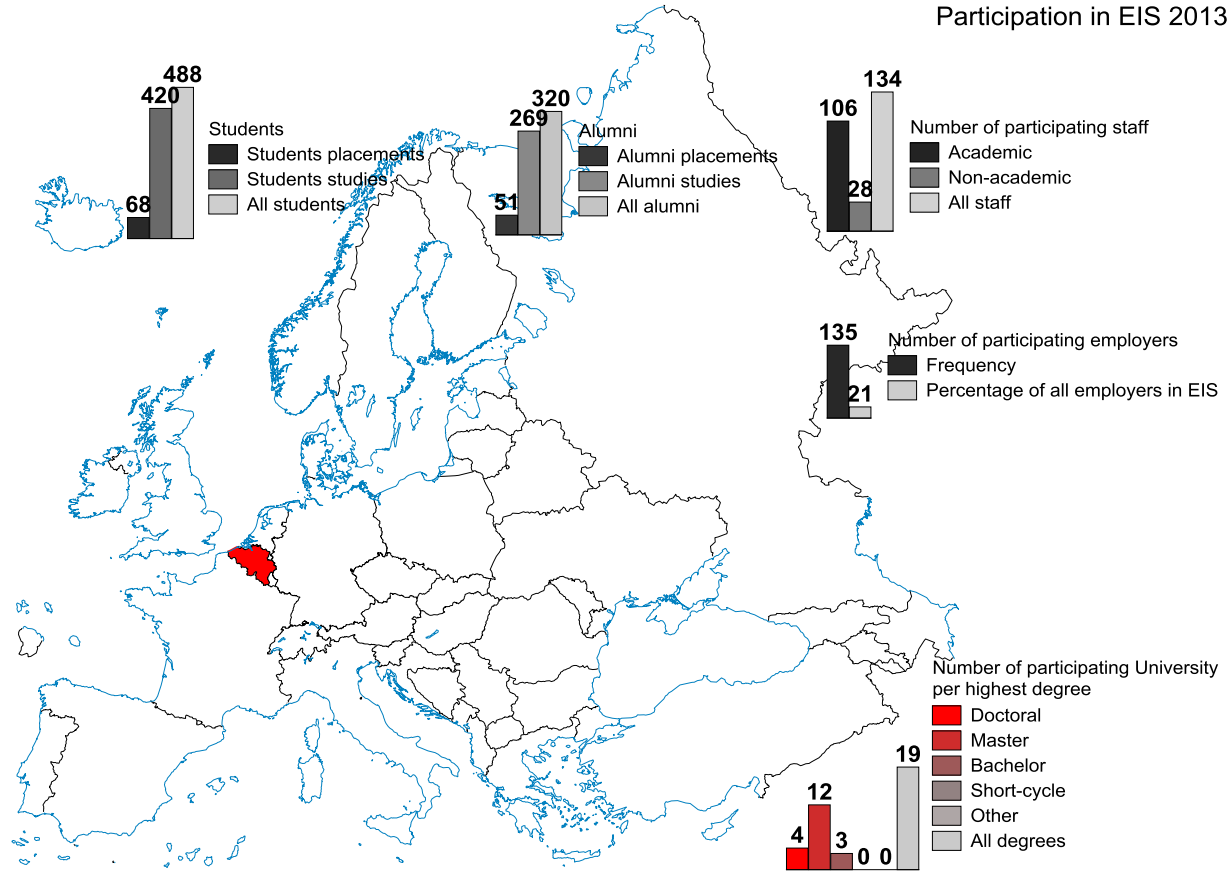


Students per field															
Agricultural Sciences	Architecture, urban and regional planning	Art and design	Business studies and management sciences	Education, teacher training	Engineering, technology	Geography, geology	Humanities	Languages and philosophical sciences	Law	Mathematics, informatics	Medical sciences	Natural sciences	Social sciences	Other	Total
8	18	20	223	43	37	8	36	87	50	14	9	29	70	31	683

<sup>76</sup> Numbers in graph refer to participants in ERASMUS actions. Numbers in Table show all students.

Belgium

Participation in EIS 2013

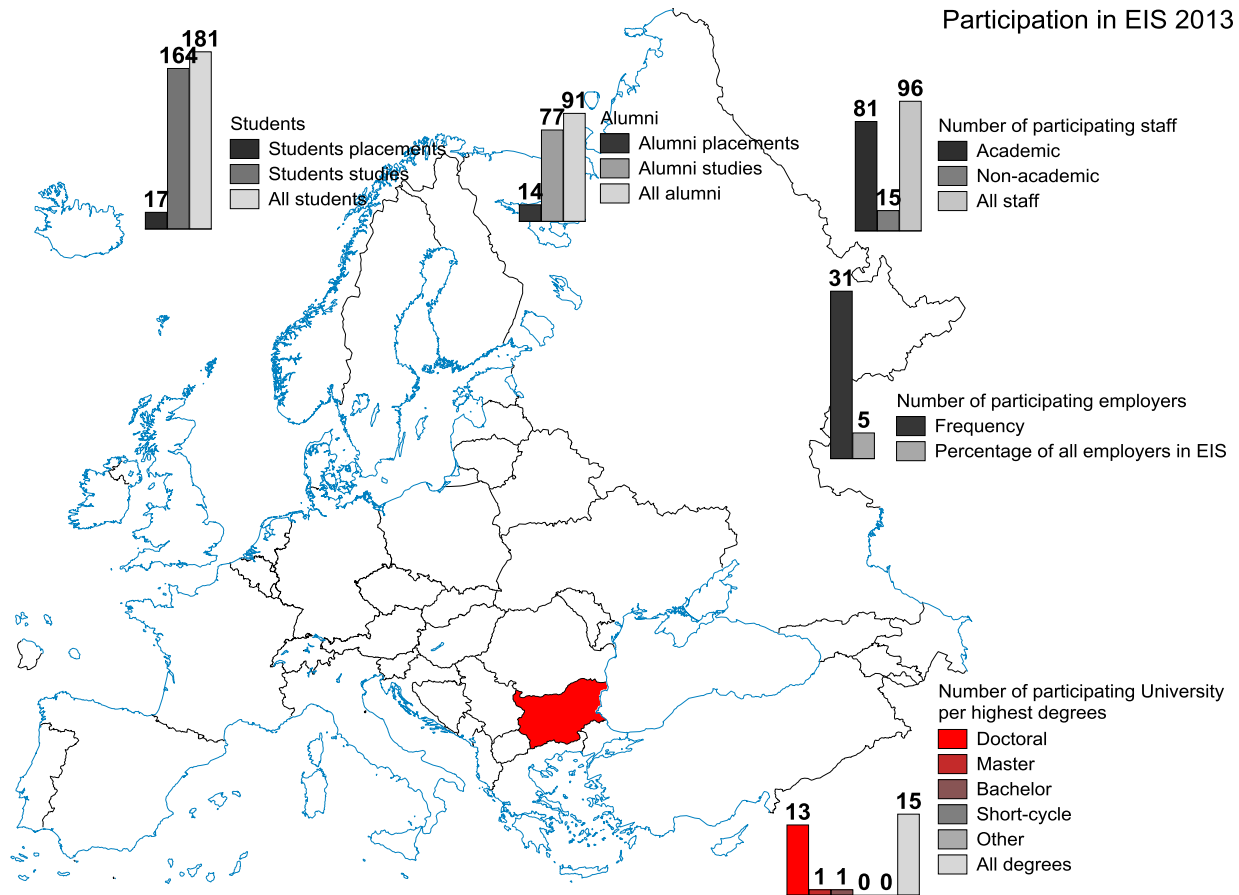


Students per field

Agricultural Sciences	Architecture, urban and regional planning	Art and design	Business studies and management sciences	Education, teacher training	Engineering, technology	Geography, geology	Humanities	Languages and philosophical sciences	Law	Mathematics, informatics	Medical sciences	Natural sciences	Social sciences	Other	Total
9	17	28	428	96	139	6	86	149	118	43	165	51	201	131	1667



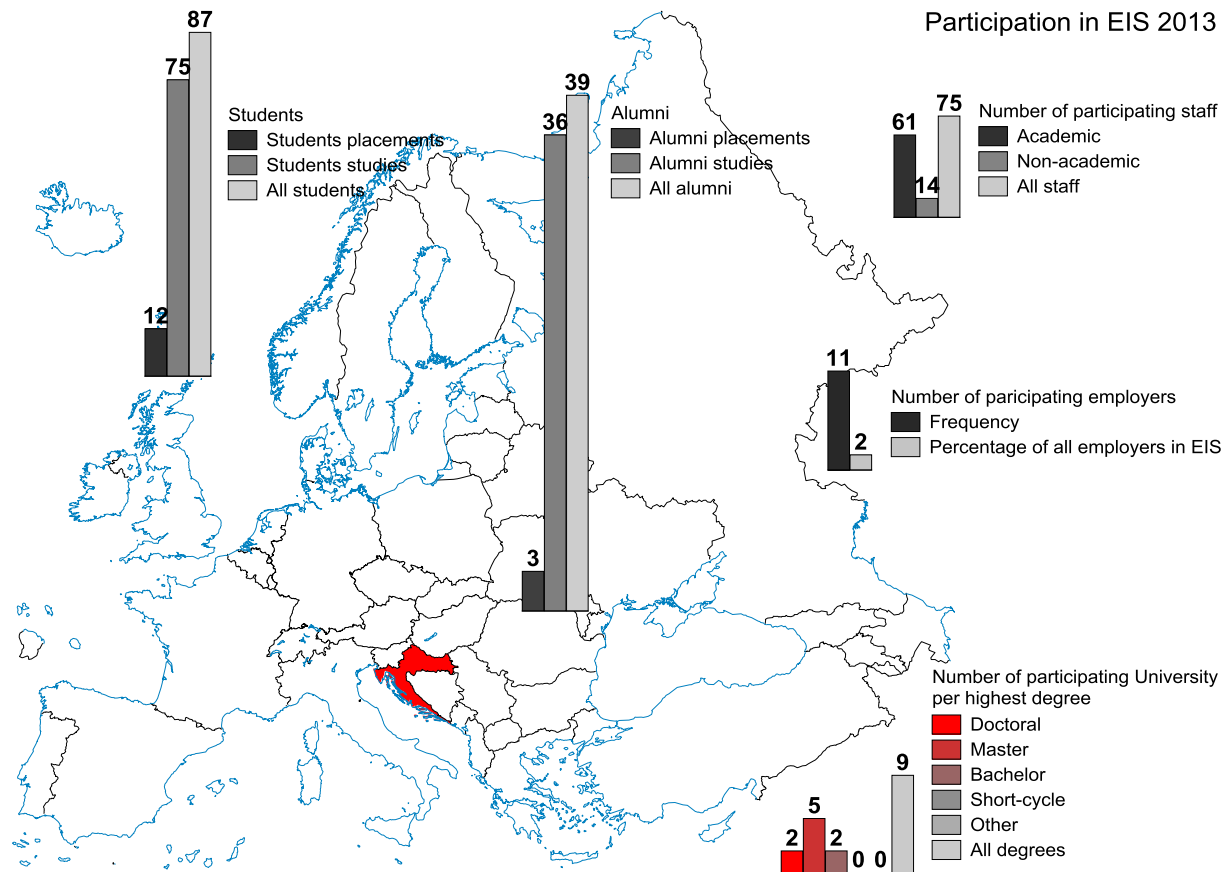
Bulgaria



Students per field

Agricultural Sciences	Architecture, urban and regional planning	Art and design	Business studies and management sciences	Education, teacher training	Engineering, technology	Geography, geology	Humanities	Languages and philosophical sciences	Law	Mathematics, informatics	Medical sciences	Natural sciences	Social sciences	Other	Total
6	22	19	177	9	33	1	8	13	17	10	9	7	33	35	399

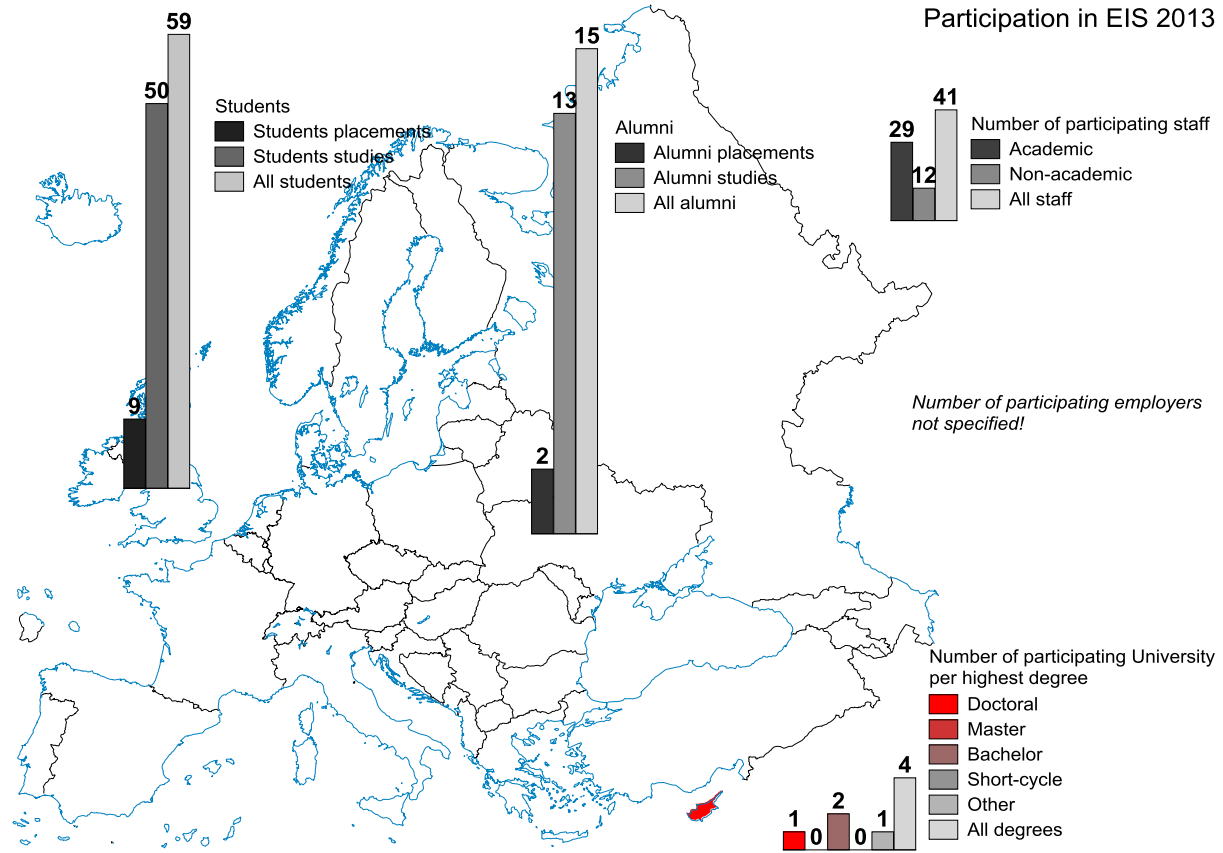
Croatia



Students per field

Agricultural Sciences	Architecture, urban and regional planning	Art and design	Business studies and management sciences	Education, teacher training	Engineering, technology	Geography, geology	Humanities	Languages and philosophical sciences	Law	Mathematics, informatics	Medical sciences	Natural sciences	Social sciences	Other	Total
5	7	28	91	13	42	5	22	50	15	22	1	7	26	9	343

