



20 years of Erasmus Mundus

**Beyond Borders
and Boundaries**

Completed in May 2024.

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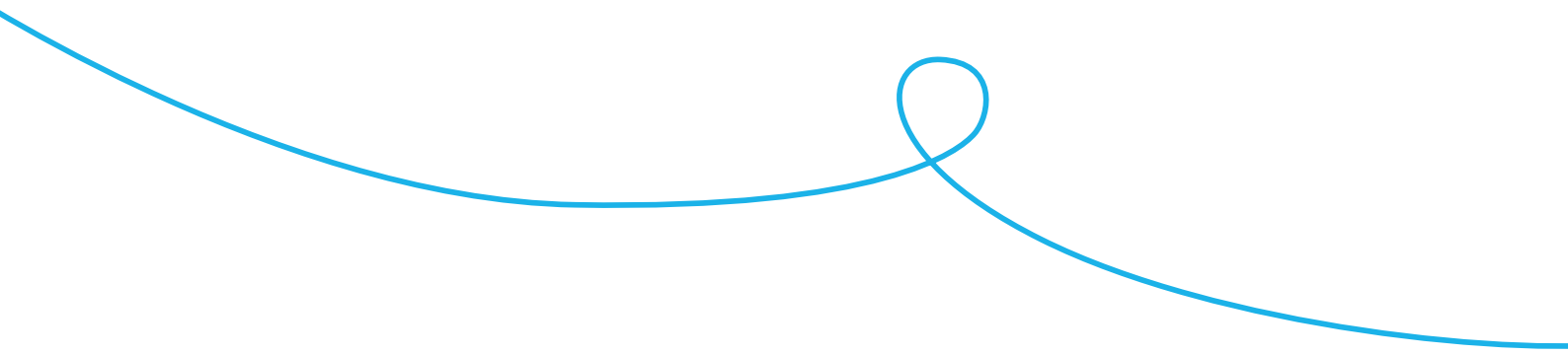
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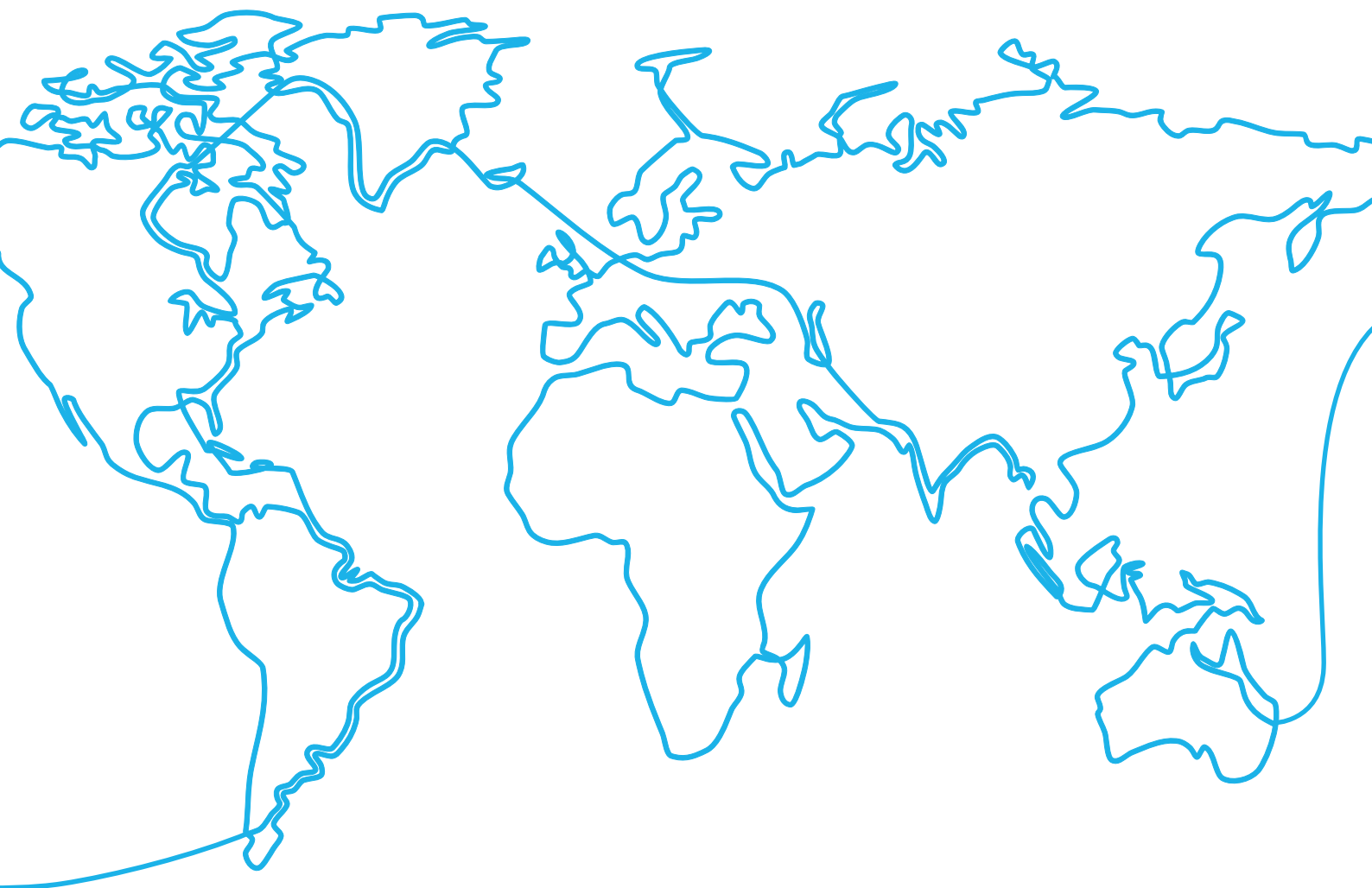
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20 years of Erasmus Mundus: Beyond Borders and Boundaries





Foreword

This publication marks the **20th anniversary of the visionary Erasmus Mundus programme**, a milestone to underscore its highly transformative impact on individuals, higher education institutions, and countries both within and outside of the European Union (EU).

Over the last two decades, Erasmus Mundus has brought together universities from all over the EU and beyond together to jointly organise excellent Master's courses, merging the best parts of each national programme to form a new, integrated and unique international study programme. As such, it has been a powerful catalyst for Europe's global educational exchange and collaboration, igniting personal growth and institutional excellence. The action has supported more than **34,000 highly talented students** from across **179 countries of origin**, underscoring Europe's attractiveness as a premier study destination, and facilitated more than **111,000 mobility stays** at higher education institutions across Europe and beyond. Erasmus Mundus offers a **unique appeal to prospective students**, with its high academic standards, unparalleled mobility paths and attractive financial support.

The action, which is part of Erasmus+ since 2014, has been at the forefront of **European cooperation in higher education**, advancing both the European Higher Education Area (EHEA) and the European Education Area (EEA). Striving for academic excellence and innovation in higher education through transnational cooperation, Erasmus Mundus has empowered **585 joint Master projects** and approximately **600 higher education institutions** in propelling interdisciplinarity and stronger links to the labour market to support Europe's innovative growth.

Erasmus Mundus is also an important element of the international dimension of the Erasmus+ programme. The alliances established with higher education institutions, companies and other relevant organisations from third countries strengthen networks, innovation capabilities and recognition arrangements with a distinctly European added value. In this 20 years, Erasmus Mundus has helped the reputation of the EU higher education system as a global partner for research and innovation, and as a model for international cooperation.

The findings of this study, which highlight the multi-layered impact of Erasmus Mundus, arrive at a pivotal moment for the **European Education Area (EEA)**, with elevated ambitions for transnational cooperation and the **mid-term evaluation of the Erasmus+ programme** (2021-2027). The latter will formally mark the start of preparations for the next generation of EU programmes in the field of education and training, with reflections on the future of all flagship initiatives under Erasmus+.

Building on the two decades of outstanding achievements, Erasmus Mundus remains one of the true flagship actions of Erasmus+, with change-making effects in national legislation, paving the way towards a European degree. I am looking forward to a new era of strategic ambition and of further impactful delivery, counting on higher education institutions from Europe and the wider world to further enhance the success of the programme.

Pia Ahrenkilde Hansen

Director-General for Education, Youth, Sport and Culture

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Glossary

The following **key terms** are used to maintain clarity and consistency throughout the study. Recognising that official EU Erasmus Mundus terminology has evolved over time, the study uses these **simplified terms** to refer consistently to the core elements of the programme since its inception.

The term “**Erasmus Mundus action**” is used to represent all iterations of Erasmus Mundus, both as a single standing EU programme and an integral part of the Erasmus+ programme, across different EU funding periods since 2004.

The term “**associated countries**” refers to third countries associated to the Erasmus+ programme,¹ as stipulated in Article 19 of Regulation (EU) 2021/817 of the European Parliament and of the Council of 20 May 2021 establishing Erasmus+: the Union Programme for education and training, youth and sport and repealing Regulation (EU) No 1288/2013. These countries include: (a) members of the European Free Trade Association (EFTA) that are members of the European Economic Area (EEA): Norway, Iceland, and Liechtenstein and (b) acceding countries, candidate countries and potential candidates: North Macedonia, Republic of Türkiye, and Republic of Serbia.^{2,3} The two terms – associated countries and programme countries – are interchangeably used to refer to the countries fully participating in the Erasmus+ programme in its entirety at the time of the study, including EU member states.⁴

The term “**non-associated countries**” denotes any other third country not covered by the above list. Other terms such as “**partner countries**”,⁵ “**international**”, “**non-EU/EEA**” or “**non-European**” partners are used interchangeably depending on the terminology used in the secondary datasets.

The terms “**EM Master’s programmes**” or “**EM Masters**” collectively and interchangeably refer to all study programmes funded by Erasmus Mundus at Master’s level under several specific actions: Erasmus Mundus Masters Courses (EMMC) (2004-2013), Erasmus Mundus Joint Master Degrees (EMJMD) (2014-2020), and Erasmus Mundus Joint Masters (EMJM) (2021-2027).

The term EM Master’s “**project**” is used from a funding perspective in the statistical part of the study to refer to the financial support given to an existing joint study programme for a defined period of time (i.e. the project duration). The term “**unique**” EM Master’s programme refers to an existing study programme that has received EM funding through one or several subsequent EM projects.

The terms “**instances of institutional participation**” or “**institutional instances of participation**” refer to the number of times the same entity participated as coordinator, full partner or associated partner in the delivery of multiple EM Master’s programmes under one or several EU funding periods.