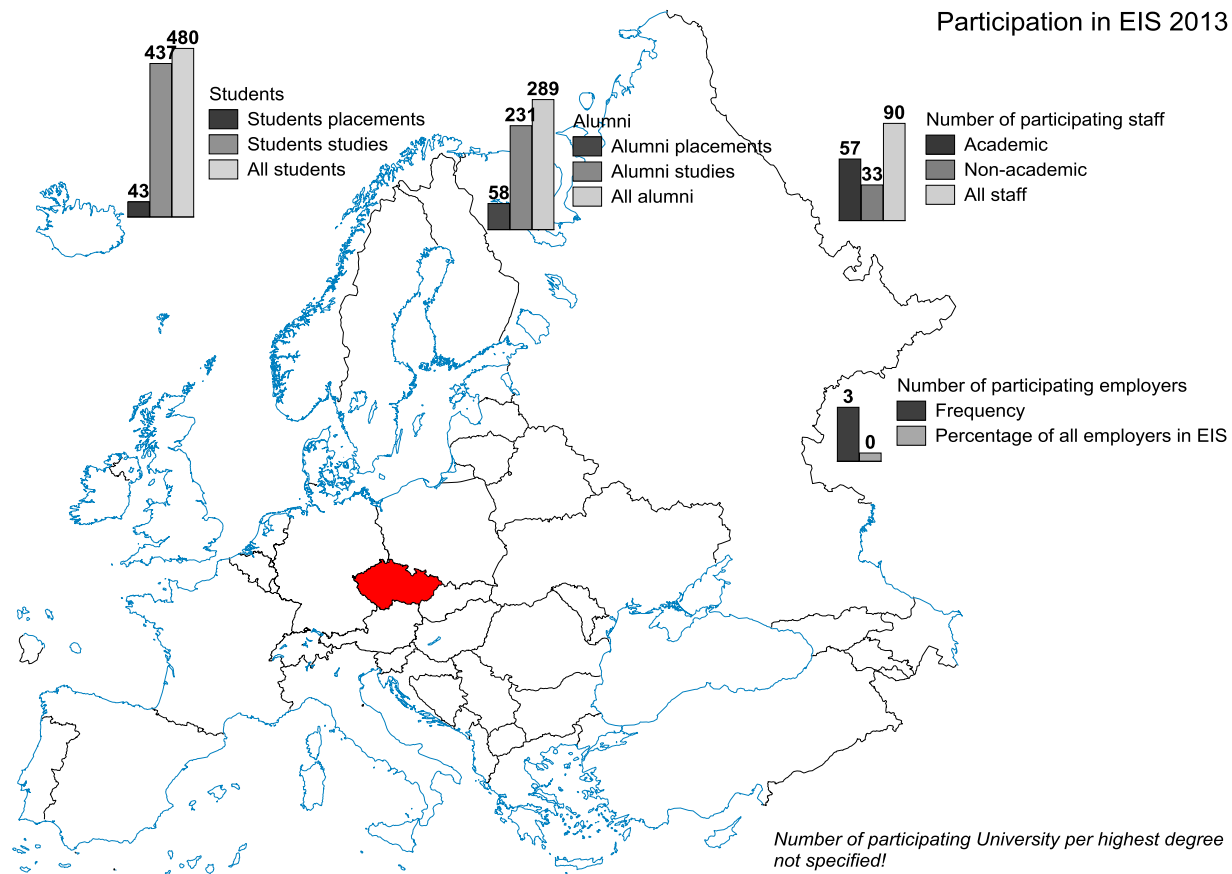
Cyprus



Students per field

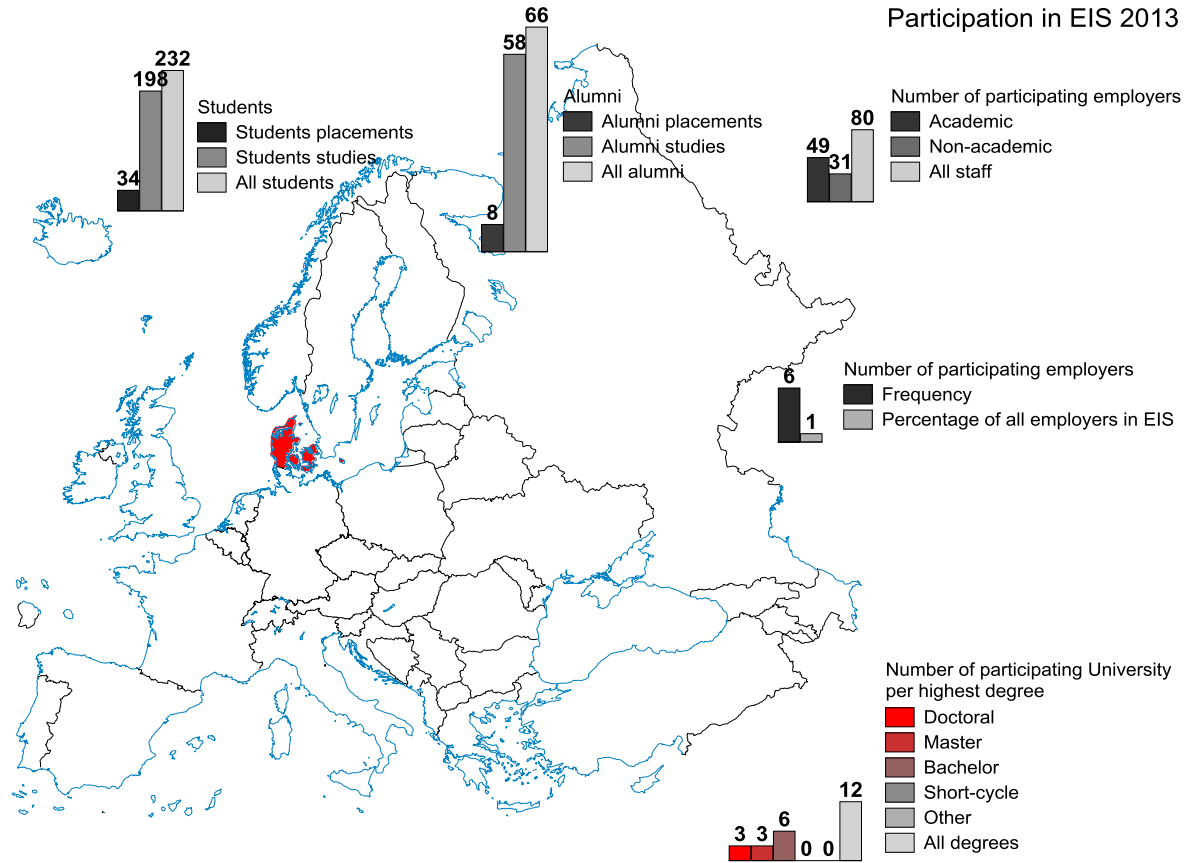
Agricultural Sciences	Architecture, urban and regional planning	Art and design	Business studies and management sciences	Education, teacher training	Engineering, technology	Geography, geology	Humanities	Languages and philosophical sciences	Law	Mathematics, informatics	Medical sciences	Natural sciences	Social sciences	Other	Total
0	4	6	30	27	18	1	13	13	8	11	2	9	23	11	176

Czech Republic



Students per field															
Agricultural Sciences	Architecture, urban and regional planning	Art and design	Business studies and management sciences	Education, teacher training	Engineering, technology	Geography, geology	Humanities	Languages and philosophical sciences	Law	Mathematics, informatics	Medical sciences	Natural sciences	Social sciences	Other	Total
4	5	12	180	72	42	14	73	135	87	43	44	88	174	47	1020

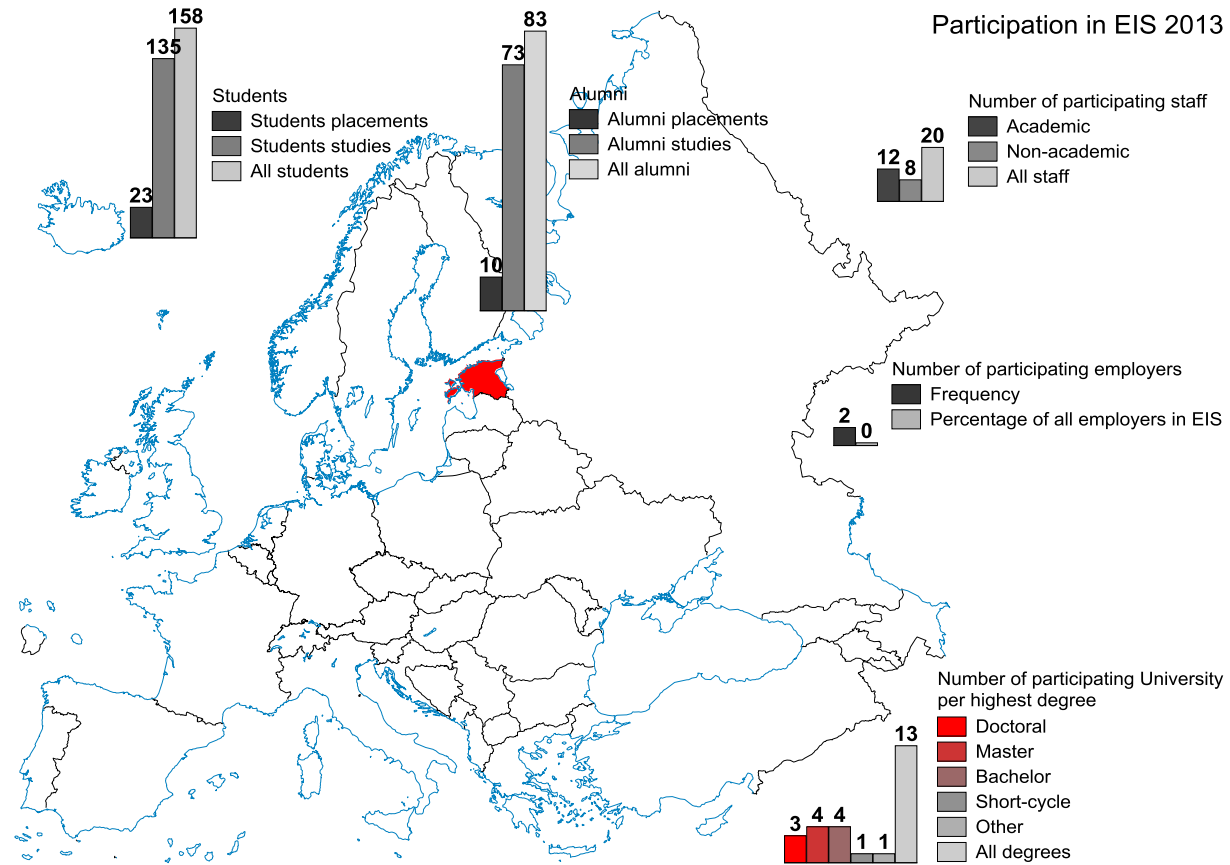
Denmark



Students per field

Agricultural Sciences	Architecture, urban and regional planning	Art and design	Business studies and management sciences	Education, teacher training	Engineering, technology	Geography, geology	Humanities	Languages and philosophical sciences	Law	Mathematics, informatics	Medical sciences	Natural sciences	Social sciences	Other	Total
7	36	79	283	244	50	9	223	32	48	18	196	41	201	190	1657

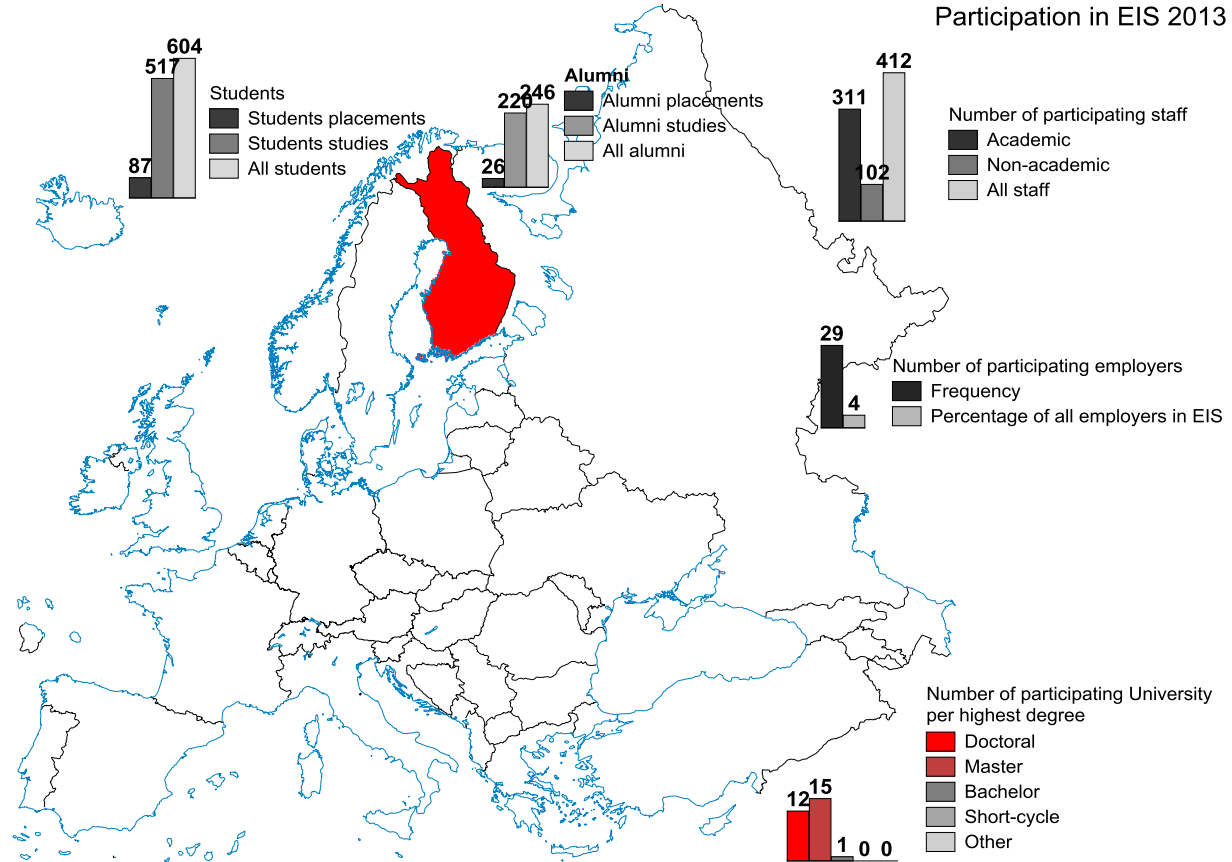
Estonia



Students per field

Agricultural Sciences	Architecture, urban and regional planning	Art and design	Business studies and management sciences	Education, teacher training	Engineering, technology	Geography, geology	Humanities	Languages and philosophical sciences	Law	Mathematics, informatics	Medical sciences	Natural sciences	Social sciences	Other	Total
0	7	59	85	29	29	16	43	39	41	16	43	43	78	26	554

Finland

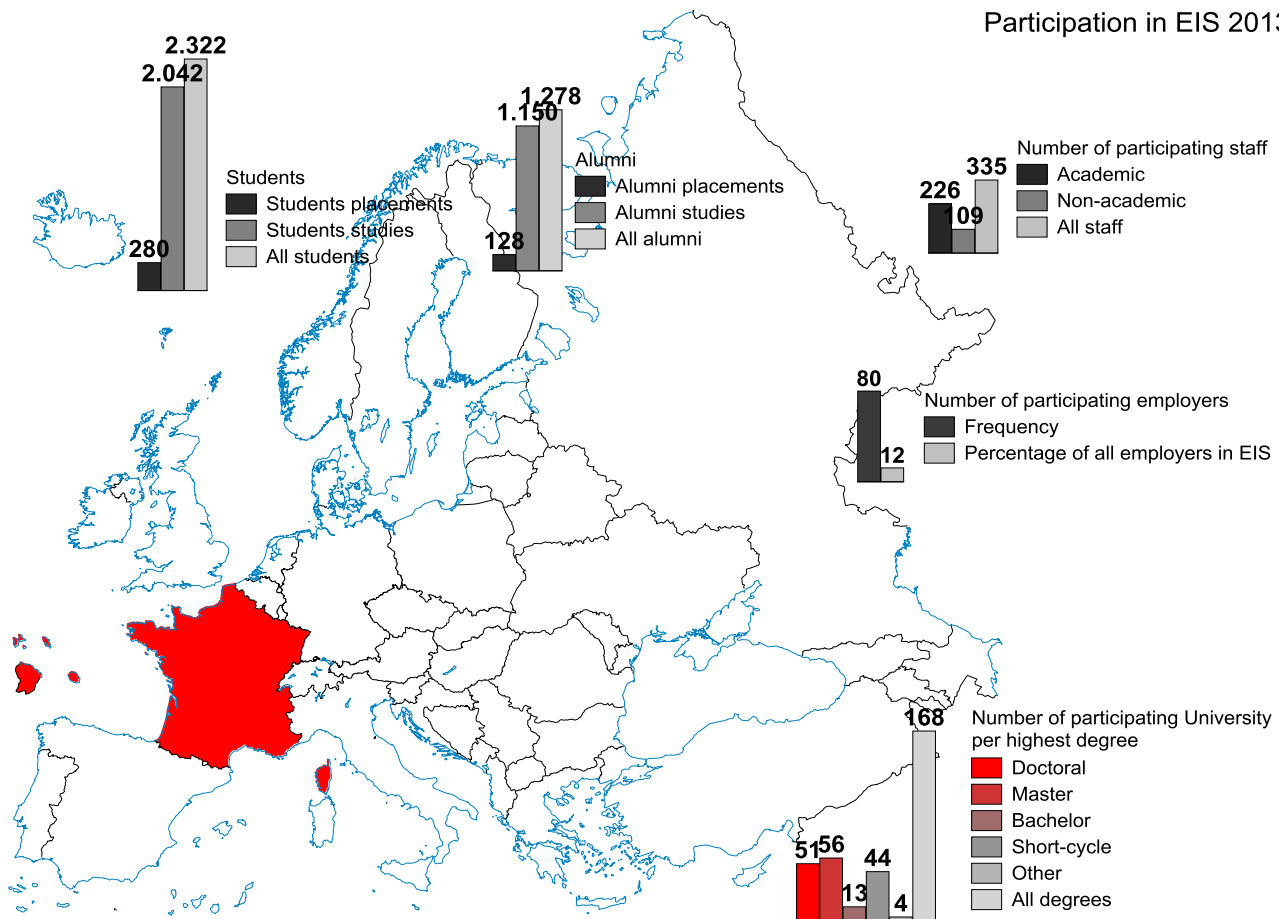


Students per field

Agricultural Sciences	Architecture, urban and regional planning	Art and design	Business studies and management sciences	Education, teacher training	Engineering, technology	Geography, geology	Humanities	Languages and philosophical sciences	Law	Mathematics, informatics	Medical sciences	Natural sciences	Social sciences	Other	Total
26	7	111	672	89	221	14	124	149	75	32	154	126	180	213	2193

France

Participation in EIS 2013

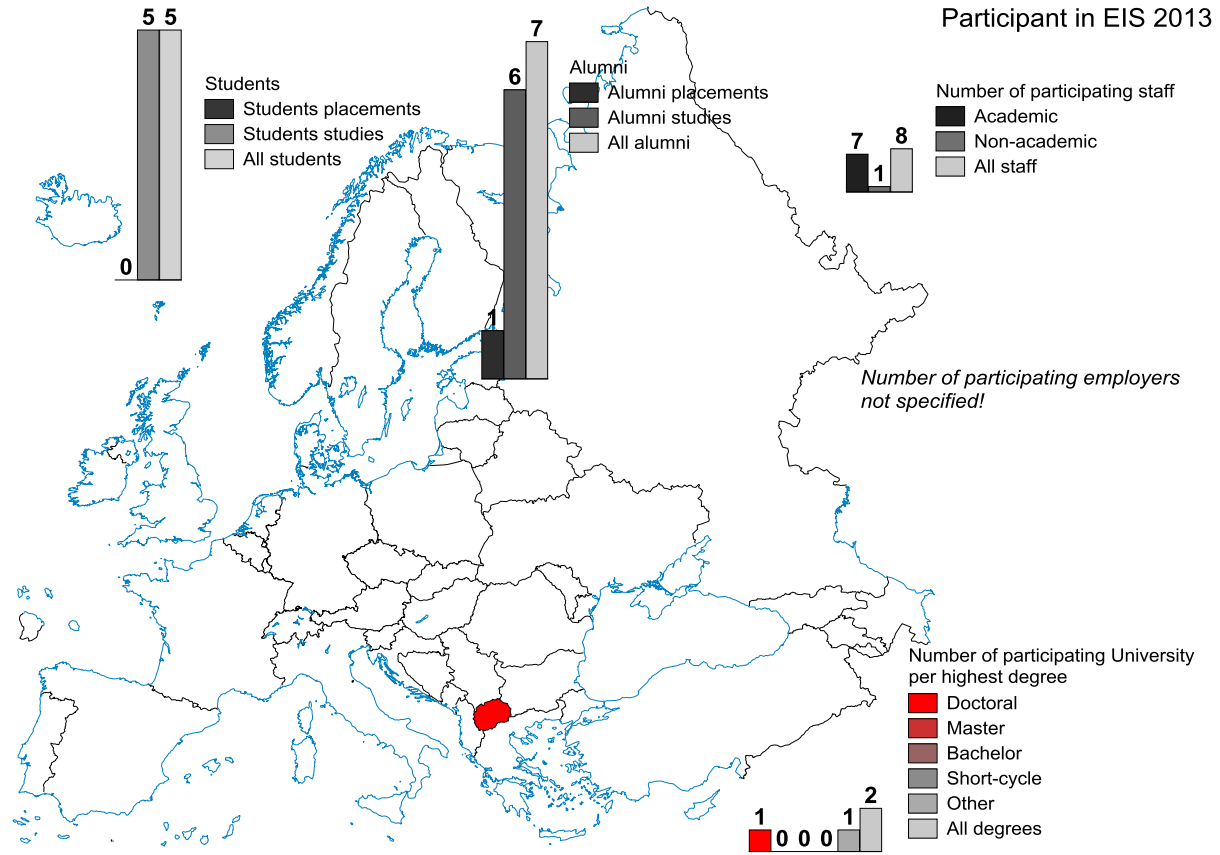


Students per field

Agricultural Sciences	Architecture, urban and regional planning	Art and design	Business studies and management sciences	Education, teacher training	Engineering, technology	Geography, geology	Humanities	Languages and philosophical sciences	Law	Mathematics, informatics	Medical sciences	Natural sciences	Social sciences	Other	Total
202	118	239	1541	97	1144	77	366	699	698	201	113	99	480	366	6440



FYROM

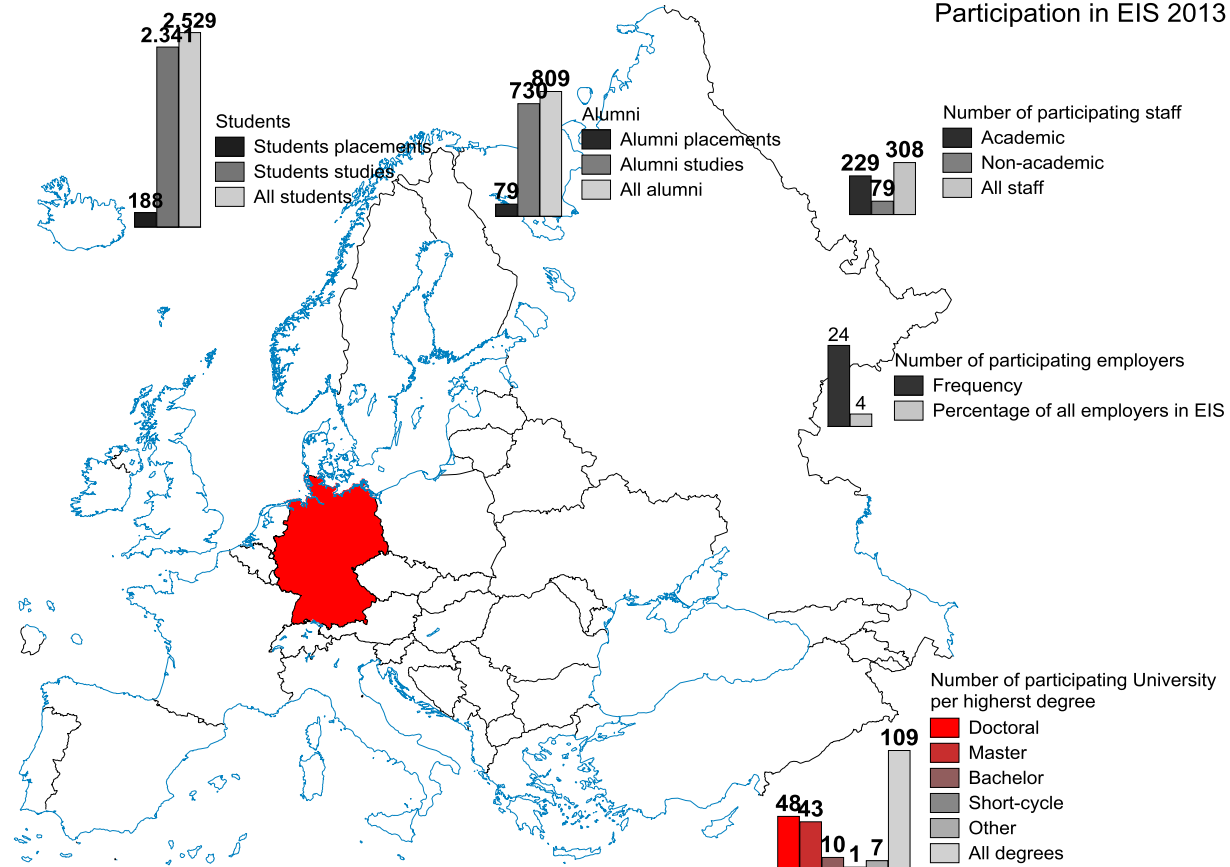


Students per field

Agricultural Sciences	Architecture, urban and regional planning	Art and design	Business studies and management sciences	Education, teacher training	Engineering, technology	Geography, geology	Humanities	Languages and philosophical sciences	Law	Mathematics, informatics	Medical sciences	Natural sciences	Social sciences	Other	Total
0	0	0	20	0	7	0	0	4	5	2	0	3	5	7	53

Germany

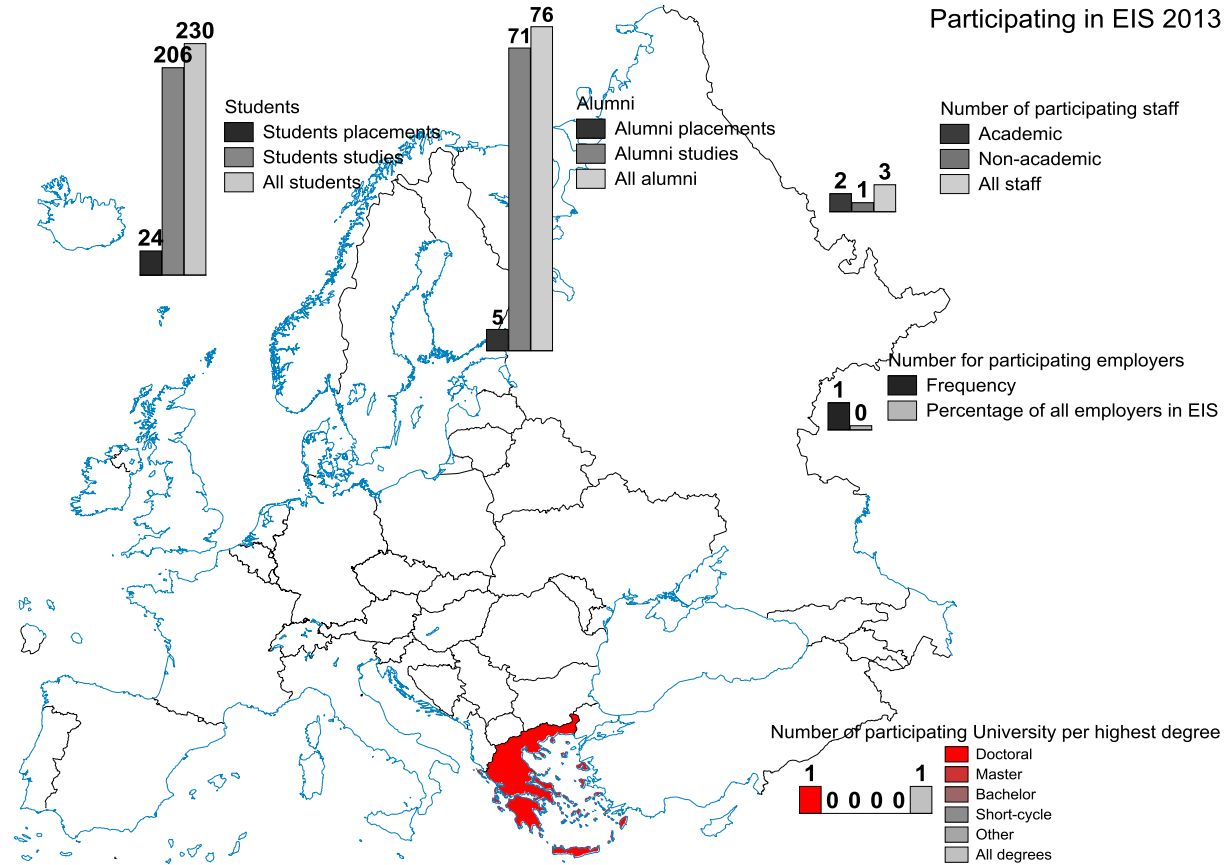
Participation in EIS 2013



Students per field

Agricultural Sciences	Architecture, urban and regional planning	Art and design	Business studies and management sciences	Education, teacher training	Engineering, technology	Geography, geology	Humanities	Languages and philosophical sciences	Law	Mathematics, informatics	Medical sciences	Natural sciences	Social sciences	Other	Total
25	117	130	1531	446	550	137	340	802	262	186	275	368	707	392	6268