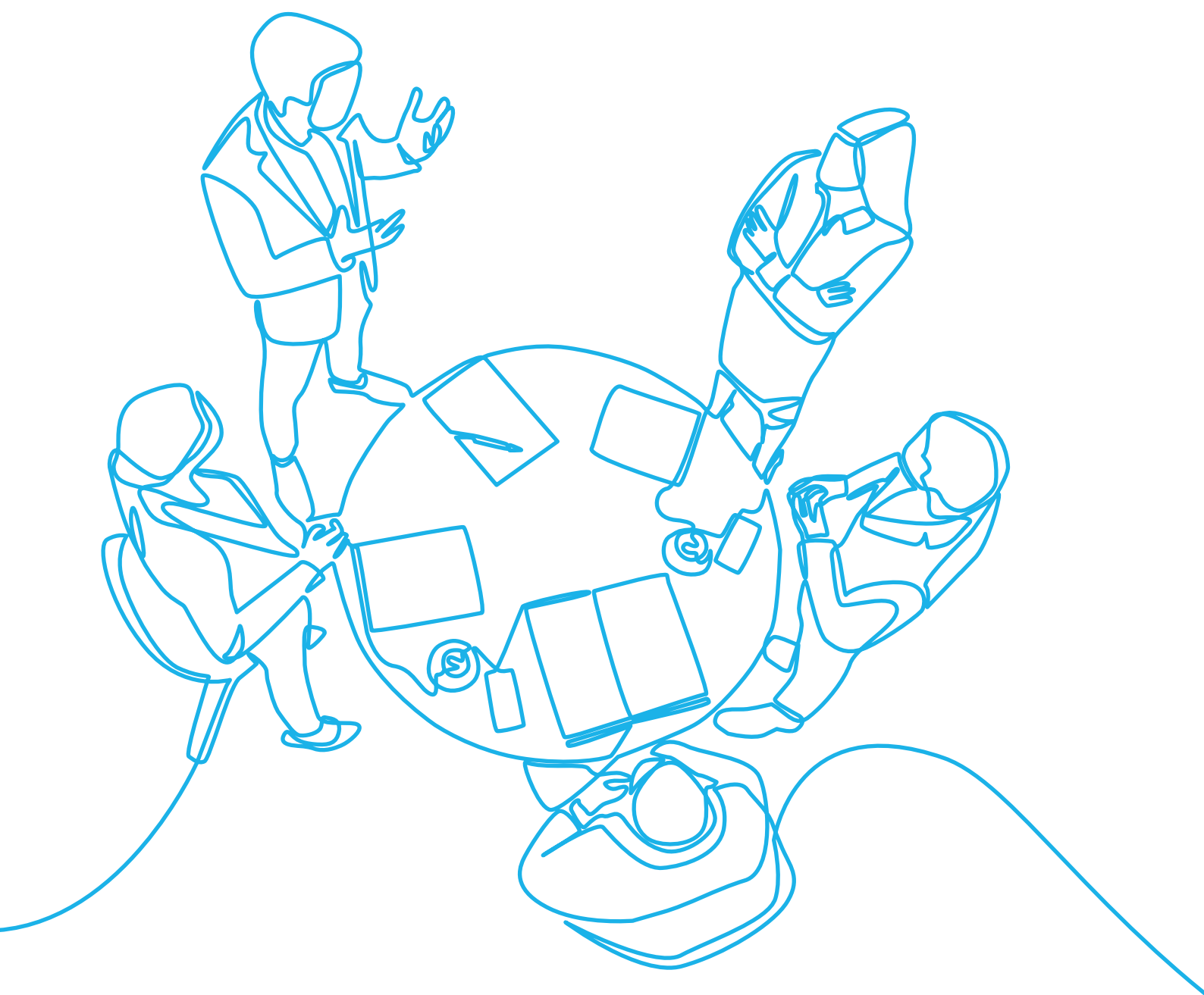
1 The Erasmus+ programme was launched in 2014 based on Regulation (EU) No 1288/2013 of the European Parliament and of the Council of 11 December 2013 establishing ‘Erasmus+’: the Union programme for education, training, youth and sport and repealing Decisions No 1719/2006/EC, No 1720/2006/EC and No 1298/2008/EC.

2 The Republic of Serbia became an Erasmus+ programme country in 2019 and subsequently third country associated to the Erasmus+ programme (2021-2027). In the statistical analysis, Serbia features in the group of associated countries based on its status at the time of the study.

3 Based on the status quo in April 2024. The UK changed its status from a programme to partner country in 2020 and subsequently became a third country non-associated to the Erasmus+ programme (2021-2027). In the statistical analysis, the UK features in the group of non-associated countries based on its status at the time of the study.

4 The term “programme countries” was used in the Erasmus+ programme (2014-2020) to refer to associated countries.

5 The term “partner countries” was used in the Erasmus+ programme (2014-2020) to refer to non-associated countries.



Executive summary

Introduction

This publication marks the **20th anniversary of the Erasmus Mundus** (EM) programme, a milestone that underscores its highly transformative impact on individuals, higher education institutions (HEIs), and countries both within and outside the European Union (EU).

The study includes **six chapters** offering a comprehensive analysis of the far-reaching impact of Erasmus Mundus. Following a brief introduction, Chapter 1 provides a historical overview of the programme in the evolving policy and budgetary context. Chapter 2 delves into Master's level institutional participation with special emphasis on governance and sustainability, paving the way for an exploration of the institutional impact of Erasmus Mundus on learning and teaching, international cooperation, and administrative processes in Chapter 3. Chapter 4 puts forward evidence of the individual impact reflected in the professional and personal achievements of EM students and alumni. Chapter 5 expands analysis to system-level (European, national and global) impact, leading into a forward-thinking exploration of the programme's trajectory in Chapter 6.

The study applied a mixed-method approach, integrating quantitative and qualitative data for an in-depth, multifaceted analysis. This merged historical data from the European Education and Culture Executive Agency (EACEA), with primary data collected from two surveys (encompassing 256 respondents across 33 countries, 150 HEIs, and 110 EM Master programmes), enriched with insights from workshops, interviews, and consultations with over 165 experts at programme, central, and faculty levels.

Key findings

1. Erasmus Mundus at a glance

Since 2004, Erasmus Mundus has undergone significant **consolidation**, in strategic, financial, and targeted action terms, with an exclusive focus on the **Master's level** in the last two programme periods (2014-2020 and 2021-2027). The programme has both adapted to and subsequently shaped higher education policy priorities at EU and wider European level. Its structure has been consistently adjusted in the light of these objectives, to strengthen intra-European cooperation in education, enhance the EU's global attractiveness, and gradually open European higher education to the world through reciprocal cooperation with global partners. The budget has increased markedly from the initial EUR 430 million (2004-2008) to an expected EUR 1 billion in the 2021-2027 financial period.

2. Institutional participation at Master's level

Over its two decades, Erasmus Mundus funded **585 Master's projects**, accounting for **349 unique Master's programmes**. They relied on a **combined total of 9,763 instances of institutional participation**⁶ by higher education institutions (HEIs) and other types of organisations from **140 different countries**. Of these, **70%** (6,812 instances) were by institutions from **associated countries to Erasmus+**⁷. **HEIs** accounted for **57%** (5,523) of all instances of participation. And about **one in three instances (31%)** entailed **full participation (as coordinator or full partner**, with 6% and 25% of all instances, respectively). In turn, **69%** of all instances of participation were as **associated partner**.

6 The term refers to the number of times the same entity participated as coordinator, full partner, or associated partner in the delivery of multiple EM Master's projects within one or several EU funding periods.

7 Calculations based on the status of the countries in the Erasmus+ programme (associated and non-associated) in 2024.

HEIs and other types of organisations from **five associated countries to Erasmus+** or predecessor programmes – France (1,095 instances), Spain (974), Germany (689), Italy (638) and Portugal (490) – have been most active in EM Master's programmes, in the three roles combined (coordinator, full partner and associated partner). As for the **non-associated countries**, HEIs and other types of organisations from the United Kingdom (394 instances)⁸ followed by those in the United States (317 instances), Brazil (216), China (135), and India (109) lead the way in this regard. While these institutions are most often associated partners, their involvement underscores the programme's global appeal and reach.

Of the 5,523 instances of participation by **HEIs**, a total of **2,919 instances (53%** of all HEIs instances, or 30% of all instances by HEIs and other types of organisations) entailed **full participation**. Specifically, there were 585 instances of participation by HEIs as **coordinator (11%** of all HEIs instances) and 2,334 as **full partner (42%** of all HEIs instances). The large majority of full participation instances – 2,450 instances (**84%**) – were by **HEIs** from **countries associated to Erasmus+**.

HEIs from the same five countries – **France (376 instances), Spain (339 instances), Germany (255 instances), Italy (250 instances)** and **Portugal (170 instances)** – had the highest level of **full participation** (as coordinators and full partners, combined). As for **non-associated countries**, next to the United Kingdom (with 37 instances as coordinator and 128 instances as full partner), HEIs from the **United States (35 instances), China (28), India (24), Brazil (22)** and **Japan (20)** had the highest participation as **full partners**. The HEIs most often involved as **associated partners** came from United States (195 instances), Brazil (166), China (109), Spain (96) and France (93).

Belgium, Italy, the Netherlands and Spain are home to **top 6 HEIs with biggest portfolios of EM Master's projects**: Ghent University (43 Master's projects), the University of Padua (39), Groningen University (31), the University of Barcelona (31), the Autonomous University of Barcelona (31), and the University of Bologna (31). In total, about **600 unique HEIs** are estimated to have participated as coordinator or full partner in EM Master's programmes and related projects over the two decades.

Most of the HEIs and EM Master's programmes surveyed reported a **long-term positive trend** showcasing the **rising numbers of non-EU/EEA students enrolled** and **EU/EEA partner institutions involved** along with the **enlarging portfolios** of EM Master's programmes within participating HEIs.

These positive trends have been propelled by **substantial investments** in EM Master's programmes at different levels. While Erasmus Mundus funding remains pivotal, tuition fees are increasingly significant, alongside institutional funding primarily allocated for programme management (as reported by 37% of respondents) and national and regional grants aimed at supporting student scholarships (also 37%). A majority of the evaluated EM programmes demonstrate a **commendable level of funding diversification**: 73% of the programme-level respondents indicated they secure funding for up to 20% of their students from sources other than Erasmus Mundus. Efforts towards sustainability are evident in the **continuous quality enhancements** made to uphold academic excellence and appeal to students and external partners alike, as well as in **increasing the 'jointness' of the consortia**, particularly through the further integration of selection processes (reported by 95% of programme-level respondents), development of mobility tracks (88%), use of communication platforms (80%), execution of recruitment campaigns (77%), and issuance of joint diploma supplements (73%). Furthermore, sustainability has been enabled by the **encompassing support** EM Master's programmes received at central and faculty levels, particularly from the Registrar's Office (whose engagement is reported by 38% of programme-level respondents), International Relations Offices at central and faculty levels (36% and 35%, respectively), and the faculty-level Academic Affairs Office (29%). Such widespread support not only addresses the complex demands of EM Master's programmes, but also amplifies their **cross-cutting impact on core university missions**, enhancing learning and teaching experiences, generating spillovers in research, strengthening international cooperation and streamlining administrative processes.

⁸ It includes the participation of British institutions when the United Kingdom was an EU member state.

3. Institutional impact of Erasmus Mundus

The influence of Erasmus Mundus at institutional level is not only utterly aligned with the EM action's goals, but also significantly exceeds them, yielding a wide array of beneficial spillover effects that resonate with institutional priorities. The primary aims frequently cited include attracting top-tier international students (94% of all respondents), forging new partnerships or strengthening existing ones (91%), and boosting the institution's visibility and reputation within Europe (87%). The feedback from the EM Master's programmes and HEIs surveyed confirms the programme's success in meeting these objectives, with notable **advancements in international cooperation** (reported by 74% of all respondents), **learning and teaching** (65%), and **administrative processes** (59%). These study outcomes highlight the EM programme's capacity to catalyse positive change across a spectrum of critical areas, reinforcing its value and impact within the academic community.

Typically, the impact of Erasmus Mundus is more **pronounced at lower institutional levels**, such as departments, reaffirming the programme's inherently grassroots, bottom-up approach. This effect is especially significant at smaller HEIs, including universities of applied sciences, where Erasmus Mundus serves as a **pivotal mechanism for achieving academic excellence** and **furthering internationalisation**. The EM Masters and institutions taking on coordinator roles, as well as those from non-European or partner countries (notwithstanding the small statistical base), notably benefit from these dynamics.

The differentiated effects reported by academic and administrative staff align with their distinct roles within the institution. While programme-level academic staff generally perceive a more substantial impact on learning, teaching, and international cooperation, administrative personnel tend to report greater improvements in administrative processes. This variation in perception underscores the far-reaching benefits of Erasmus Mundus, highlighting its ability to drive positive change tailored to the diverse needs and perspectives within academic communities.

The impact on **learning and teaching** is multilayered, as attested by the 65% of respondents who reported positive changes in this area. At **programme level**, it largely enhances **opportunities for faculty exchange and collaboration** (75% of respondents) and enriches teaching skills and competencies related to the EM Master's subject (68%), as well as interdisciplinary and multidisciplinary methods (67%). At **central level**, Erasmus Mundus is seen to have largely advanced the **internationalisation of curriculum**, broadening course content to include international perspectives (81% of respondents) and adapting to a globally diverse student body (67%). Furthermore, the EM experience has somewhat influenced the development of **institutional policies for awarding joint degrees** (68%), aligning with the goals of a European degree promoted within the European Education Area (EEA).

International cooperation has seen the most gradual yet profound transformation due to Erasmus Mundus, enhancing **understanding of the European higher education landscape** (76% of programme and 60% of faculty/central-level respondents), increasing **student mobility offer/numbers** (62% of programme and 47% of faculty/central-level respondents), and bolstering **international partnerships**. **Programme-level impacts** include a surge in staff exchanges (89%), novel partnership models (88%) and partial support in securing funding for other joint programmes (50%). At **central level**, there is a noticeable deepening and **diversification of collaborations** with EM partners in new areas (89%), and improved access to university networks (69%). Over half of the respondents acknowledged the positive influence of participating in an Erasmus Mundus project for joining European Universities alliances.

The perceived impact of Erasmus Mundus on **administrative processes** is less pronounced, given its anchoring at programme level and the relatively small size of EM Masters in relation to other study programmes. At **programme level**, the largest improvements were seen in **student services** such as orientation (68%), recruitment (67%), admissions (62%), credit recognition (62%), and mobility guidance (59%), i.e. services that can boost student satisfaction. Central-level changes include enhanced frameworks **for international collaboration**, e.g., better internal regulations on joint programmes/degrees (55%) and support for cross-faculty coordination in international settings.

4. Impact on students and alumni

By catalysing the aforementioned enhancements in learning and teaching curriculum, methods and practices, international cooperation activities, and administrative processes, **Erasmus Mundus elevates the academic experience for all students** at HEIs hosting EM Master programmes. The action's most direct impact on students and alumni lies in providing **unparalleled opportunities for the world's top-tier students to pursue academic and career paths** in Europe and beyond, offering a unique blend of educational and professional advancement.

Until 2024, Erasmus Mundus **supported 34,197 Master's level scholarship holders from 179 countries, leading to 111,617 mobility stays** at partner institutions from across their chosen joint programme. This number is complemented by more than **13,000 non-scholarship holders** enrolled in EM Masters over the same period. More than a third of all EM Master's scholarship holders hail from **Asia** (34%), followed by **Europe** (18%), **Latin America and the Caribbean** (17%) and Other European Countries and the EU Neighbouring regions (14%)⁹. Over the past two decades, the top five home nations of Master's scholarship recipients are India (2,199), Brazil (1,544), China (1,505), Mexico (1,357), and Pakistan (1,236).

Recent findings from the two last editions of the Erasmus Mundus Graduate Impact Survey (GIS) reveal the programme's **unique appeal to prospective students**, reflecting its strong brand. Non-EU students are drawn to its high academic standards and attractive financial support, whereas EU students value the unparalleled international experience. This interest is further translated into impressive **satisfaction** rates among **EM Master's programme** graduates, with 90% of respondents from the 2012/13, 2017/18, and 2020/2021 cohorts reporting high levels of satisfaction. Respondents cite the welcoming attitudes extended towards international students and the excellence of the teaching staff as key reasons for their satisfaction (Jühlke et al., 2024 forthcoming).

The GIS survey identified **five key areas** where Erasmus Mundus consistently delivered individual impact: enhanced intercultural competencies (78% of respondents), improved career prospects (69%), personal growth (66%), more positive attitudes towards Europe and the EU (62%), and deeper subject-matter expertise (59%). Notably, nearly one third of EM graduates, especially those from outside the EU, choose to stay in one of their host countries after graduation, and often embark on careers closely related to their studies. This situation is, however, different in a longer run. **A decade after graduation, many graduates go back to their country**, while the share of those living in a host country or another country declines (Jühlke et al., 2022).

5. Broader effects at national, European and global level

Zooming out, while it may be harder to fully demonstrate the direct, system-level impact of EM, there is substantial evidence of indirect impacts and positive contributions across several domains. At **European level**, EM has notably contributed to activating the Bologna Process tools, spurring the development and testing the implementation of the European Approach for Quality Assurance of Joint Programmes. Moreover, it has been instrumental in shaping the criteria for a European degree and pivotal in piloting these criteria through label pilot projects.

⁹ See Annex 3 for regional grouping of countries.

Nationally, Erasmus Mundus has been a **catalyst for constructive debates and regulatory reforms** on issues such as tuition fees for international students (e.g., Finland), language requirements (e.g., Belgium-Flanders, France), and grant management regulations (e.g., Belgium-Flanders), as well as quality assurance and accreditation practices (e.g., Austria, Finland, Germany, Netherlands, and Spain).

Globally, Erasmus Mundus engaged partner institutions (HEIs and other types of organisations) from an impressive range of **108 countries not associated to Erasmus+¹⁰**, accounting for a total of **2,951 instances** of institutional participation, in **378 EM Master's programmes** (i.e. 65% of all Masters). Of these, 469¹¹ were instances of **full participation by HEIs**, as coordinator (38 instances) or full partner (431 instances). Almost half of the instances of full participation were from Other European countries and EU neighbouring regions (209), of which about three quarters were from the UK (165 HEIs instances as coordinator or full partner).

Of the total of **10,478 student mobility stays of EM scholarship holders** hosted by institutions from non-associated countries participating in EM Masters, 8,283 were in the UK and 2,195 in other non-associated countries. Next to the UK, the **non-associated countries hosting most mobilities** by EM scholarship holders were the United States (267 mobilities), Japan (222 mobilities), Brazil (178 mobilities), China (165 mobilities), Canada (139 mobilities) and Australia (136 mobilities).

6. Conclusions and ideas for the way forward

Building on the EM's in-depth impact on its core objectives and the spillover effects at other levels, **different pathways could be considered for the future**. Experts and programme representatives put forward several reflections, articulated around **five key traits of the current programme**.¹²

Under the **European and global dimensions**, the alternative could be either further strengthening the current balance between the two dimensions, which is an outstanding feature of the programme, or strengthening one over the other.

While the current **exclusive focus on the Master's cycle** is defensible, a (pilot) opening for Bachelor's and the reintroduction of the PhD level, could be considered. This could provide interested institutions with a more robust strategic instrument covering all levels of education although there are doubts about the feasibility of engaging Bachelor students in such a thorough and demanding international study experience as the one offered by EM Master's programmes.

To have a sustainable and clear **approach to certification**, experts recommend clarifying the status and funding links between the established EM brand, reflected on related joint degrees (issued by some 40% of EM Masters) and a European degree (label).

With **in-built mobility windows** as a defining feature of EM Master's programmes, the future could foresee mainstreaming the use of digital learning components (virtual exchanges, Collaborative Online International Learning - COIL¹³) or blended learning opportunities, which are already possible.

Last, approaches to **the overall funding model** could either: further consolidate the current integrated approach (scholarships and institutional support), which has already been highly welcome; consider dissociating the scholarship and institutional funding components to foster synergies with other actions funding one of the two; or foresee a more central use of instruments like the Erasmus Charter for Higher Education (ECHE) with an integrated role of Erasmus Mundus, for strategic transformation at institutional level.

10 Calculations based on the status of the countries in the Erasmus+ programme (associated and non-associated) in 2024.

11 This includes 37 instances of participation of UK HEIs in the role of coordinator, and 128 instances in the role of full partner, based on the country's non-associated status at the time of the study (2024).

12 The European Commission takes note of these proposals, but does not necessarily endorse them at the moment of this publication. Other ways for public consultation and co-creation of Erasmus+ after 2027 are available.

13 See definition <https://online.suny.edu/introtocoil/suny-coil-what-is/>

Introduction

Structure

This study consists of six chapters investigating the impact of Erasmus Mundus at different levels.

Chapter 1 provides a helicopter view of 20 years of Erasmus Mundus, exploring the shifting policy context, objectives, and key elements of the programme over the years.

Chapter 2 zooms in on the participation of HEIs and other types of partners in EM Master's programmes over four programme generations (2004-2008, 2009-2013, 2014-2020, 2021-2023, ongoing until 2027), exploring key statistical data and offering insights into the evolving pathways of individual EM Master's programmes and institutional EM Master's portfolios, with special emphasis on governance and sustainability issues.

Chapter 3 offers novel insights into the EM action impact at institutional level, in three key areas: learning and teaching, international cooperation, and administrative processes. This section presents the programme's effectiveness in these areas, identifying strengths and positive changes at study programme and broader institutional level.

Chapter 4 provides a summary of the evidence about the professional and personal achievements of EM alumni, showcasing graduates' diverse successes. This section testifies the programme's substantial contributions to individual growth and career development.

Chapter 5 investigates EM's impact at national, European, and global levels, highlighting its broad system-wide influence.

Chapter 6 concludes the study with a summary of the main findings and a forward-looking discussion, presenting a set of ideas for the future of the EM programme, considering both challenges and opportunities. It strives to provide some initial food for thought on how the programme could evolve and expand its positive impact in the changing global higher education landscape.

Methodology¹⁴

This study's methodological approach was aligned with its **core objectives** to: (a) demonstrate **higher education sector** involvement in Erasmus Mundus over the past two decades, (b) highlight the **primary features and characteristics** of EM Master's programmes, paying particular attention to their pursuit of excellence, inclusion, and sustainability, (c) explore the **positive changes** triggered by Erasmus Mundus at institutional, individual and system levels, and (d) gather new insights and ideas for the potential **future trajectory of Erasmus Mundus**. The study relied on **four major datasets** to apply a mixed method (Table 1).

¹⁴ For a more detailed overview of the study design, data collection and analysis, and the sample, see Annex 4 "Additional methodological notes."

Table 1. Main data sources for the study

Chapters supported by specific datasets	EACEA statistics	Survey data (central and programme level)	Expert workshops, interviews and consultations	Secondary students and alumni data
Chapter 1: Erasmus Mundus at a glance	All sections		All sections	
Chapter 2: Institutional participation at Master's level	Section 2.1	Sections 2.2-2.3	Sections 2.2-2.3	
Chapter 3: Institutional impact of EM		All sections	All sections	
Chapter 4: Impact on students and alumni	Section 4.1			Sections 4.2-4.4
Chapter 5: Broader effects at national, European and global level			All sections	
Chapter 6: Conclusions and ideas for the way forward		All sections	All sections	

EACEA statistics

A comprehensive **dataset** made available by **EACEA** provided detailed information on **institutional participation** in the EM action, **selected Master's projects**, and **EM scholarship holders** and mobility flows/instances between 2004 and 2024. The institutional dataset covered the participation of HEIs and other types of organisations in Master-related sub-actions of the EM programme: Erasmus Mundus Action 1 (2004-2008), Erasmus Mundus Master Courses (2009-2013), Erasmus Mundus Joint Master Degrees (2014-2020) and Erasmus Mundus Joint Masters (2021-2027).¹⁵ It also covered participation in externally funded sub-actions in the first two programme periods: the External Cooperation Window (ECW), the EMA21 (countries supported via the European Neighbourhood and Partnership Instrument, ENPI)¹⁶, the European Development Fund (EDF),¹⁷ the Development Co-operation Instrument (DCI), regional actions,¹⁸ the Instrument for Pre-Accession Assistance (IPA) and EMA22 (cooperation with industrialised countries) (cf. Chapter 1). However, the latter are only briefly covered in the historical overview of the programme, the main analysis in this study focusing on the Master's programmes and participation of institutions and scholarship holders therein.

Surveys

In consultation with DG EAC and EACEA, **two survey instruments** were designed and implemented in spring 2023 to gather primary data on: (a) the profile and level of engagement with Erasmus Mundus, (b) the institutional impact of Erasmus Mundus in core areas such as learning and teaching, international cooperation, and administration, and (c) lessons learned and recommendations for the future. Aimed at specific target audiences within the beneficiary HEIs, the surveys sought insights from a diverse group of professionals with experience in Erasmus Mundus, encompassing administrative and academic staff employed at study programme, central (i.e. central administration) or faculty level. To collect nuanced feedback, the surveys were organised in **four separate tracks** (cf. Table 2 and Table 25).

15 The analysis does not include projects funded under the much smaller initial Action 4 and then Action 3, which had a different nature and were open to other types of organisations, focusing on awareness raising and promotion activities, nor the Action 2 projects and doctoral programmes, as the main aim of the study is to analyse the impact of Erasmus Mundus Master's programmes.