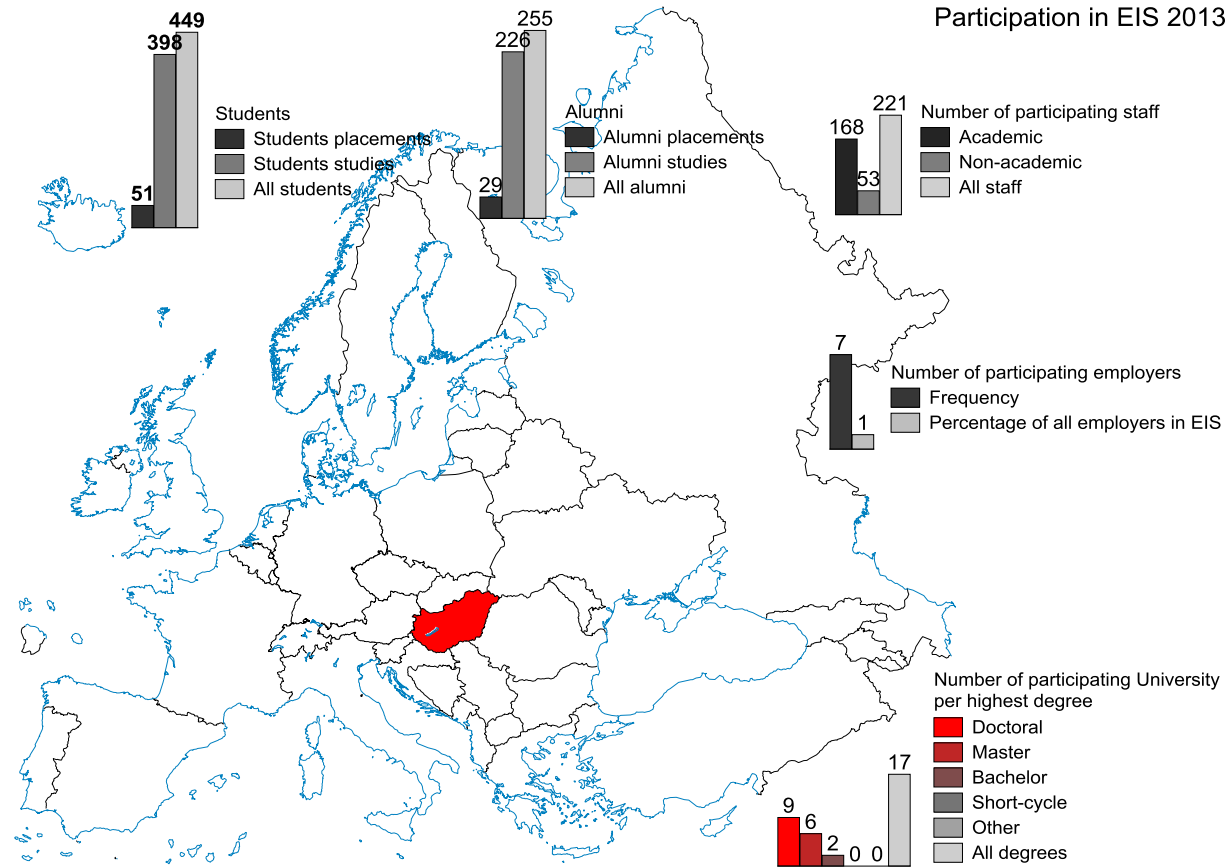
Greece



Students per field

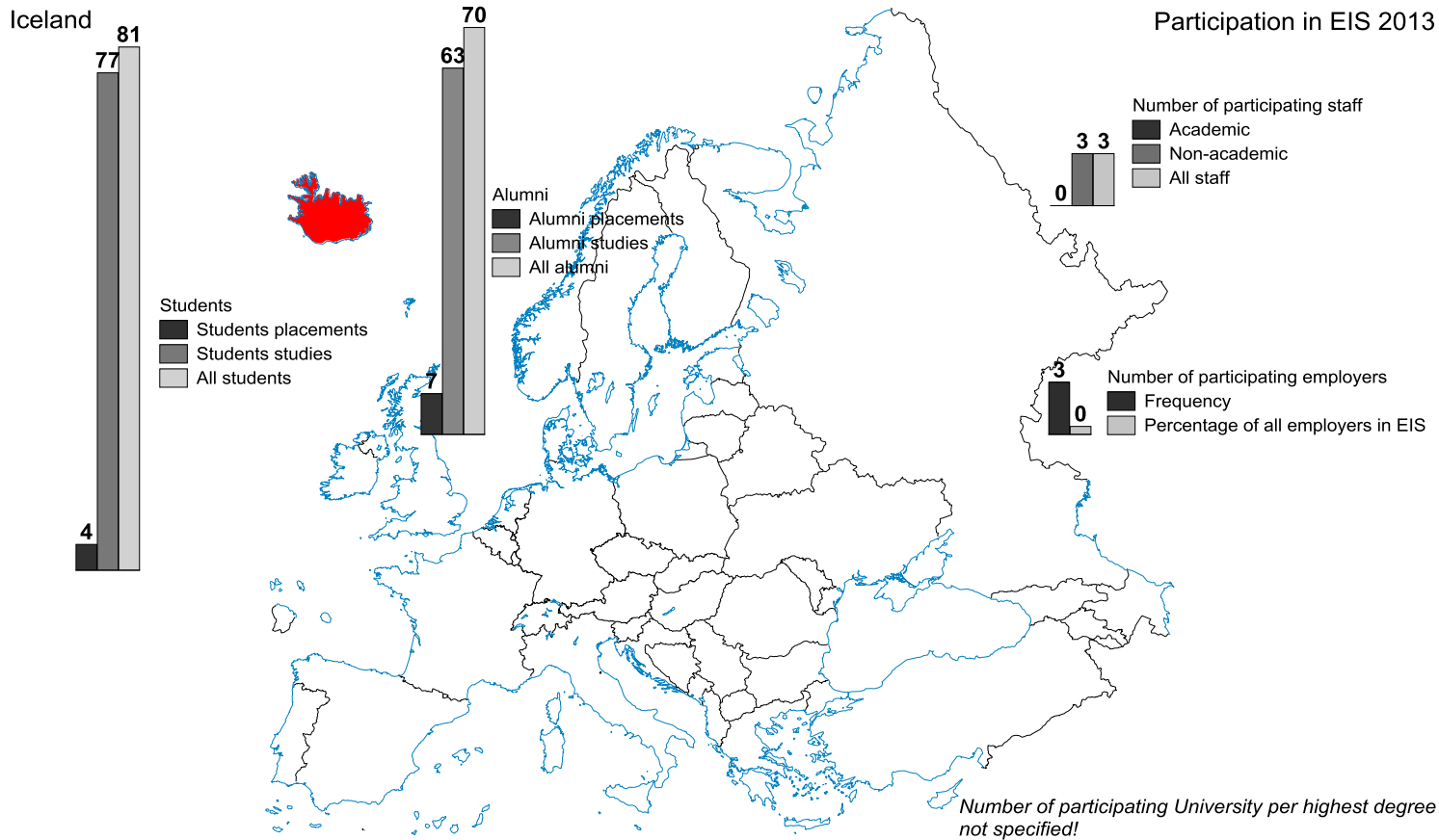
Agricultural Sciences	Architecture, urban and regional planning	Art and design	Business studies and management sciences	Education, teacher training	Engineering, technology	Geography, geology	Humanities	Languages and philosophical sciences	Law	Mathematics, informatics	Medical sciences	Natural sciences	Social sciences	Other	Total
8	12	14	159	46	69	2	36	75	24	57	31	43	54	38	668

# Hungary



Students per field

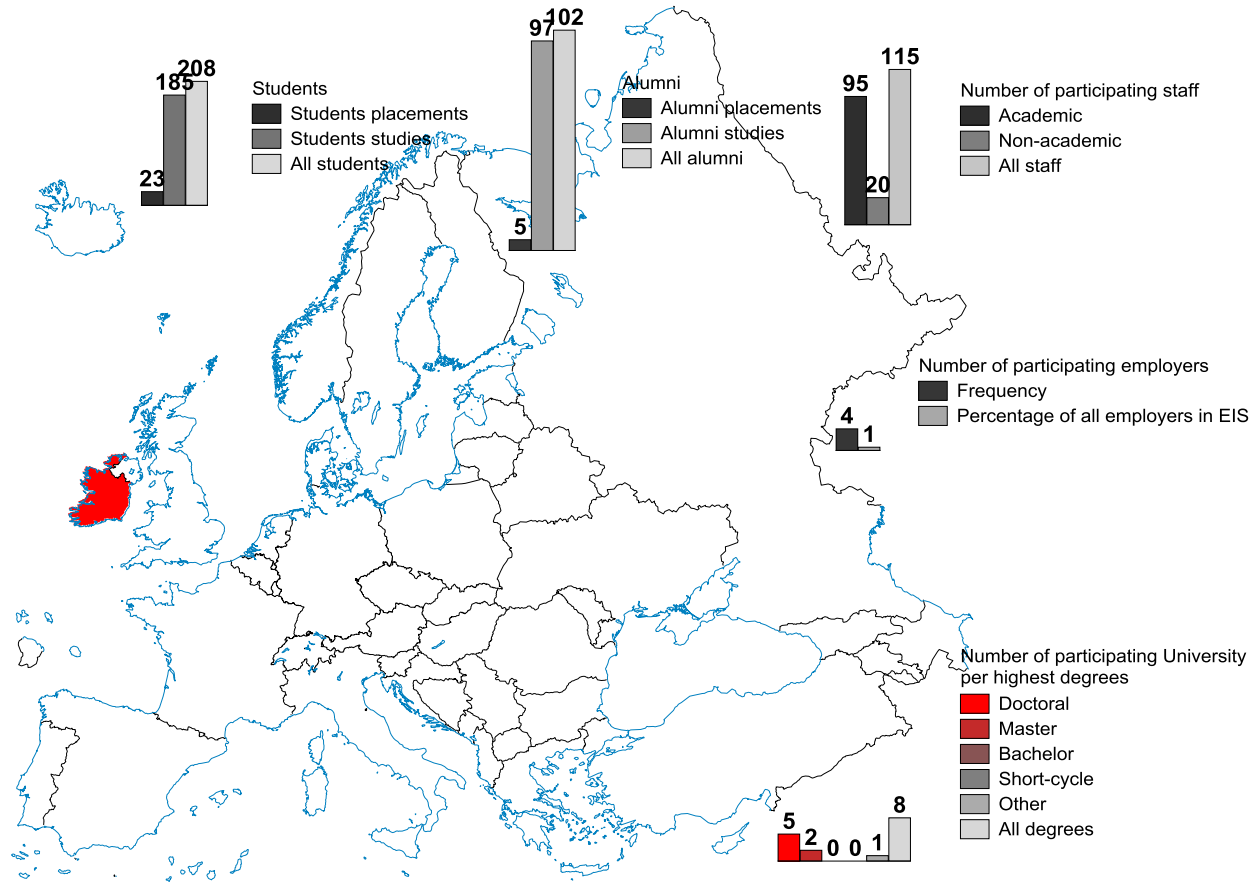
Agricultural Sciences	Architecture, urban and regional planning	Art and design	Business studies and management sciences	Education, teacher training	Engineering, technology	Geography, geology	Humanities	Languages and philosophical sciences	Law	Mathematics, informatics	Medical sciences	Natural sciences	Social sciences	Other	Total
44	32	30	337	85	228	44	138	147	231	119	65	50	125	156	1831



Students per field															
Agricultural Sciences	Architecture, urban and regional planning	Art and design	Business studies and management sciences	Education, teacher training	Engineering, technology	Geography, geology	Humanities	Languages and philosophical sciences	Law	Mathematics, informatics	Medical sciences	Natural sciences	Social sciences	Other	Total
1	6	15	17	6	28	3	27	8	11	5	0	3	22	3	155

Ireland

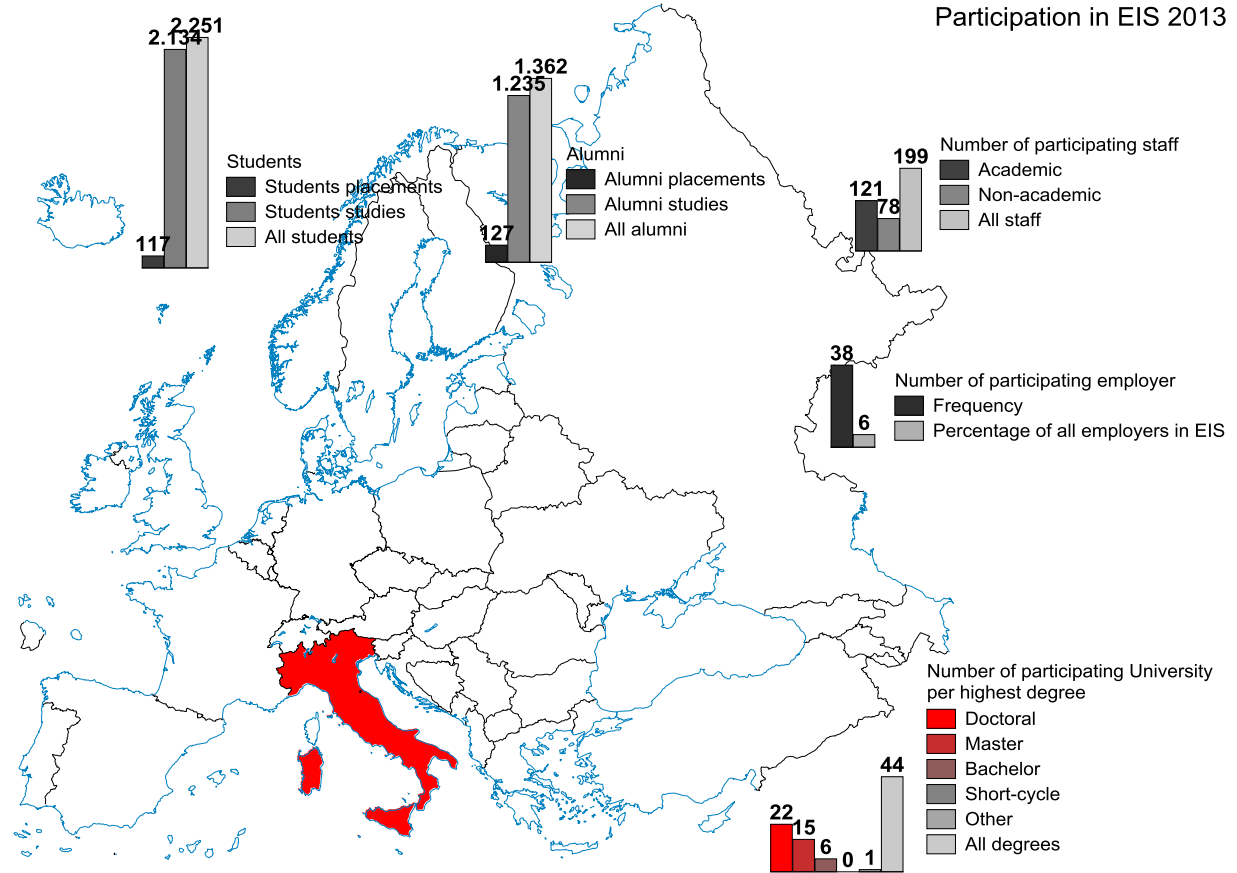
Participation in EIS 2013



Agricultural Sciences	Architecture, urban and regional planning	Art and design	Business studies and management sciences	Education, teacher training	Engineering, technology	Geography, geology	Humanities	Languages and philosophical sciences	Law	Mathematics, informatics	Medical sciences	Natural sciences	Social sciences	Other	Total
1	4	40	100	19	43	10	90	69	40	17	77	57	71	35	673