16 It included Mediterranean and Caucasus countries, as well as Moldova, Russia and Ukraine.

17 It included African, Caribbean and Pacific countries and the overseas territories of EU Member States.

18 It encompassed Latin America, Asia and Central Asia, and the Gulf region and South Africa.

In total, 358 responses were received to both surveys, of which **256 responses** were considered **valid** and retained for analysis (Table 2). Valid responses provided feedback on a minimum of 50% of the questionnaire, ensuring that each valid response covered at least one of the three impact areas explored. The survey sample showed a **high level of representativeness** including valid responses from representatives of (a) **110 unique EM Master's programmes**, corresponding to ca. 32% of all unique funded EM Master's projects¹⁹ and (b) **150 unique HEIs** from 33 countries, corresponding to ca. one fourth of all HEIs and one third of all countries involved in Erasmus Mundus²⁰.

Table 2. Survey responses

Survey track	All responses	Valid responses	Valid responses combined per level of analysis
1.1 Central-level staff	62	37	83
1.2 Faculty-level staff	71	46	
1.3 Current programmes staff	200	167	173
1.4 Past programmes staff	25	6	
All responses	358	256	256

The sample included a notable representation of respondents from (a) five countries (France, Germany, Italy, the Netherlands and Spain), (b) HEIs with more than twelve years' experience with EM, involving many comprehensive and large-sized institutions (more than 25,000 students enrolled); (c) EM Master's coordinators; (d) Social Sciences and Humanities, Information Science and Engineering, Life Sciences and Chemistry (4 of the 16 study fields included in the Erasmus Mundus 2023 catalogue²¹).

Expert workshops, interviews and consultations

To corroborate the quantitative results and gather additional insights, **five workshops** were held alongside a series of **interviews** and **individual consultations** with over 165 experts from National Agencies for Erasmus+, university networks, Quality Assurance agencies, student and alumni associations, EM Master's programmes, HEIs, and DG EAC and EACEA employees and experts. Finally, secondary data collected by related projects (REDEEM2, 2021 and the **Erasmus Mundus Graduate Impact Survey**, GIS, 2022 and 2024 reports) and other existing evidence compiled through desk research were analysed and summarised to showcase the impact of EM on students and alumni and to support the key findings.

19 This figure is calculated based on the number of 349 unique EM Master programmes funded between 2004 and 2023.

20 This figure is calculated based on the estimated number of ca. 600 HEIs involved as coordinator or full partner in EM between 2004 and 2023.

21 For more details, see www.eacea.ec.europa.eu/scholarships/erasmus-mundus-catalogue_en, last accessed on 18 February 2024.

1. Erasmus Mundus at a glance: policy context, objectives and key elements over time

This chapter offers a comprehensive overview of the EM programme's evolution over the past two decades. It delves into the shifting policy landscape that the programme has both responded to and come to exemplify, tracking the progression of its objectives, changes to its core components, and trends in its budgetary allocations. The transition of EM from a broader initiative supporting excellence in a global context to a more targeted emphasis on transnational Master's programmes is depicted schematically in Figure 1.

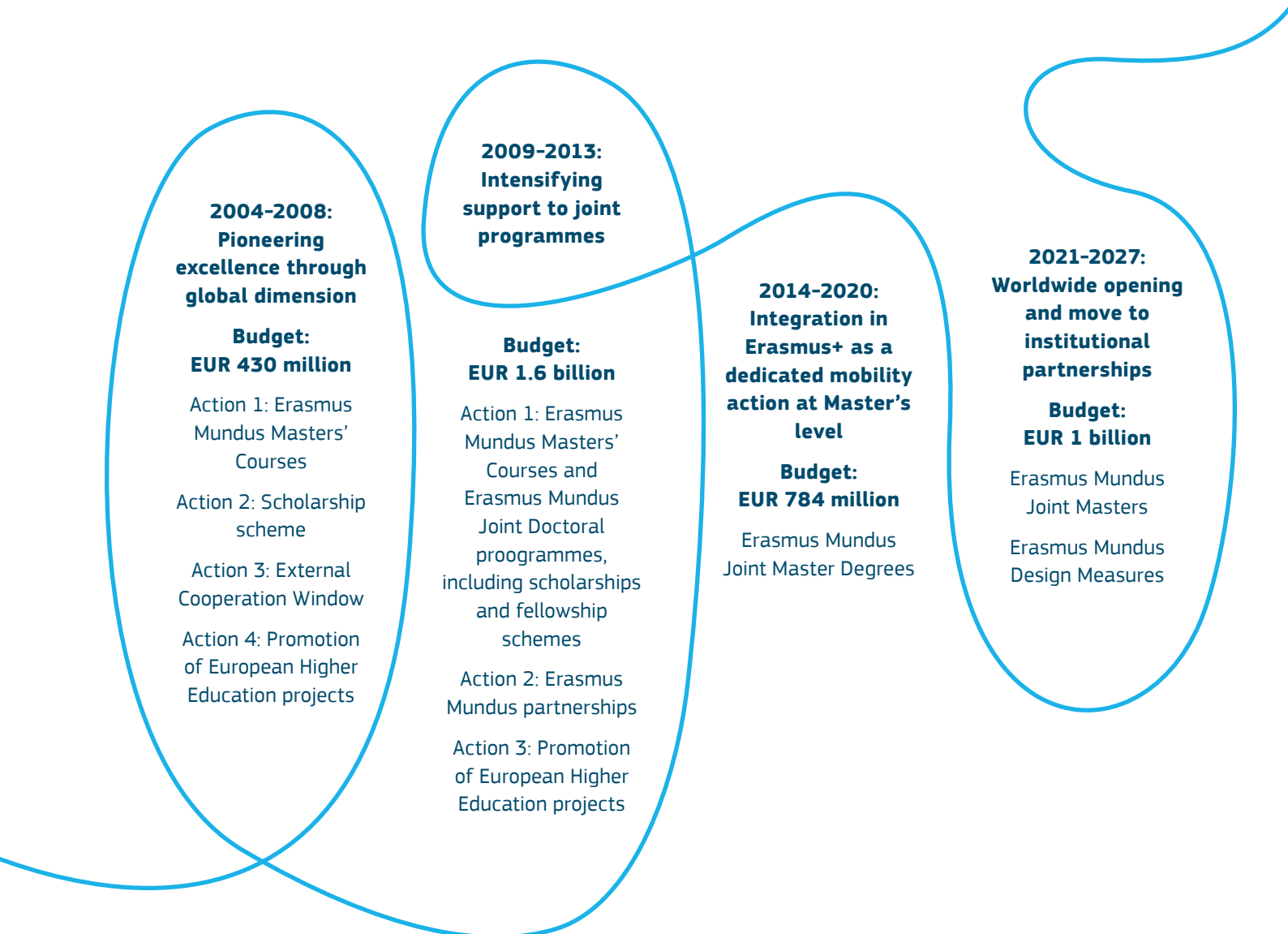


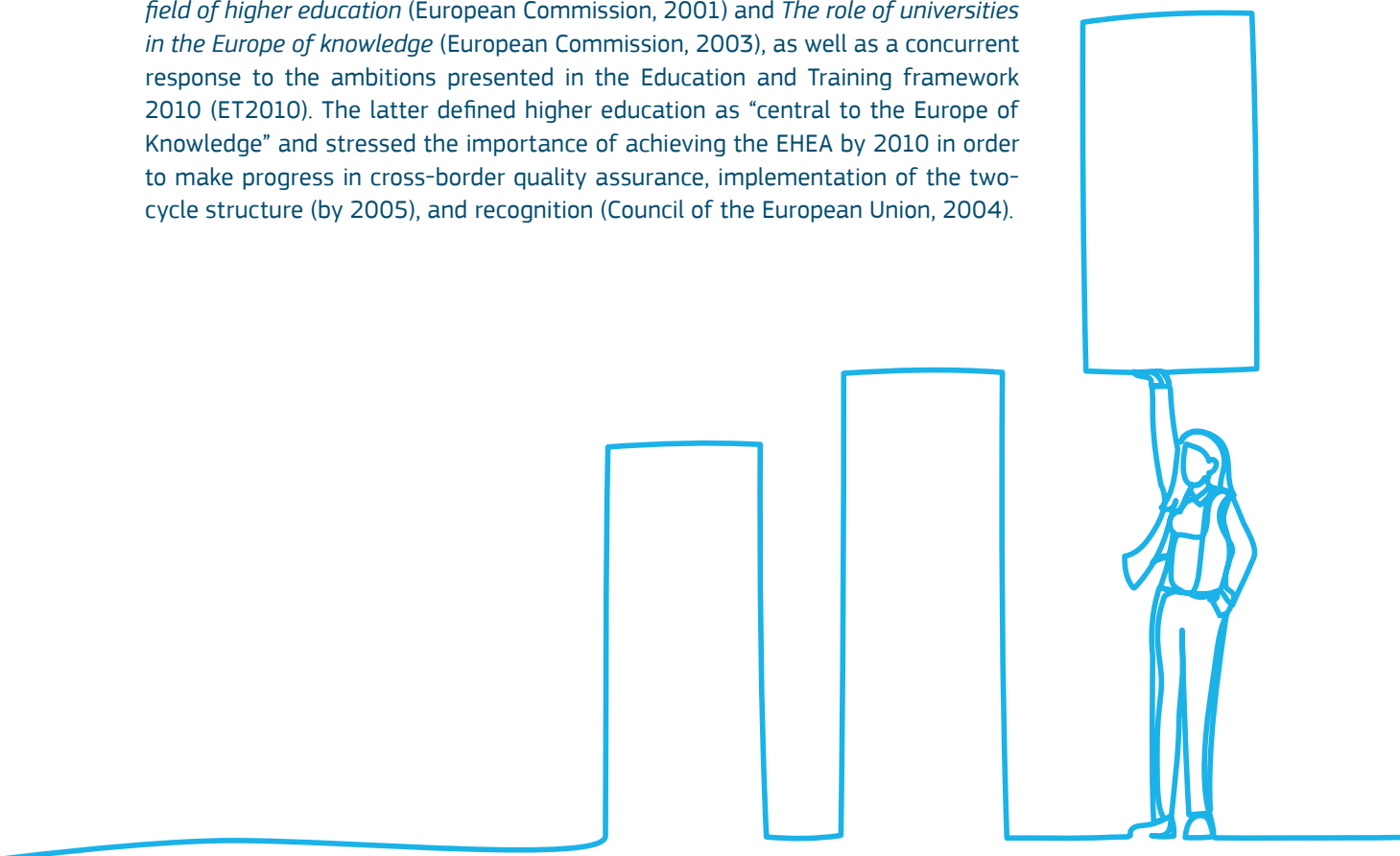
Figure 1. Evolution of the Erasmus Mundus programme in 2004-2024

1.1 Pioneering excellence and the global dimension of European higher education (2004–2008)

1.1.1 Policy context

The EM programme was legally adopted on 5 December 2003 (European Parliament and Council, 2003) and launched in 2004²², in a context of increased cooperation in higher education in the intra-European context, supported by the Erasmus programme in higher education (launched in 1987), and the ongoing intergovernmental Bologna Process (1998-1999), which strived for increased convergence between higher education systems in Europe through the introduction of its Bachelor-Master(-PhD) structure.

The EM programme responded to the dual ambition of the Bologna Process and the EU's overarching Lisbon Strategy (European Council, 2000), which were: (a) to ensure that the European higher education system acquires a **“worldwide degree of attractiveness”**, proportional to Europe's cultural and scientific traditions, and (b) to enhance intra-European cooperation, and ultimately adapt European higher education to the needs of the knowledge society under the EU framework. The programme also built on a set of policy documents, namely two communications: *Strengthening cooperation with third countries in the field of higher education* (European Commission, 2001) and *The role of universities in the Europe of knowledge* (European Commission, 2003), as well as a concurrent response to the ambitions presented in the Education and Training framework 2010 (ET2010). The latter defined higher education as “central to the Europe of Knowledge” and stressed the importance of achieving the EHEA by 2010 in order to make progress in cross-border quality assurance, implementation of the two-cycle structure (by 2005), and recognition (Council of the European Union, 2004).



22 All relevant strands of EU institutions came together for the launch of the EM programme. The adoption of Erasmus Mundus required internal negotiations and an agreement between the Education, External Relations, and Budget Directorates of the European Commission, as well as the support of the European Parliament and the two European Council presidencies. On the education side, the key actors were Education Commissioner, Viviane Reding, and her Directorate General for Education and Culture (DG EAC), headed by Director General, Klaus van der Pas, and supported by Director David Coyne, as well as Head of Unit for Tempus and Third Country Higher Education Cooperation – Martin Westlake and Deputy Head of Unit – Augusto González (who drafted the Erasmus Mundus proposal). On the external relations side, the main decision maker was Commissioner Chris Patten, while his main European Parliament counterpart was MEP Mariel de Sarnez, Rapporteur. The Italian and Danish European Council presidencies chaired the work of the Education Committee, which oversaw the proposal and the final steps towards adoption.

Box 1. Retrospective by Martin Westlake, former Head of Unit responsible for EM, DG EAC, European Commission

Martin Westlake, Head of Unit, Tempus and Third Country Higher Education Cooperation, DG EAC, European Commission (2000-2003)

"The birth of Erasmus Mundus should be seen against the backdrop of a growing global discourse on the knowledge economy and the emergence of an international higher education area, encouraged by cheap air travel, the internet and globalisation more generally. The Bologna Process and the Lisbon Strategy, backed by the EU's experience with Tempus, were increasingly creating a high-quality, proficient European higher education area, but one not yet considered sufficiently competitive internationally. '9/11' and the priority President Romano Prodi subsequently gave to intercultural dialogue, combined with the support of REX Commissioner Chris Patten, provided the young DG EAC and its Commissioner, Vivianne Reding, with the opportunity to develop a programme that had been waiting to happen. The effectiveness of the simple tripartite structure of the initial programme can be measured by the statistics demonstrating its success and popularity twenty years on."

Box 2. Retrospective by Augusto González, former Head of Unit responsible for EM, DG EAC, European Commission

Augusto González, Deputy Head of Unit, Tempus and Third Country Higher Education Cooperation, DG EAC, European Commission (2000-2003) and later Head of Unit for Higher Education international cooperation (2004-2006)

"Erasmus Mundus emerged in a context marked, on the one hand, by the Bologna Process and, on the other, by the view held within the EU that student exchanges with non-EU countries were an invaluable yet underused tool for intercultural understanding. That two of the main proponents of this view were European Commission President Romano Prodi and External Relations Commissioner Christopher Patten was key to the internal institutional support EM got from its inception.

Within that context and compared to existing EU programmes at the time, Erasmus Mundus provided a novel, simple tool combination: a framework for a true European higher educational offer – Joint Masters and double degrees – and financially attractive scholarships for non-EU students. It proved its effectiveness and tremendous added value from the start: a) it had an immediate impact on degree structure convergence, in some cases prompting national legislation reform removing obstacles to double degrees; b) it very visibly enhanced quality academic offer and student services among participating HEIs and beyond; and c) it provided the EU external action with a public diplomacy funding channel that significantly reinforced EM's global outreach. The greatest added value EM generated was for participating students; their own testimonies attest to that."

1.1.2 Objectives

The two main initial aims of Erasmus Mundus were to (1) **enhance the quality of higher education in Europe** by promoting cooperation with other European institutions and third countries, and consequently, (2) to **make higher education in Europe more attractive and visible** throughout the world. Adding to the general goals, the programme intended to promote quality in higher education with a **distinctly European added value**, as well as encouraging and enabling highly qualified graduates and scholars from all over the world to obtain qualifications and acquire experience in the EU. Another specific objective committed the programme to develop better-structured cooperation between EU and third-country HEIs and increase outgoing mobility from the EU. The programme is known as a pioneer in developing international collaborative networks to set up and deliver joint study (and research) programmes within the EHEA (European Commission, 2013a).

1.1.3 Main programme elements

In the **2004–2008** period, the EM programme was implemented through a set of **four actions**. Joint Master's programmes offering scholarships for the top global graduates were at the core of the programme (European Commission, 2013a).

- **Action 1: Erasmus Mundus Masters' Courses (EMMCs)** were defined as advanced-level European master courses, selected by the European Commission, on the basis of the quality of the education and training offered. They involved cooperation between at least three HEIs in three different member states; a study programme including a period of study in at least two of the three institutions; a built-in mechanism for the recognition of periods of study at partner institutions, and the awarding of joint, double or multiple degrees by the participating institutions recognised or approved by member states.

The level of integration (*'jointness'*) of the joint study programme in all its components (student admission and selection method and criteria, course coherence and delivery methods, performance assessment, administrative and financial management, student services, promotion and awareness raising strategies, etc.) was at the heart of the programme from the beginning and constituted an essential selection criterion.

- **Action 2:** An accompanying **Scholarship scheme**, to provide financial support for **non-EU graduate students and scholars** attending Erasmus Mundus Masters' Courses (EMMCs).
- **Action 3: Partnerships with non-EU HEIs** facilitated the involvement of universities from non-European countries in the programme. The partnerships involved an EMMC and a HEI in at least one non-EU country in order to create a framework for mobility towards the third country involving the recognition of study periods.
- **Action 4:** This action supported activities and measures to **make higher education in Europe more attractive** as a study destination, by enhancing the profile and visibility of, and accessibility to, European higher education.

Overall, in the first programme period (2004–2008), Erasmus Mundus funded **166 projects across the four actions**, and 1,488 instances of institutional participation (HEIs, in their majority), for an initial budget of over **EUR 430 million** (Table 3).

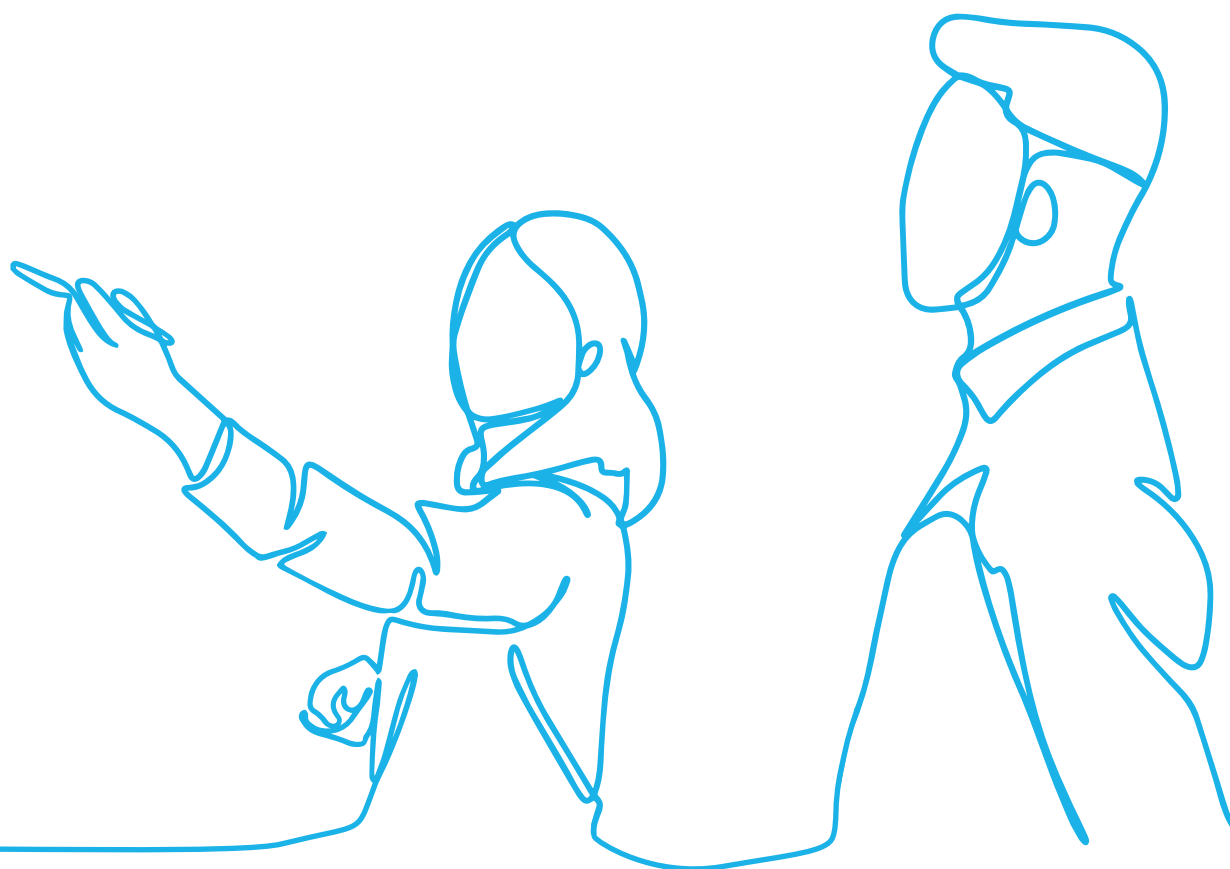
Table 3. Number of selected projects, institutional instances of participation per action and overall budget for the 2004–2008 programme period

Actions	Number of selected projects	Institutional instances of participation ²³
Action 1 & 2: Masters (EM1/EMMC)	103	492
Action 3: External Cooperation Window (ECW)	32	648
Action 4	31	348
Total	166	1,488

Overall Budget: over EUR 430 million²⁴

1.1.4 Evaluation

While the EMMCs made considerable achievements by the end of the first funding period, a related evaluation highlighted the need for further progress at institutional, national and European levels, to further enhance creating, managing and sustaining international joint programmes (European Commission, 2013). The elements identified as deserving further attention included: the development of more **ambitious internship programmes**, and comprehensive **policies for the participation of non-academic organisations** in curriculum development and evaluation. Lastly, the need to develop business models to ensure the sustainability of the EMMCs at the end of the funding period was also underlined (European Commission, 2013).



²³ The term refers to the number of times the same entity participated as coordinator, full partner, or associated partner in the delivery of multiple EM Master's projects within the same or across different funding periods.

²⁴ See Annex 5 for the budget breakdown by Sub-action.

1.2 Intensified support for joint programmes and cooperation with partner countries (2009–2013)

1.2.1 Policy context and overall programme changes

At policy level, the next phase of the EM programme was marked by the 2009 update to the *Education and Training 2020 framework (ET2020)*, stressing the need to further enhance the quality and efficiency of (higher) education, as well as employability (Council of the European Union, 2009), and by the priorities set in the wider *Europe 2020 Strategy* (European Commission, 2010a). The latter was a follow-up to the Lisbon Strategy, setting the EU's ambitions for “smart, sustainable and inclusive growth” in the aftermath of the 2008 financial crisis.

The wider strategy listed two particularly important “flagship initiatives” in the field of higher education, *A Digital Agenda for Europe* and the *Youth on the Move initiative* (European Commission, 2010b), the latter aiming “to enhance the performance and international attractiveness of Europe's HEIs and raise the overall quality of all levels of education and training in the EU, combining both excellence and equity, by promoting student mobility and trainees' mobility, and improve the employment situation of young people” (European Commission, 2010a). The European Commission's *Agenda for the modernisation of Europe's higher education systems* (European Commission, 2011a) further stressed the need for reforms at both member states and institutional level to further improve the quality and relevance of higher education, and to promote mobility.

The next phase of Erasmus Mundus continued to support world-class integrated joint programmes at Master's level in Europe, with full scholarships for top international students and grants for mobile academics (short-term). While the second phase (2009–2013) ensured the continuity of the first one (2004–2008), several programme modifications and additions were made. The programme's scope was widened by incorporating four new key dimensions:

1. Extending joint study programmes to the doctoral level;
2. Extending the scholarships offer to European students;
3. Integrating the “External Cooperation Window” scheme into Erasmus Mundus, as “Action 2 – Erasmus Mundus partnerships”, with a wider scope including all levels of higher education and other forms of cooperation with third countries;
4. Allowing third-country HEIs to participate in EM Master's programmes (European Commission, 2012).