Italy

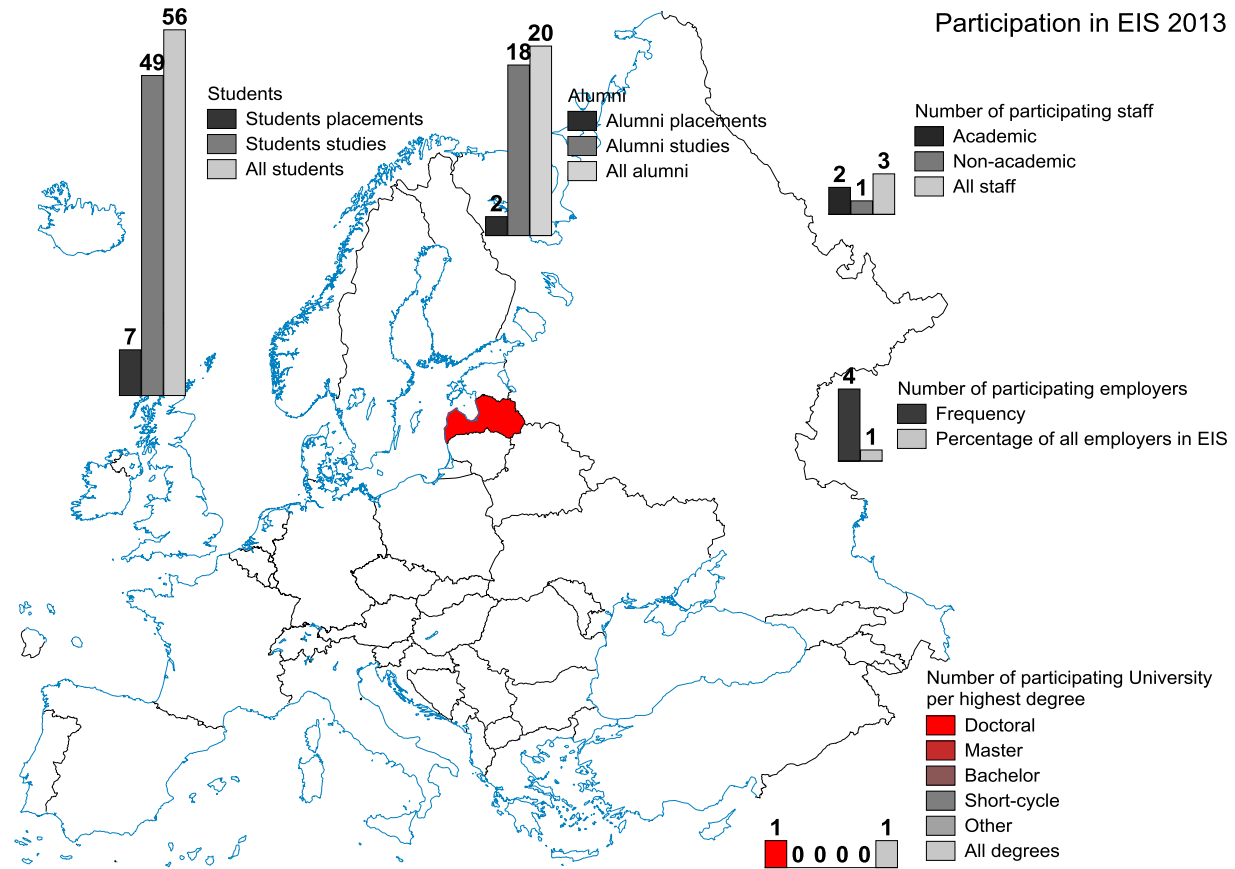
Participation in EIS 2013



Students per field																
Agricultural Sciences	Architecture, urban and regional planning	Art and design	Business studies and management sciences	Education, teacher training	Engineering, technology	Geography, geology	Humanities	Languages and philosophical sciences	Law	Mathematics, informatics	Medical sciences	Natural sciences	Social sciences	Other	Total	
40	662	375	852	94	1938	15	342	880	411	158	225	118	399	346	6855	

Latvia

Participation in EIS 2013

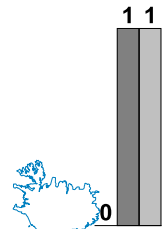


Students per field

Agricultural Sciences	Architecture, urban and regional planning	Art and design	Business studies and management sciences	Education, teacher training	Engineering, technology	Geography, geology	Humanities	Languages and philosophical sciences	Law	Mathematics, informatics	Medical sciences	Natural sciences	Social sciences	Other	Total
1	5	5	38	10	15	2	4	6	2	3	2	11	11	12	127



Liechtenstein



Students  
 ■ Students placements  
 ■ Students studies  
 ■ All students

Participation in EIS 2013

*Number of Alumni students not specified!*

*Number of participating staff not specified!*

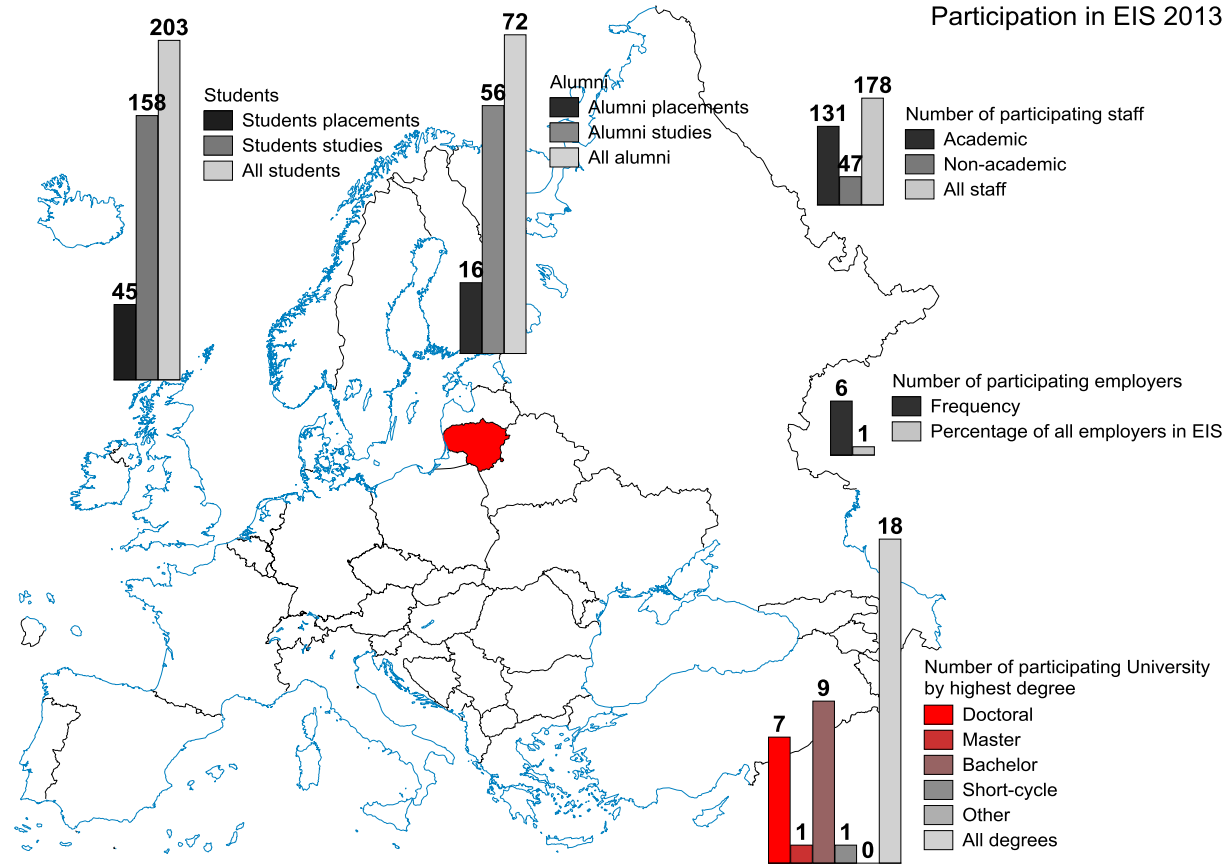


Number of participating employers  
 ■ Frequency  
 ■ Percentage of all employers in EIS

*Number of participating University per highest degree not specified!*

Students per field															
Agricultural Sciences	Architecture, urban and regional planning	Art and design	Business studies and management sciences	Education, teacher training	Engineering, technology	Geography, geology	Humanities	Languages and philosophical sciences	Law	Mathematics, informatics	Medical sciences	Natural sciences	Social sciences	Other	Total
0	1	0	0	3	0	0	0	1	0	0	0	0	0	0	5

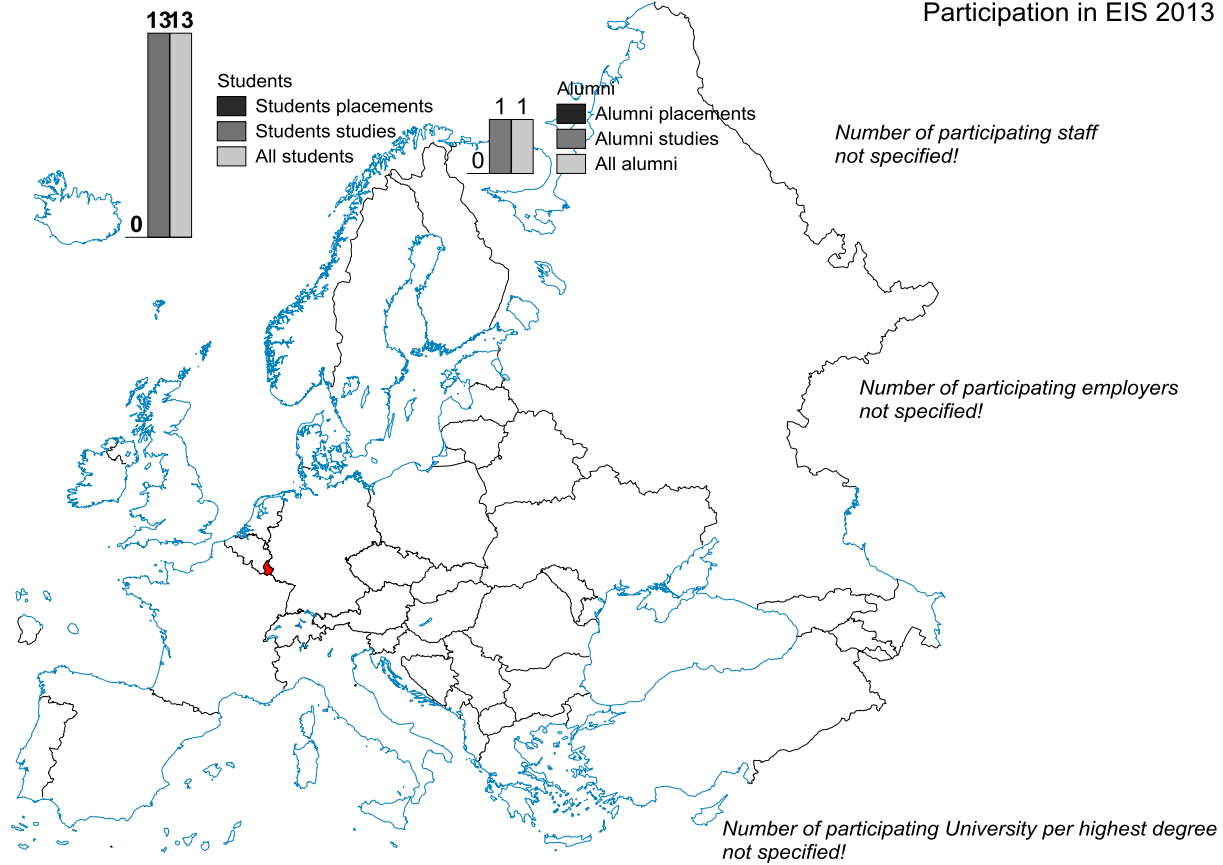
Lithuania



Students per field																
Agricultural Sciences	Architecture, urban and regional planning	Art and design	Business studies and management sciences	Education, teacher training	Engineering, technology	Geography, geology	Humanities	Languages and philosophical sciences	Law	Mathematics, informatics	Medical sciences	Natural sciences	Social sciences	Other	Total	
0	19	15	119	31	35	1	24	20	17	24	16	18	89	23	451	

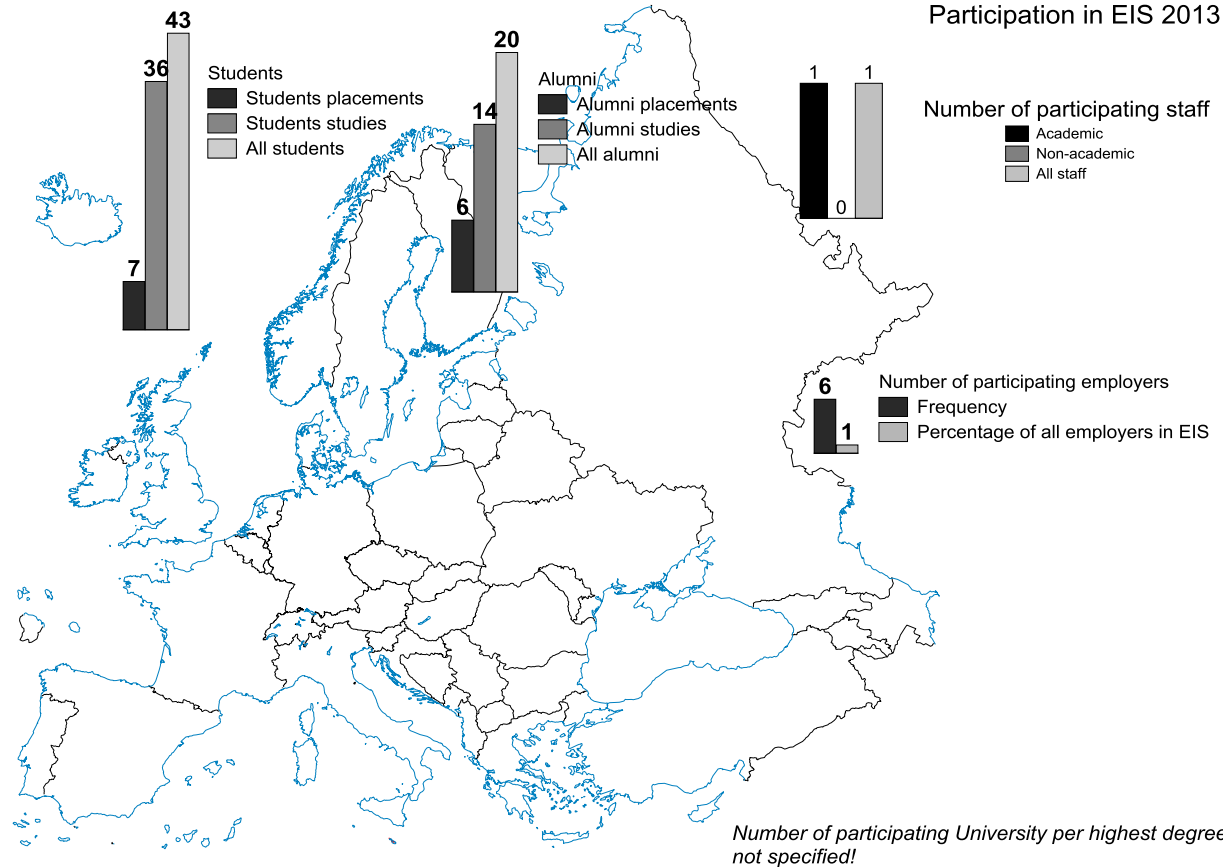
Luxembourg

Participation in EIS 2013



Students per field															
Agricultural Sciences	Architecture, urban and regional planning	Art and design	Business studies and management sciences	Education, teacher training	Engineering, technology	Geography, geology	Humanities	Languages and philosophical sciences	Law	Mathematics, informatics	Medical sciences	Natural sciences	Social sciences	Other	Total
0	1	2	2	1	3	0	0	2	5	1	3	0	8	0	28