Box 3. Retrospective by Angeliki Verli, former Head of Unit responsible for EM, DG EAC, European Commission

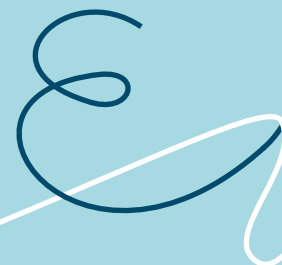
Angeliki Verli, Head of Unit responsible for External Relations in education, including the Erasmus Mundus Programme, DG EAC, European Commission (2007-2008)

“Despite my short passage (October 2007–December 2008) to the Commission Unit dealing, between others with the Erasmus Mundus programme, I had the chance to head the negotiations for the adoption of the 2nd phase of the programme (2009-2013) and work out the guide for the new proposals.

The main tool offered by Erasmus Mundus, which was the creation of joint Master’s programmes, was built on the experience acquired by European universities through the years of implementing the Erasmus programme, which I was also honoured to head for 12 years. These high-quality courses were further defined and offered to international students ensuring the attractiveness of European higher education.

The extension of the joint courses to doctoral level and the integration of HEIs from third countries in the courses, have increased this attractiveness. In the meantime, the doctorates have moved to the Marie Skłodowska-Curie Actions which also supports university networks.

Furthermore, European students were also enabled to access these joint Master’s courses through cooperation with the Erasmus+ programme financial mechanisms, in order not to exclude top European students from international mobility.”



1.2.2 Objectives

The objectives of the programme remained in line with the previous phase, namely a cooperation and mobility programme in the field of higher education for the enhancement of quality in European higher education, as well as the promotion of the EU as a centre of learning excellence around the world. The programme sought to help improve and enhance graduates' career prospects (establishing the first links with the employability objectives), and to promote intercultural understanding through cooperation with third countries, in accordance with EU external policy objectives. The latter was to contribute to the sustainable development of third countries in the field of higher education. To this end, Erasmus Mundus II continued and extended the scope of activities already launched during the first phase of the programme.

1.2.3 Main programme elements

Erasmus Mundus II activities were structured in three main key actions:

- **Erasmus Mundus Action 1 (EMA1): Erasmus Mundus Joint Programmes** of outstanding quality, divided into **Erasmus Mundus Masters' Courses (EMMC) (Action 1A)** and **Erasmus Mundus Joint Doctoral programmes (Action 1B)**, including scholarships and fellowships schemes, were the key components of the Erasmus Mundus II programme.

These two sub-actions maintained the elements of the previous programme, i.e. high-quality integrated Master's level courses, organised and offered by consortia of at least three HEIs from at least three different European countries, also extended to doctoral level.

In this phase, the consortia supporting EM Master's and Doctoral programmes were **opened to third-country institutions**, which were invited to participate **on the same footing as European institutions**. Nevertheless, the minimum mobility requirement meant at least three European HEIs had to be involved in the Master's or Doctoral programme.

In contrast to the first generation of the programme, **European students and PhD candidates were also offered scholarships**, and could participate in the joint programmes as scholarship holders at both levels. The programme foresaw full scholarships for both third country and European students/candidates at both levels of study, as well as **grants to support the short-term mobility of academics** (from both European and third countries). Scholarships funding was split into **category A scholarships** (for third country students and doctoral candidates) and **category B scholarships** (for European students and doctoral candidates).

As in the 2004-2008 period, country specific scholarships funded through the European Commission's external cooperation instruments, complemented Erasmus Mundus scholarships, in order to extend the number of beneficiaries from specific third countries in the EU Neighbourhood.

Regarding the design of the joint Masters' and Doctoral programmes, Erasmus Mundus II set an **explicit preference** for the **award of joint degrees and encouraged internships** as part of the joint programmes, to support the link to the labour market and the employability of graduates and fellows, which became more central to the programme.

- **Erasmus Mundus Action 2 (EMA2): Erasmus Mundus partnerships** provided international mobility opportunities by financing partnerships between EU and partner country HEIs. First, EMA2 provided support for the establishment of international cooperation mechanisms between HEIs from targeted partner countries and the EU, to organise and implement **structured individual mobility arrangements** between Europe and several global regions. Second, it provided scholarships of various lengths (depending on the priorities defined for the partner countries concerned, the level of studies or the particular arrangements agreed within the project consortium) for European and partner country individuals (encompassing Bachelor's and Master's students, PhD candidates, Post-doctoral researchers, as well as academic and administrative staff).

EMA2 succeeded the Erasmus Mundus External Cooperation Window (ECW, 2007-2009), a higher education cooperation and mobility scheme with a similar purpose launched in 2006 by DEVCO – EuropeAid, the European Commission's Directorate-General for Development and Cooperation. This action gave European and partner country universities the opportunity to start setting up international mobility schemes (European Commission, 2017).

The action was further structured in **two strands**:

EMA2 STRAND1: Partnerships with countries previously covered by the External Cooperation Window and related instruments, namely the European Neighbourhood and Partnership Instrument (ENPI)²⁵, the European Development Fund (EDF)²⁶, the Development Co-operation Instrument (DCI) regional actions²⁷, and the Instrument for Pre-Accession Assistance (IPA)²⁸.

EMA2 STRAND2: Partnerships with countries and territories covered by the Industrialised Countries Instrument (ICI) to cooperate with industrialised and other high-income countries.

- **Erasmus Mundus Action 3 (EMA3): Promotion of European Higher Education projects** aimed to improve the visibility and accessibility of European higher education, and support coordination and networking activities of the Erasmus Mundus National Structures²⁹ as well as other aspects related to higher education internationalisation. In Erasmus Mundus I, this action was more general, and included project-based supporting measures and studies that sought to promote worldwide awareness of and access to European higher education.

In the second programme period (2009–2013), the total **Erasmus Mundus budget almost quadrupled**, from the initial EUR 430 million to close to EUR 1.6 billion, while the **number of funded projects tripled** (from 166 to 493 projects), recording 6,818 instances of institutional participation (mostly, HEIs) (Table 4). This increase was largely due to the expansion of projects with countries not associated to the EU programmes, as well as to the Joint Doctorates component.

25 It included Mediterranean and Caucasus countries, as well as Moldova, Russia and Ukraine.

26 It included African, Caribbean and Pacific countries and the overseas territories of EU Member States.

27 It encompassed Latin America, Asia and Central Asia, and the Gulf region and South Africa.

28 It provided assistance to both potential candidates and candidate countries (Western Balkan countries, Türkiye and Iceland).

29 EU member states designated National Structures to provide general information and advice on programme implementation at the national level. EU Delegations supported the programme implementation in third countries.

Table 4. Number of selected projects, institutional instances of participation per action and overall budget for the 2009-2013 programme period

Actions	Number of selected projects	Institutional instances of participation ³⁰
Action 1: Masters (EMMC)	140	1,768
Action 1: Doctorates (EMJD)	43	246
Action 2: ECW	43	805
Action 2: EMA21	214	3,501
Action 2: EMA22	19	173
Action 3: EMA3	34	325
Total	493	6,818

Overall Budget: ca. 1.6 billion³¹

1.2.4 Evaluation

An evaluation of the programme found positive evidence of its continued relevance for participating institutions, countries and graduates, a distinct European added value, as well as effectiveness and complementarity with existing programmes and contribution to the wider policy objectives. While highlighting the need to further address the sustainability of the EM Master's programmes, the evaluation stressed the successful emergence of the **"Erasmus Mundus brand"**, acknowledging that Erasmus Mundus had a "strong image", particularly for students and partner institutions from non-European countries, and a very positive reputation "reached through the specific design of the programme creating a distinct offer in European higher education, as well as participation of prestigious higher education institutions" (European Commission, 2012). The evaluation recommended the use of the Erasmus Mundus "label" beyond the funding period to support the sustainability of EM Master's programmes as a mark of excellence.

³⁰ The term refers to the number of times the same entity participated as coordinator, full partner, or associated partner in the delivery of multiple EM Master's projects within the same or across different funding periods.

³¹ See Annex 5 for the budget breakdown by Sub-action.

1.3 From stand-alone programme to mobility action line (2014–2020)

1.3.1 Policy context and overall programme changes

At policy level, the European Commission's 2013 Communication *European higher education in the world* zoomed in on the Union's cooperation in higher education with third countries, advocating a strategic approach to international cooperation by European HEIs, through the development of fully-fledged internationalisation strategies, covering both mobility and "at home" elements, as well as strengthened cooperation with international partners, in the climate of a "global race for talent."

Prior to 2014, Erasmus Mundus was a stand-alone action alongside other EU-funded international higher education programmes (i.e. Tempus, Alfa, Edulink, and bilateral cooperation programmes with industrialised countries). It was parallel to the Lifelong Learning Programme (LLP) (2007–2013), which encompassed the Erasmus programme for the field of higher education.

In 2014, EU programmes for education and training, youth and sport underwent a major change and were brought together **under a single umbrella: the Erasmus+ programme**, covering all levels of education, including youth and sport, as well as intra-European cooperation and collaboration with institutions from partner countries. The shift to a single programme was mostly driven by the conclusions of the mid-term review of the previous programmes. The review stressed the need to simplify their structures, reduce duplication and foster integration, lower administrative costs, and increase user-friendliness, in order to reach a critical mass in participation and a systemic-level impact (European Commission, 2011b).

The new overarching programme applied a **simplified architecture**, based on three complementary and mutually reinforcing pillars, bringing together the previous sectoral programmes: Key Action 1 (KA1: Learning mobility of individuals), Key Action 2 (KA2: Cooperation for innovation and exchange of good practice) and Key Action 3 (KA3: Support for policy reform) and two standalone chapters for Jean Monnet actions and sport. Erasmus Mundus became part of KA1 Learning mobility of individuals.

In the 2014–2020 period, the three programme supporting actions merged into **one single action**, and several other format-related changes were implemented to streamline the programme:

- Funding for joint study programmes at doctoral level was moved to the **Marie Skłodowska-Curie Actions** (MSCA), which were supported under Horizon 2020, the EU's framework programme for research and innovation.
- The mobility with third countries facilitated by EMA2 became the core of the new **International Credit Mobility** (ICM) action (Key Action 107) launched in 2014 to facilitate the mobility of higher education students (all levels) and staff on a project basis, worldwide.
- The previous EMA Action 3 ceased to exist as a specific mechanism promoting the attractiveness of the EHEA. This objective became one of the specific goals of the Erasmus Mundus Joint Master Degrees (EMJMDs). The **EMJMDs** thus became one of the **central components of the "international dimension"**³² of the Erasmus+ programme, supporting cooperation with partner countries. Promoting Europe as a study destination was subsequently supported through the European Commission funded **Study in Europe** initiative.

32 Together with Key Action 1 (KA1) International Credit Mobility, Key Action 2 (KA2) Capacity Building in Higher Education and Jean Monnet.

Box 4. Retrospective by Claire Morel, former Head of Unit responsible for Erasmus Mundus, DG EAC, European Commission

Claire Morel, Deputy Head of Unit for International Cooperation, DG EAC, European Commission (2010-2015) and Head of Unit for International Cooperation (2015-2019)

"Since its inception, Erasmus Mundus has been largely open to the world, both to excellent students from anywhere in the globe, and to universities from outside the EU, applying to set up joint, double or multiple degrees with embedded mobility. These degrees became part of universities' international strategies, increasing their international visibility and attractiveness and creating new academic networks.

When Erasmus+ was launched in 2014, one of the big novelties was its international opening, offering students and university staff the opportunity to be mobile outside Europe (known as "international credit mobility"). Erasmus Mundus was integrated into Erasmus+ and found its place in the international actions of the programme by offering degree mobility as a natural complement to credit mobility.

Thanks to Erasmus Mundus, university cooperation has allowed universities to cooperate more closely on curriculum development, student centred education, joint teaching and supervision, quality assurance, mutual recognition of qualifications and to establish a highly integrated type of cooperation. National legislations were adapted in several member states to develop joint degrees and support participation in Erasmus Mundus.

A great contribution was also made by the network of active and enthusiastic National Contact Points that at the beginning greatly facilitated the success of the programme, through their active promotion work, their involvement in the adaptation of national legislations, and the networking possibilities they offered to universities in their countries. There has always been a lot of enthusiasm around the programme and the new horizons it has opened for students, alumni and universities."