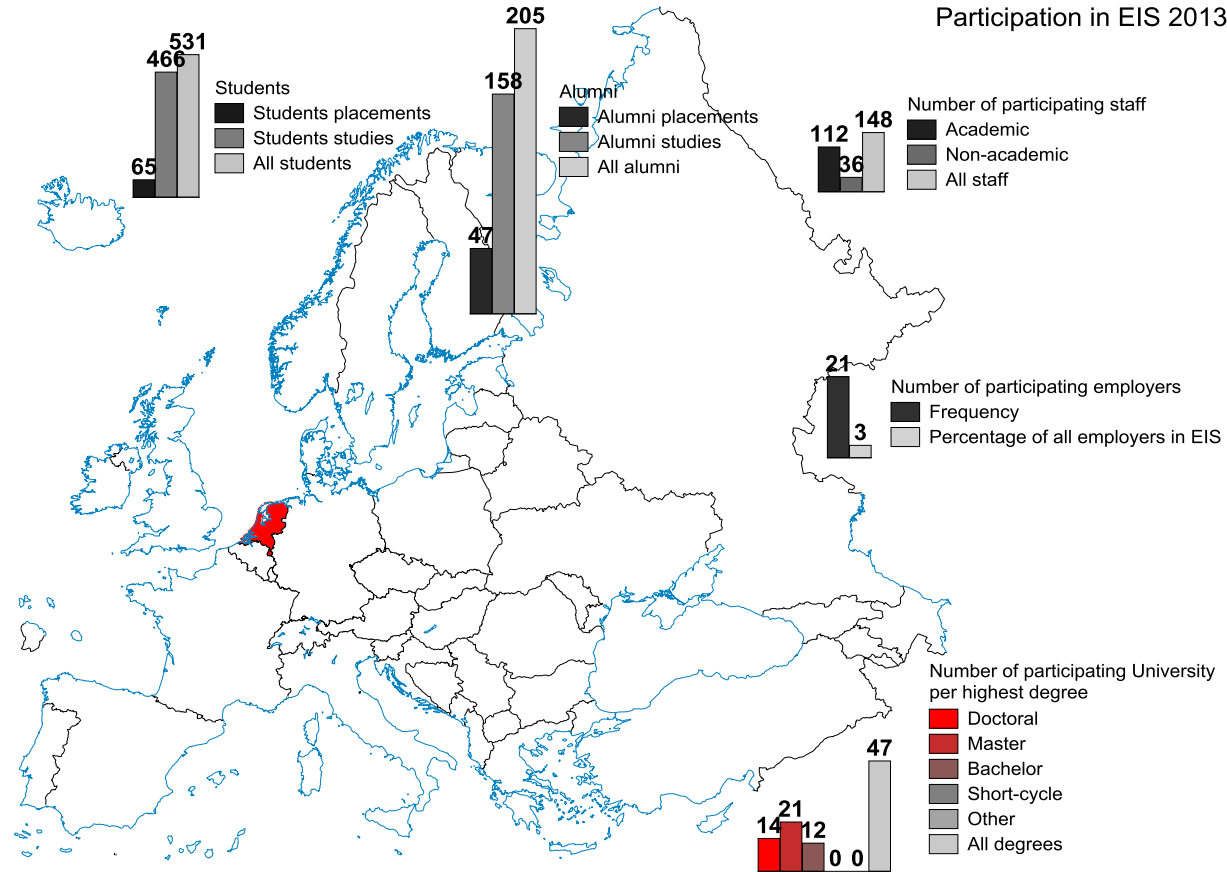
Malta



Students per field															
Agricultural Sciences	Architecture, urban and regional planning	Art and design	Business studies and management sciences	Education, teacher training	Engineering, technology	Geography, geology	Humanities	Languages and philosophical sciences	Law	Mathematics, informatics	Medical sciences	Natural sciences	Social sciences	Other	Total
0	4	0	5	4	6	0	5	3	3	0	8	4	10	12	64

The Netherlands

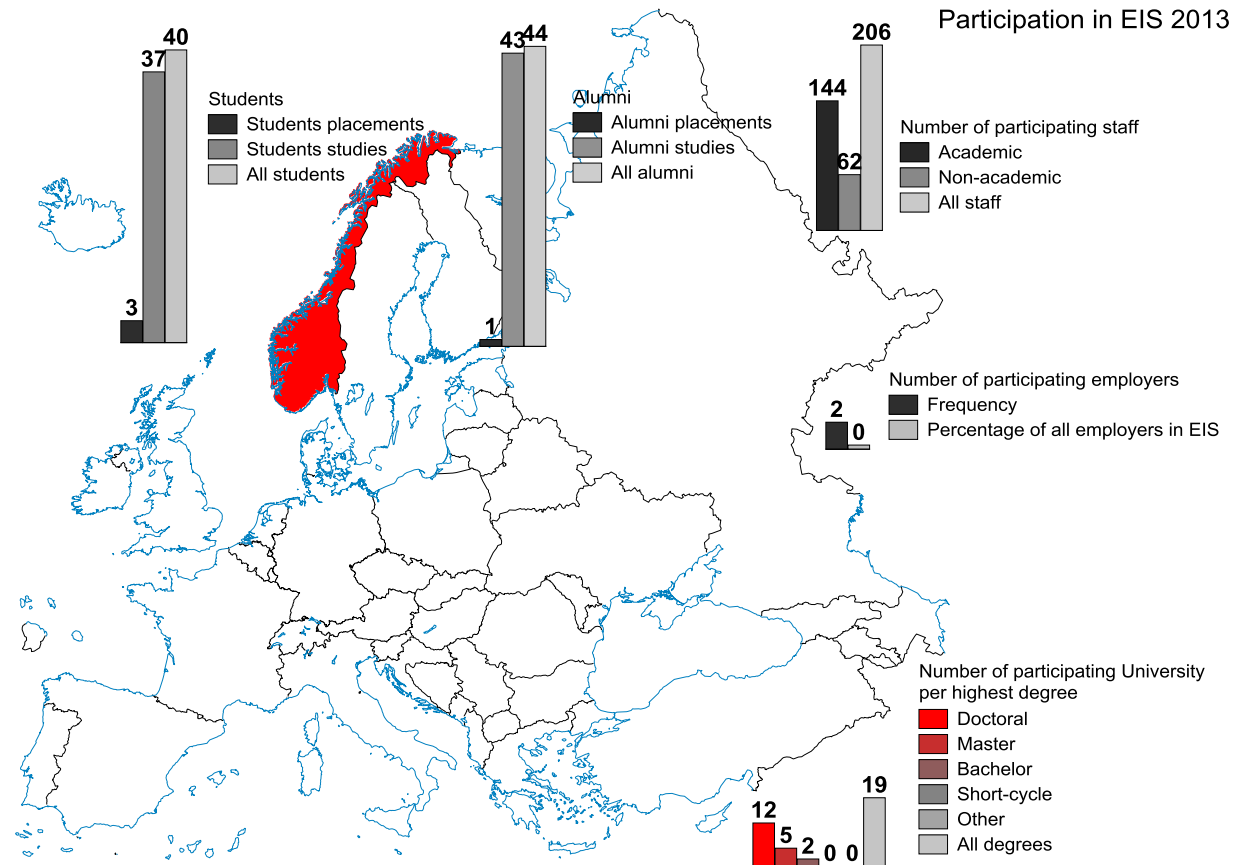
Participation in EIS 2013



Students per field

Agricultural Sciences	Architecture, urban and regional planning	Art and design	Business studies and management sciences	Education, teacher training	Engineering, technology	Geography, geology	Humanities	Languages and philosophical sciences	Law	Mathematics, informatics	Medical sciences	Natural sciences	Social sciences	Other	Total
25	40	87	599	100	91	28	202	152	199	34	99	73	419	197	2345

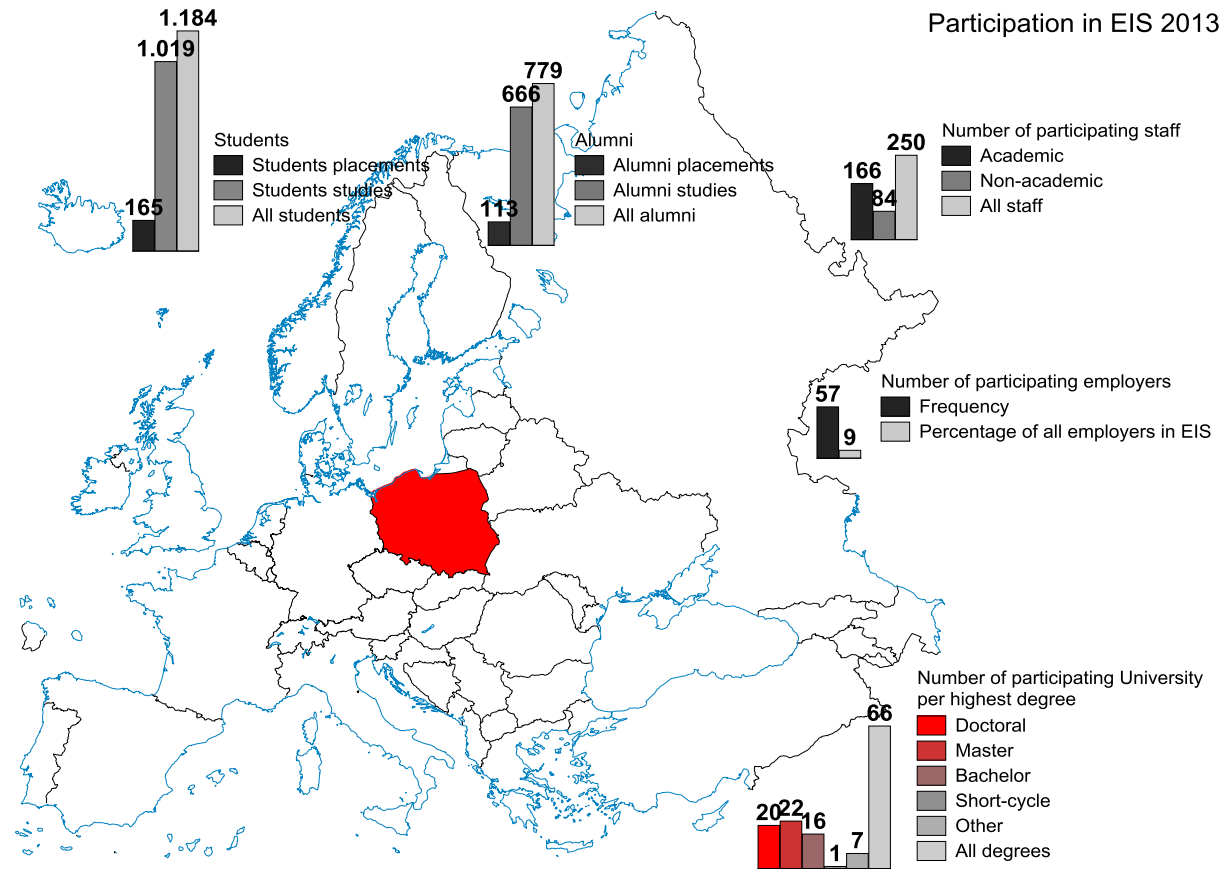
Norway



Students per field

Agricultural Sciences	Architecture, urban and regional planning	Art and design	Business studies and management sciences	Education, teacher training	Engineering, technology	Geography, geology	Humanities	Languages and philosophical sciences	Law	Mathematics, informatics	Medical sciences	Natural sciences	Social sciences	Other	Total
1	0	23	70	48	74	2	40	6	4	5	58	9	84	79	503

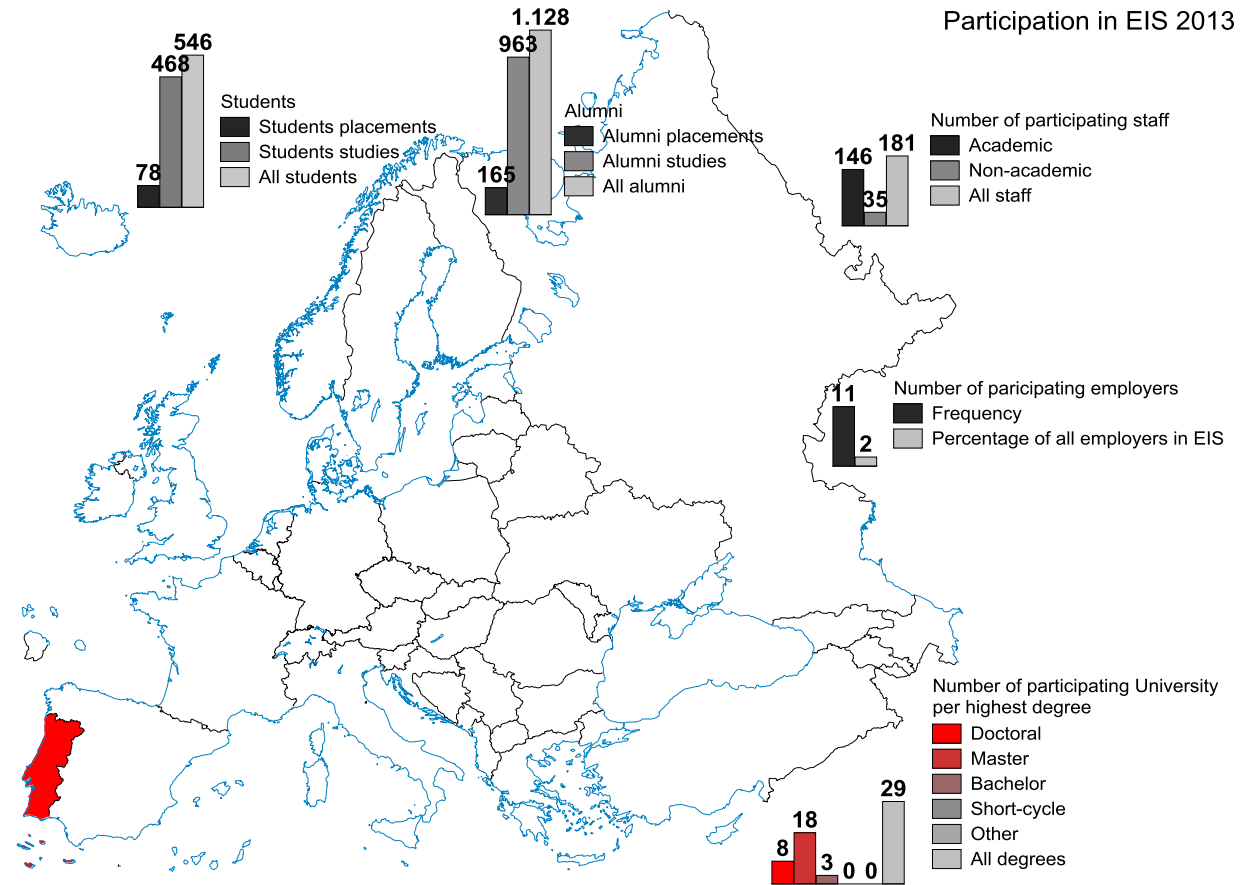
Poland



Students per field

Agricultural Sciences	Architecture, urban and regional planning	Art and design	Business studies and management sciences	Education, teacher training	Engineering, technology	Geography, geology	Humanities	Languages and philosophical sciences	Law	Mathematics, informatics	Medical sciences	Natural sciences	Social sciences	Other	Total
14	147	153	714	62	667	32	136	247	104	159	61	99	246	234	3075