Box 5. Retrospective by Graham Wilkie, former Acting Head of Unit responsible for Erasmus Mundus, DG EAC, European Commission

Graham Wilkie, Deputy Head of Unit for International Cooperation, DG EAC, European Commission (2015-2019) and Acting Head of Unit (2019-2020)

"The Erasmus Mundus programme holds significant EU policy relevance and educational value. From the EU perspective, it promotes European values, international cooperation, excellence in education, talent attraction, and EU diplomacy. For higher education institutions, it fosters academic collaboration, diversity, reputation enhancement, funding access, and innovation exchange.

Erasmus Mundus expands upon the original Erasmus programme by emphasizing international cooperation and mobility through joint degrees, scholarships, and partnerships. The programme's key achievements include promoting joint degrees, enhancing mobility, strengthening partnerships, and fostering excellence.

Personally, it's been a privilege to witness the programme's impact on students from around the world: to a man and woman, the alumni I met were happy to evangelise about the wonders of the European higher education system and it's energising to see our system through fresh eyes."

1.3.2 Main programme elements

Placed under the Key Action 1: Learning mobility for individuals of the new Erasmus+ programme (2014-2020), the new **Erasmus Mundus Joint Master Degrees (EMJMDs)** action was targeted at the Masters' level, and, as previously, encompassed a scholarship scheme.

In this funding period, EMJMDs remained the main format for supporting high-level integrated international study programmes, varying from 60 to 90 or 120 ECTS. The specificity of the programmes – the high degree of jointness and excellence of the academic content offered – was retained.

By adding joint Master “degree” to the title, the action encouraged the award of “joint degrees” whenever possible under national legislation, as joint degrees were seen to embody “*a full integration of the learning and the teaching process*” (European Commission, 2015). The role of HEIs in partner countries also progressed, in that they could be involved in the award of the joint, double or multiple degrees.

While the recognition of EM Master's programme degrees was a key feature since the programme launched in 2004, use of the European Approach for Quality Assurance of Joint Programmes, approved at ministerial level in the Bologna Process in 2015, was specifically encouraged as a means of external quality assurance from 2017 onwards.

In the 2014-2020 period, the funding made available under EMJMDs covered: scholarships (for four student intakes, with approx. 13 to 20 student scholarships per intake); funding for a preparatory year (optional); management costs (including costs for the invited scholars and guest lecturers); and a variable number of additional scholarships for targeted world regions (four additional scholarships per intake, on average, for one or more priority regions).

As in the previous generations of the programme, the emphasis remained on primarily attracting top students from outside Europe, while also supporting European students. The share of funding between scholarships for students from partner countries (at least 75% of the total), and scholarships for students from programme countries (incurring lower travel and installation costs) was maintained.

In the 2014-2020 period, the Erasmus Mundus Joint Master Degree catalogue was created to address the need to promote and ensure the visibility of all joint Master programmes offering scholarships, and covering both newly selected and existing EM Master's programme.

In the third funding period (2014-2020), the move of Joint Doctorates and Action 3 projects outside the programme led, at first glance, to a smaller budget (EUR 748 million). However, this budget was fully targeted on EM Master's programmes and funded 251 programme iterations, and 5,552 institutional instances of participation (Table 5).

Table 5. Number of selected projects, institutional instances of participation per action and overall budget for the 2014-2020 programme period

Actions	Number of selected projects	Institutional instances of participation ³³
Masters (EMJMD)	251	5,552
Overall Budget: EUR 784 million³⁴		

³³ The term refers to the number of times the same entity participated as coordinator, full partner, or associated partner in the delivery of multiple EM Master's programmes within the same or across different funding periods.

³⁴ See Annex 5 for the budget breakdown by Sub-action.

1.3.3 Evaluation

Reflections about the future of the EM action (European Commission, 2017b), involving the European Commission, the EACEA, Erasmus+ National Agencies and EM project coordinators, identified four main strategic priorities at the end of Erasmus+ (2014-2020): (a) ensuring the continuity of the action and embedding it in the EU higher education strategy; (b) improving the attractiveness of the scheme for institutions and capitalising on the brand name; (c) ensuring the long-term sustainability of the Master's programmes, and (d) simplifying the implementation modalities.

1.4 Global opening, simplification and new funding mechanisms (2021–2027)

1.4.1 Policy context and overall programme changes

This period is marked by an **ambitious vision** for higher education at EU policy level, set through several key documents, and related policy goals tied closely to the initial EM objectives of linking intra-European quality enhancement and academic excellence with global attractiveness and collaboration with non-European partners. These objectives have largely remained unaltered throughout the different programme periods, although the programme has become increasingly open to the world and acquired an enhanced European dimension.

The *Achieving the European Education Area by 2025* (European Commission, 2020) details the geopolitical dimension of (higher) education cooperation for the first time, placing this as one of six pillars. This Communication mentions (higher) education's role in creating a “stronger Europe in the world”, in which enhancing intra-European cooperation, and strengthening cooperation with international partners, through programmes like Erasmus Mundus, becomes ever more salient. The Communication highlights the role of education cooperation programmes as “soft power” instruments, supporting the Union's external relations agenda. The follow-up document in the area of higher education – the *European Strategy for Universities* (European Commission, 2022) – links international cooperation to the promotion of “European values”, portrays HEIs as key “drivers of Europe's global role and leadership” (one of the four pillars of the strategy) commits to further supporting “consortia of worldwide leading universities to develop and implement Master's programmes, through Erasmus Mundus Joint Master calls addressing global challenges.” The strategy also announces a new “European degree label”, aiming to provide new impetus and respond to the challenge of awarding joint degrees, previously identified by Erasmus Mundus consortia.

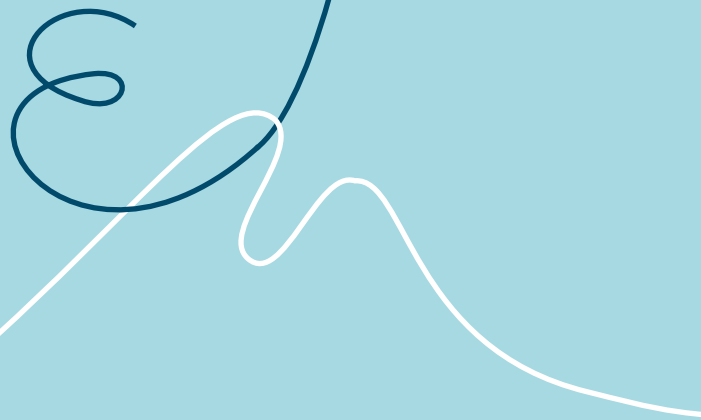
Conclusions on building bridges for effective European higher education cooperation (Council of the European Union, 2022) further committed member states to looking into removing the remaining barriers to transnational cooperation, many of which also affect EM consortia, and tasks the European Commission to test the feasibility of a European degree label. The proposed criteria for awarding a European degree (label) were largely inspired by EM Masters. These criteria and potential award mechanisms were tested by six selected higher education consortia consisting of institutions experienced in Erasmus Mundus, including European Universities alliances. An ensuing Communication on a *Blueprint for a European degree* was published by the European Commission in March 2024 (European Commission, 2024a) as part of a wider higher education package.

The transition to the second edition of Erasmus+ (2021-2027) comes with a strong horizontal priority to become **more inclusive** and increase access to the programme of groups with fewer opportunities (amongst four others). In this line, the EM programme was moved from “Key Action 1: Learning mobility of individuals”, to an enhanced “Key Action 2: Cooperation among organisations and institutions.” Within it, Erasmus Mundus is enlisted as one of the “partnerships for excellence”, along the Centres of Vocational Education and the more institutionalised form of cooperation supported under the European Universities Initiative. This shift was meant to **emphasise the Erasmus Mundus focus on institutional collaboration** and position it as one of the instruments Erasmus+ offers to support internationalisation of higher education in a longer-term, sustainable outlook (European Commission, 2017).

Box 6. Outlook by Filip Van Depoele, Head of Unit for International Cooperation, DG EAC, European Commission

Filip Van Depoele, Head of Unit for International Cooperation, DG EAC, European Commission (2021-present)

“Since its inception 20 years ago, Erasmus Mundus has been the frontrunner for the establishment of joint degrees in the European Higher Education Area, inspiring the recently presented blueprint for a European degree. Still today, Erasmus Mundus boosts the relevance of European higher education and the attractiveness of Europe as a study destination, as evidenced by the number of impressive talents from all over the world who graduate every year from the Erasmus Mundus Joint Masters. The challenge is now to ensure that Erasmus Mundus remains as relevant, innovative, and transformative over the next 20 years.”



1.4.2 Main programme elements

As of 2021, Erasmus Mundus underwent substantial changes. The action was divided in two independent sub-actions: the Erasmus Mundus Joint Masters (EMJMs), a continuation of the previous Erasmus Mundus Joint Master Degrees (EMJMDs) and the new **Erasmus Mundus Design Measures (EMDMs)**. The EMDMs aim to encourage the development of new, innovative, high-level integrated transnational study programmes at Master's level, particularly in underrepresented countries or thematic areas under Erasmus Mundus. The design measures are meant to support higher education institutions that are not yet ready to offer a full EMJM but wish to engage in joint programmes and explore the opportunities offered by the European Approach for Quality Assurance of Joint Programmes.

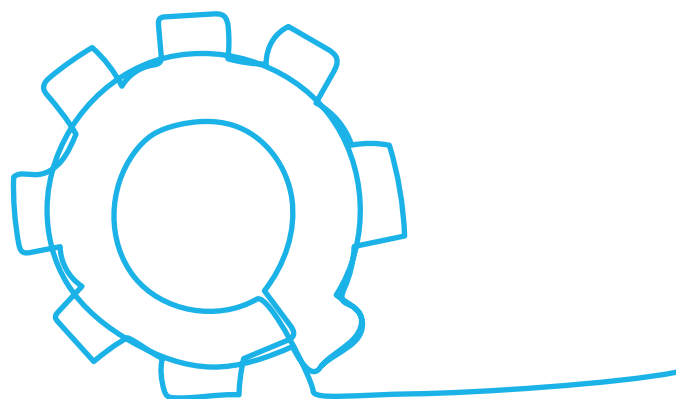
Regarding the current EMJMs format, the **stronger role of partner institutions in third countries not associated to the Erasmus+** programme is noteworthy. As of 2021, these partners may act as consortium coordinators and be counted in the minimum eligible partnership of three HEIs. The minimum mobility requirements of the new format (at least two mobilities as before) may now include one mobility to a partner in a country not associated with the programme.

Going a step further than the previous phase (2014-2020), the Standards for Quality Assurance of Joint Programmes identified in the European Approach are referred to in the Erasmus+ programme guide and define the compulsory requirements for EMJMs. As in the previous period, the award of joint degrees is highly encouraged, whenever the national legislations permit.

As of 2021, a **simplified funding mechanism** was implemented, consisting of only three types of unit costs: institutional costs, individual needs support for students with disabilities, and scholarships. Given that there is not anymore budgetary difference between EU and partner country candidates, projects need to ensure the geographical balance of students³⁵. Lastly, the new funding mechanism provides **increased support for sustainability**, by linking the contribution to institutional costs to the number of students enrolled³⁶ during the entire duration of the grant agreement (both scholarship and non-scholarship holders).

The EMJMs further introduced a simplified management mechanism for HEIs that consists of a fixed grant agreement covering six academic years or 74 months, independently from the length of the Master programme and at least four student intakes (i.e. "editions"). Another novelty for this period addressed a long-standing demand from the joint Masters that were no longer funded under Erasmus Mundus. Beside the financial contribution, any EM funded project with the expiring grant agreement may continue to run the course as an Erasmus Mundus Master for up to three additional editions after the end of the project based on a performance assessment by EACEA."

The budget for the first three years (2021-2023) stood at EUR 585 million, and has funded 253 projects and 2,113 instances of institutional participation to date (Table 6).



³⁵ No more than 10% of the total scholarships awarded to students of the same nationality (with exception of the additional scholarships for targeted regions) (cf. Erasmus+ Programme guide 2024).