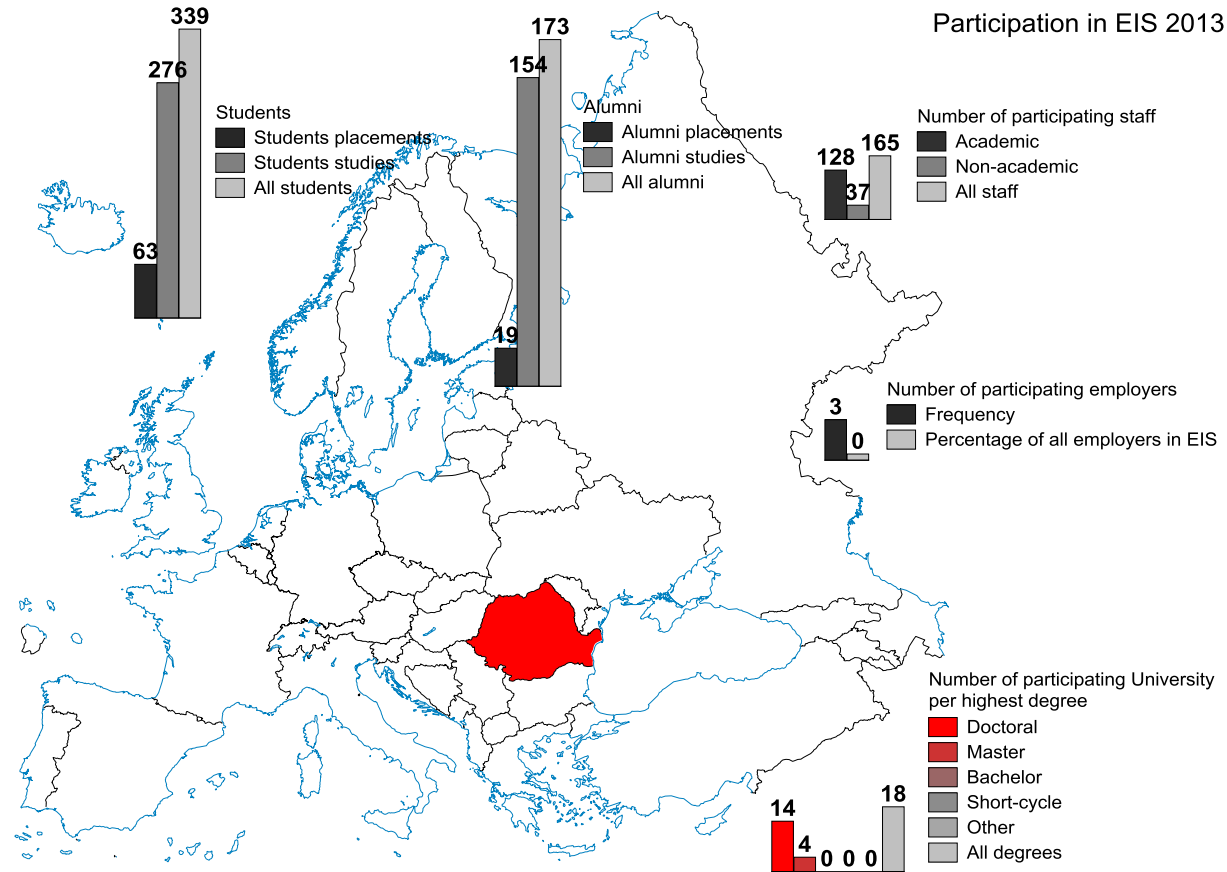
Portugal



Students per field																
Agricultural Sciences	Architecture, urban and regional planning	Art and design	Business studies and management sciences	Education, teacher training	Engineering, technology	Geography, geology	Humanities	Languages and philosophical sciences	Law	Mathematics, informatics	Medical sciences	Natural sciences	Social sciences	Other	Total	
10	57	89	152	84	262	20	106	49	107	30	349	90	188	170	1763	



Romania

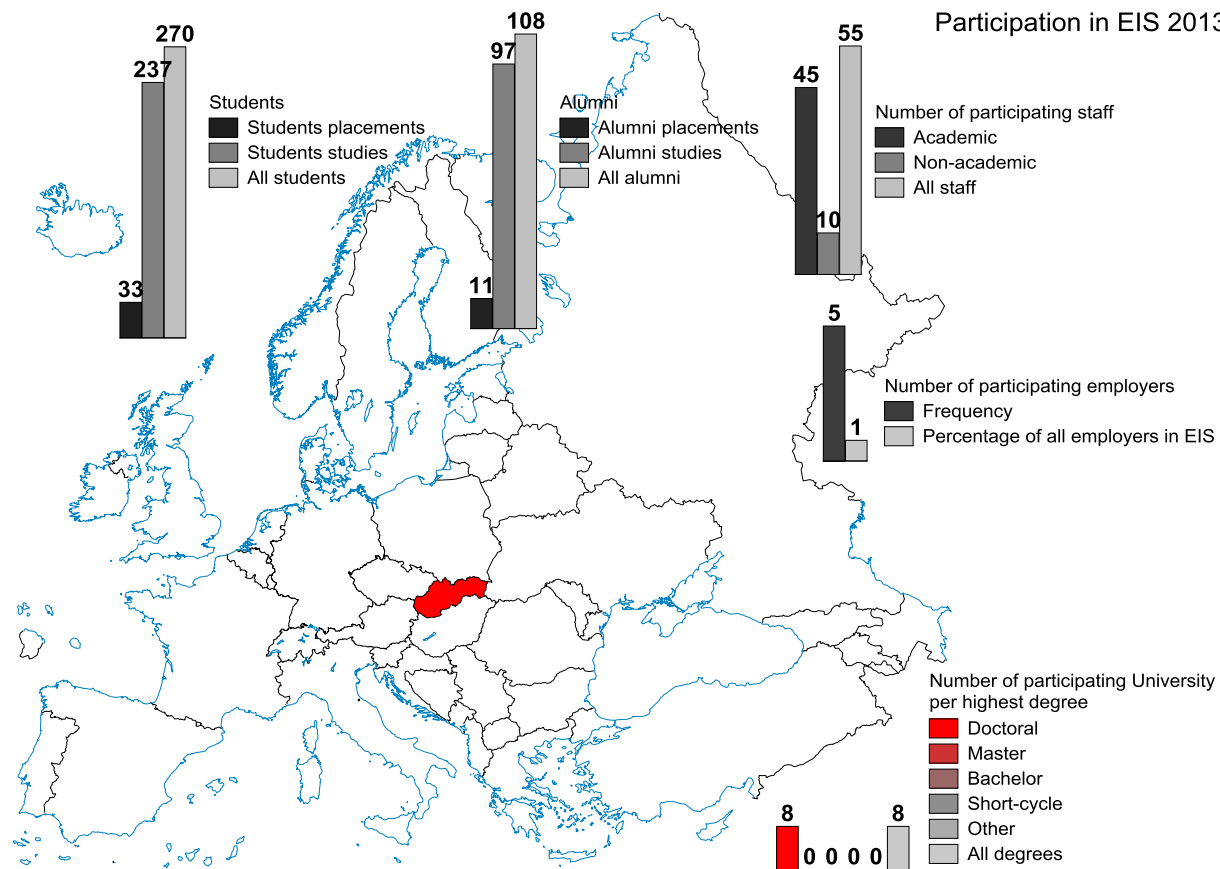


Students per field

Agricultural Sciences	Architecture, urban and regional planning	Art and design	Business studies and management sciences	Education, teacher training	Engineering, technology	Geography, geology	Humanities	Languages and philosophical sciences	Law	Mathematics, informatics	Medical sciences	Natural sciences	Social sciences	Other	Total
8	43	46	157	13	159	8	36	38	63	29	95	11	58	67	831

Slovakia

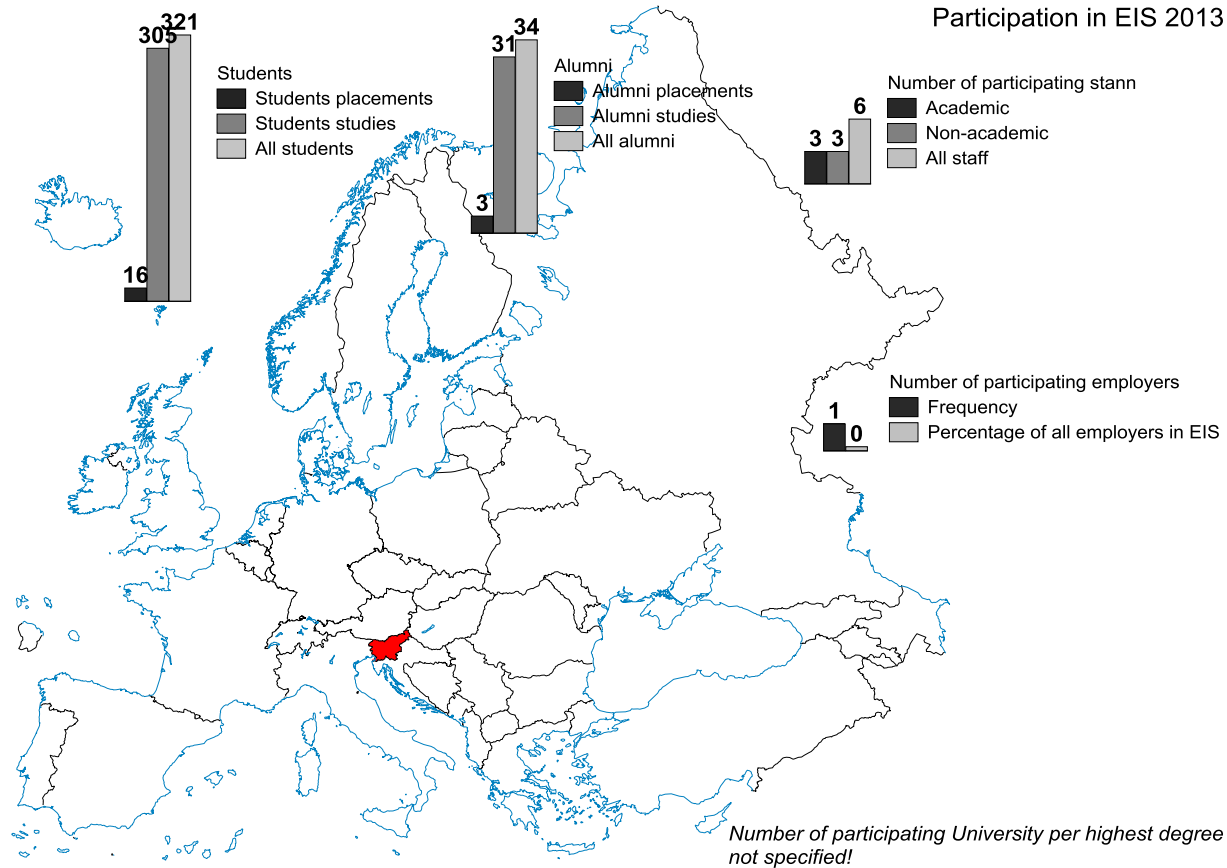
Participation in EIS 2013



Students per field

Agricultural Sciences	Architecture, urban and regional planning	Art and design	Business studies and management sciences	Education, teacher training	Engineering, technology	Geography, geology	Humanities	Languages and philosophical sciences	Law	Mathematics, informatics	Medical sciences	Natural sciences	Social sciences	Other	Total
4	9	6	162	27	21	7	40	59	25	26	20	17	45	30	498

Slovenia

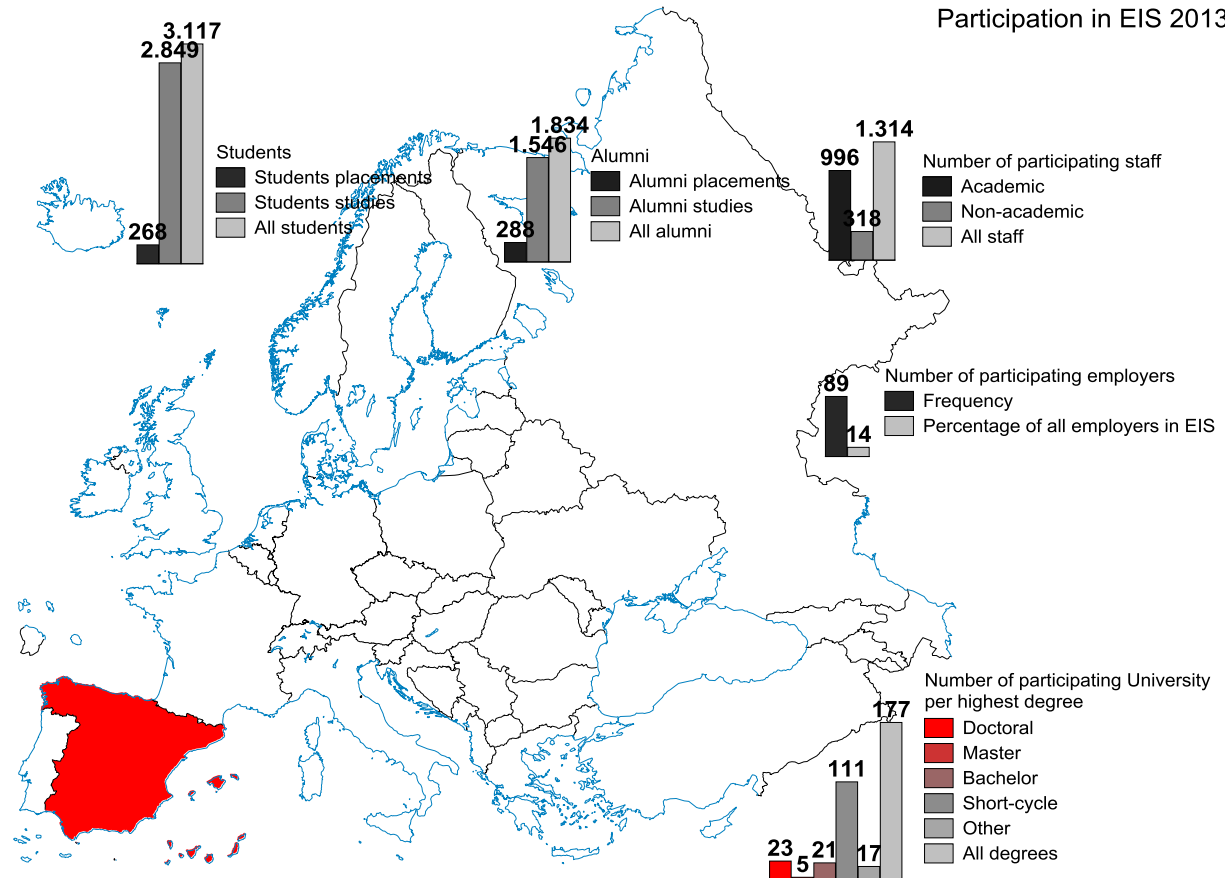


Students per field

Agricultural Sciences	Architecture, urban and regional planning	Art and design	Business studies and management sciences	Education, teacher training	Engineering, technology	Geography, geology	Humanities	Languages and philosophical sciences	Law	Mathematics, informatics	Medical sciences	Natural sciences	Social sciences	Other	Total
2	19	23	107	4	26	3	22	49	38	16	39	21	72	26	467

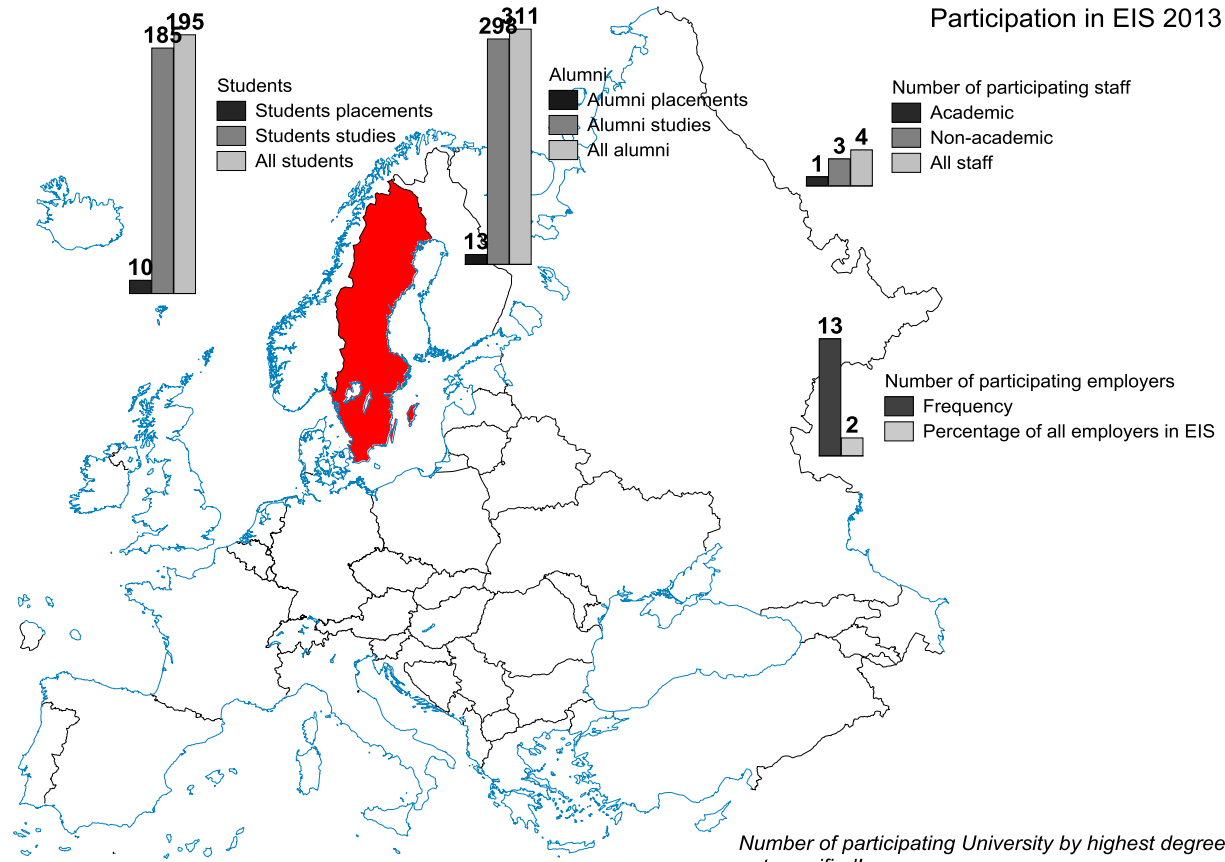
Spain

Participation in EIS 2013



Students per field															
Agricultural Sciences	Architecture, urban and regional planning	Art and design	Business studies and management sciences	Education, teacher training	Engineering, technology	Geography, geology	Humanities	Languages and philosophical sciences	Law	Mathematics, informatics	Medical sciences	Natural sciences	Social sciences	Other	Total
75	328	294	1194	575	1302	79	470	817	477	283	1092	732	874	635	9227

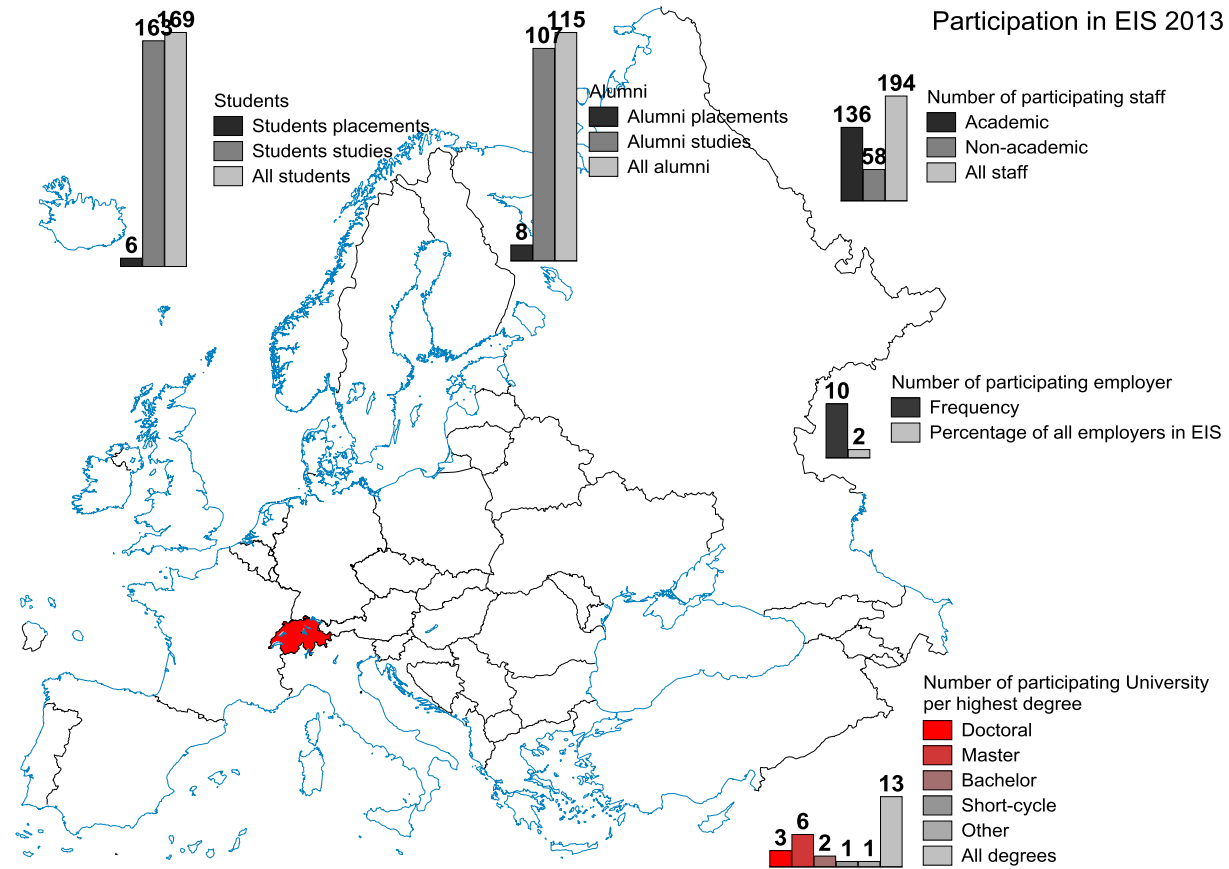
Sweden



Students per field

Agricultural Sciences	Architecture, urban and regional planning	Art and design	Business studies and management sciences	Education, teacher training	Engineering, technology	Geography, geology	Humanities	Languages and philosophical sciences	Law	Mathematics, informatics	Medical sciences	Natural sciences	Social sciences	Other	Total
2	18	21	163	29	285	19	91	49	84	29	115	78	207	38	1228

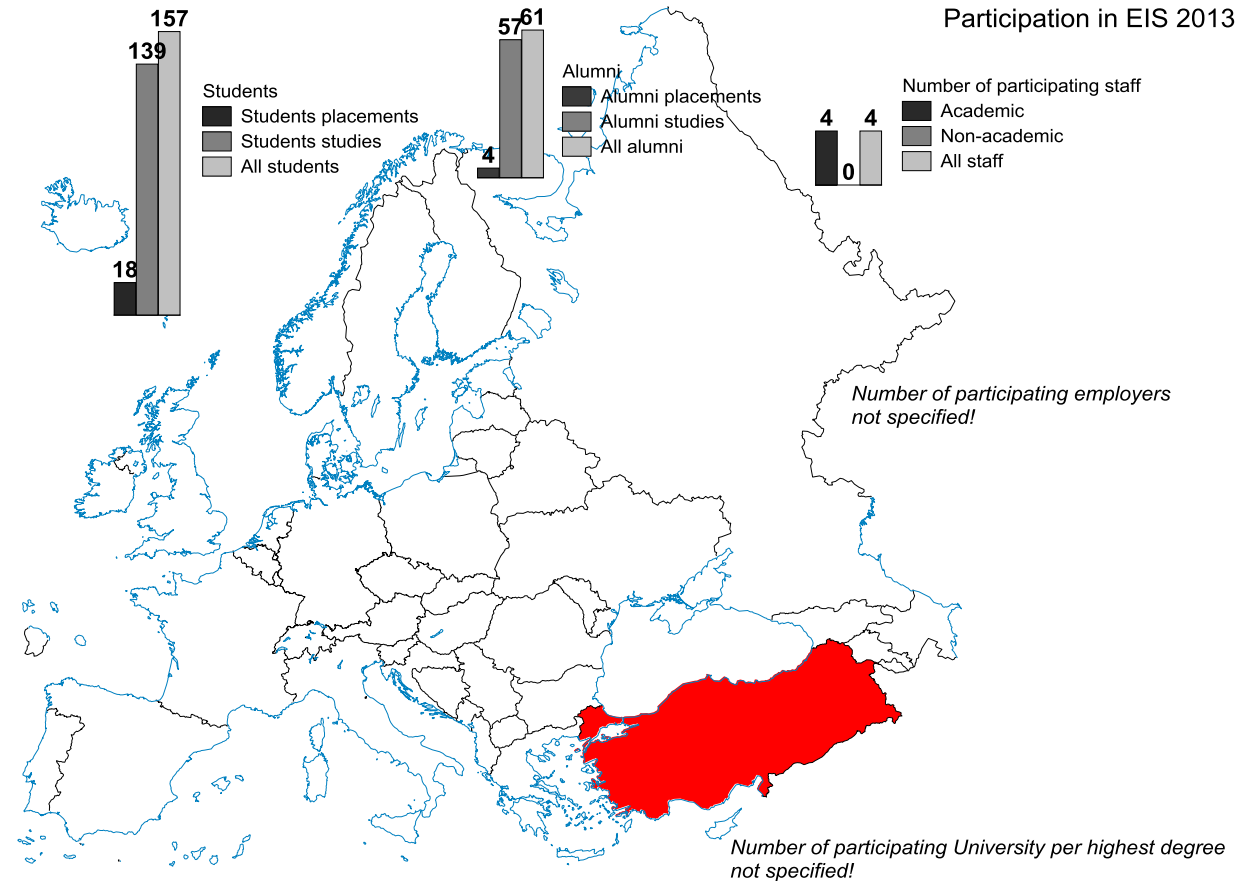
Switzerland



Students per field

Agricultural Sciences	Architecture, urban and regional planning	Art and design	Business studies and management sciences	Education, teacher training	Engineering, technology	Geography, geology	Humanities	Languages and philosophical sciences	Law	Mathematics, informatics	Medical sciences	Natural sciences	Social sciences	Other	Total
4	10	28	267	209	52	12	20	36	11	11	8	13	57	37	775

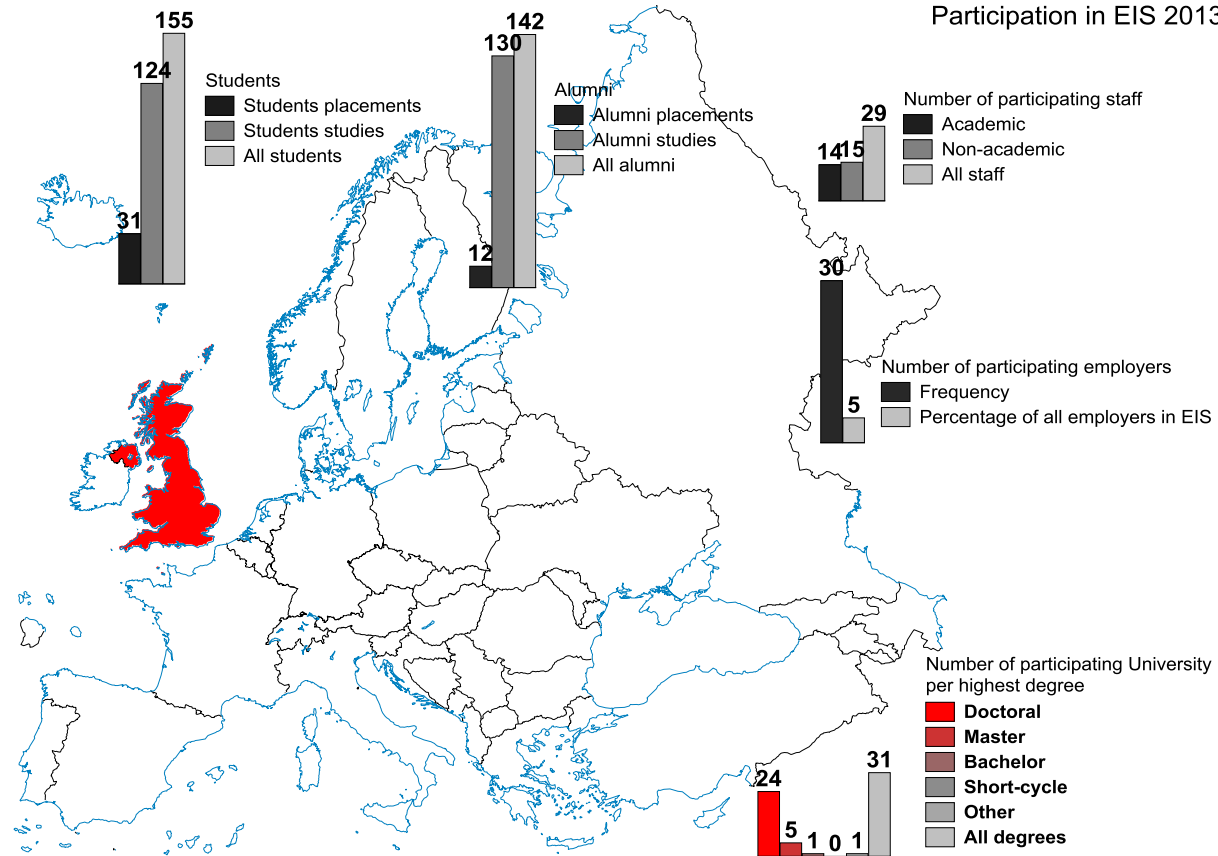
Turkey



Students per field															
Agricultural Sciences	Architecture, urban and regional planning	Art and design	Business studies and management sciences	Education, teacher training	Engineering, technology	Geography, geology	Humanities	Languages and philosophical sciences	Law	Mathematics, informatics	Medical sciences	Natural sciences	Social sciences	Other	Total
2	19	12	67	31	109	2	10	17	10	7	14	19	45	16	380

United Kingdom

Participation in EIS 2013



Students per field															
Agricultural Sciences	Architecture, urban and regional planning	Art and design	Business studies and management sciences	Education, teacher training	Engineering, technology	Geography, geology	Humanities	Languages and philosophical sciences	Law	Mathematics, informatics	Medical sciences	Natural sciences	Social sciences	Other	Total
0	9	20	135	25	35	14	60	142	36	15	21	18	67	30	627



**NC-04-14-545-EN-N**  
**Doi : 10.2766/75468**  
**ISBN : 978-92-79-38380-9**