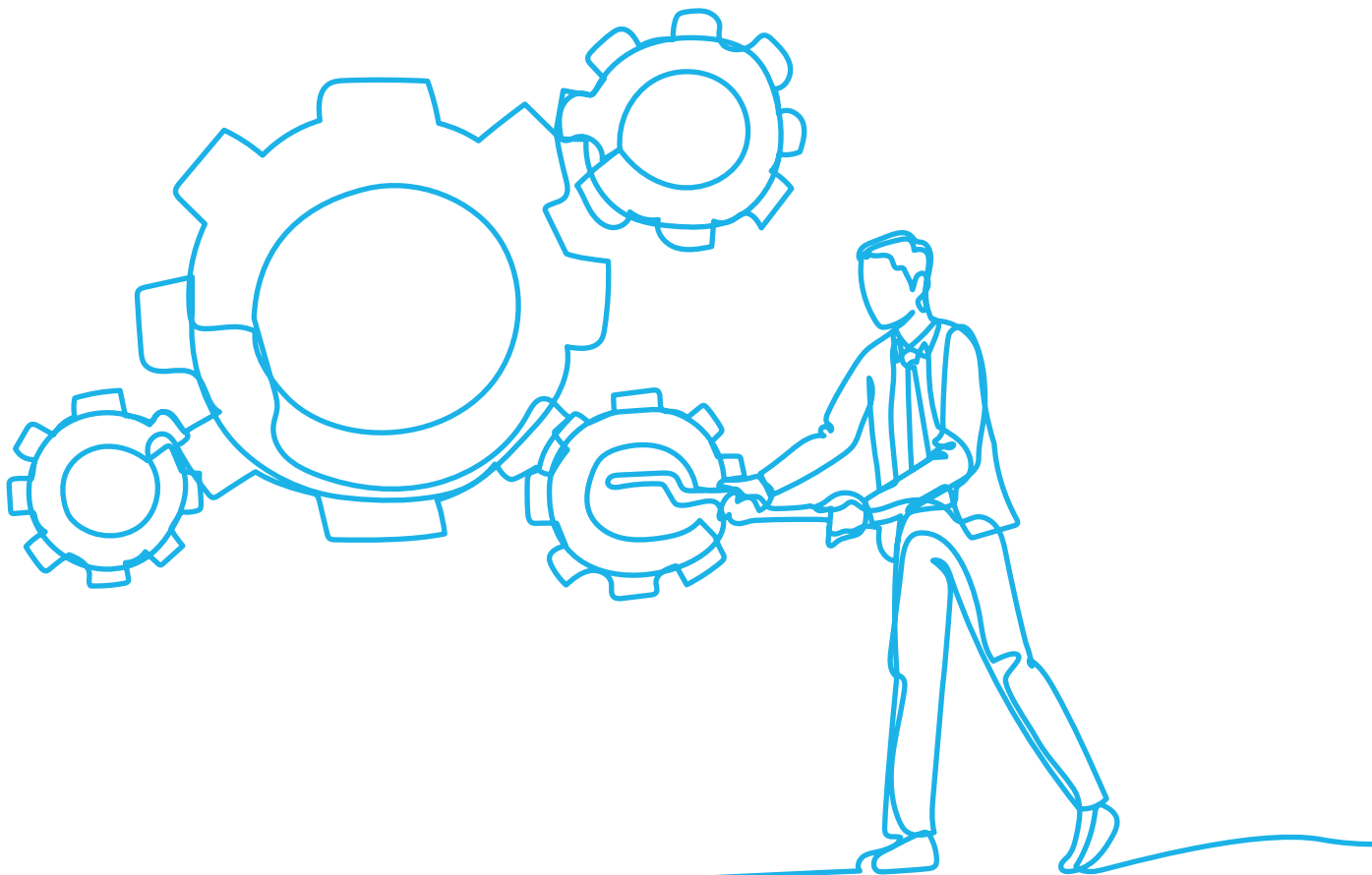
³⁶ With a max. contribution for 100 enrolled students (cf. Erasmus+ Programme guide 2024).

Table 6. Number of selected projects, institutional instances of participation per action and overall budget for the 2021-2023 programme period

Actions	Number of selected projects	Institutional instances of participation ³⁷
Masters (EMJM-MOB)	91	1,951
Design Measures (EMDM)	162	162 ³⁸
Total	253	2,113

Budget for 2021-2023: ca. EUR 585 million³⁹

All in all, over the four programme periods, Erasmus Mundus has undergone a significant consolidation process, in strategic, financial, and targeted action terms. The budget has markedly increased from the initial EUR 430 million between 2004 and 2008 to an expected EUR 1 billion in the 2021-2027 financial period. The programme funded over 1,160 projects to date (with four years to go under the current programme period) across its different sub-actions. The programme also enabled over 15,971 instances of participation of HEIs and other types of organisations in the related sub-actions, the numbers continuing to rise.



³⁷ The term refers to the number of times the same entity participated as coordinator, full partner, or associated partner in the delivery of multiple EM Master's programmes within the same or across different funding periods.

³⁸ Given that EMDM projects are mono-beneficiary grants, the number of institutional instances of participation and the number of selected projects are the same.

³⁹ See Annex 5 for the budget breakdown by Sub-action.

2. Institutional participation at Master's level

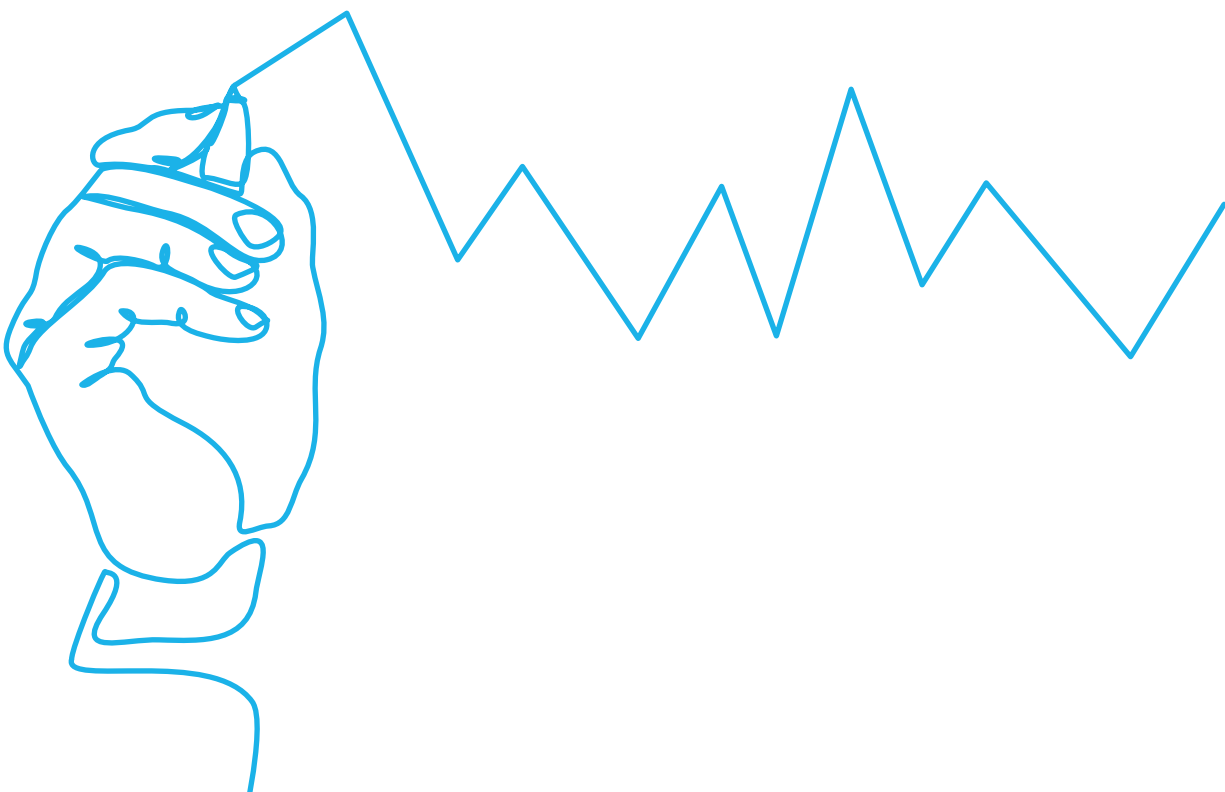
Building on the historical trajectory of Erasmus Mundus and its targeted focus on Master's programmes, this chapter delves into the **main inputs and outputs** of the programme at Master's level underpinning its impact across various domains. It begins with an analysis of the evolving **numbers of EM Master's programmes** over the first two decades, examining **institutional participation trends** across the four funding periods using data from EACEA. The chapter then carries an in-depth exploration of the **evolution of institutional portfolios of EM Master's programmes and individual EM Masters** over time and based on the survey data, before concluding with an analysis of their sustainability and governance pathways.

2.1 Statistical overview (2004-2023 ongoing)

Analysis of the **historical evolution of funded study programmes and institutional participation** therein encompasses Master sub-actions of the EM programme across four funding periods: EM1/EMMCs (2004-2008), EMMCs (2009-2013), EMJMDs (2014-2020) and EMJMs (2021-2027).

2.1.1 Erasmus Mundus Master's projects

Over two decades, **Erasmus Mundus funded a total of 585 Master's projects**, with the number of selected projects gradually increasing from one funding period to the next (Table 7), in line with the increase in the related budgets (cf. Chapter 1). As the same study programme could apply for EM consecutive support over the four funding periods, this number represents the number of "projects" (i.e. study programme iterations) funded, and not of study programmes. Of the 585 projects selected under EM, **three EM Master's programmes** were in their **fifth project funding period**, 18 EM programmes in their fourth funding period, 42 programmes in their third, and 86 programmes in their second funding period.



The 585 funded projects involved **349 unique Master's programmes**, of which **149 (43%) applied for multiple funding projects** under EM. However, this does not mean that these programmes remained identical over time. Recurrent changes in the action's requirements, selection criteria, the growing strive for excellence and opening to cooperation with partners from non-associated countries and industry led the respective study programmes to implement multiple innovations with each new application, especially as the action became more competitive. These innovations often occurred in relation to the jointness of the programme (e.g., recruitment, curriculum, teaching, certification), and, in some cases in the composition of the core consortia, through the involvement of new (full or associate) partners.

Table 7. Number of EM Master's projects funded per programme period in 2004-2023

Programme period	Number of EM Master's projects funded (project funding periods)
2004 – 2008	103
2009 – 2013	140
2014 – 2020	251
2021 – 2023 (ongoing)	91
Total	585

The number of EM Master's projects selected per year varied from 11 (in 2014) to as high as 51 (in 2009 and 2019) (Figure 2). These numbers reflected the annual funding available rather than the level of HEIs or other types of participants' interest, which significantly surpassed the budgets available. The linear growth from 2014-2020 and 2021-2027 (figures up to 2023) also reflects the more recent practice of a gradual, annual increase in the overall Erasmus+ budget in these two programme periods. During the 2014-2020 period, the highest annual budget became available in the final years of the EU's Multiannual Financial Framework (MFF), a trend that is to continue also in 2021-2027.

Number of EM Master's projects funded per year and programme period (n=585)



Figure 2. Number of EM Master's projects funded per year and per programme period⁴⁰

⁴⁰ The year 2013 is not included in the graph as there was no call for proposals that year.

2.1.2 Overall instances of participation (HEIs and other types of organisations)

Typically designed for HEIs of different types, the 585 EM projects also witnessed over time the increasing **involvement of non-university organisations**, such as research centres and institutes (both independent ones, as well as affiliated to HEIs), private companies, NGOs, municipalities, civil society organisations etc., which in the study are depicted in the combined “Other types of organisations” category. This diversification of participating institutions was at least in part due to sustained efforts over different programme periods to structurally involve industry representatives and employers in the joint programmes’ design and delivery. The latter had the purpose to help further increase the quality and relevance of the educational offer of EM Master’s programmes to the labour market needs, and consequently increase EM graduates’ employability.

The 585 EM Master’s projects relied on **a combined total of 9,763 instances of institutional participation**⁴¹ by **HEIs (5,523 instances, i.e. 57%)** and **other types of organisations (4,240 instances, i.e. 43%)** to date (Figure 3). The high numbers and multiple instances of participation by the same institutions attest the highly collaborative nature of EM Masters (involving an average of 16 full and associated partners per Master’s programme). The same figures show a **sixfold increase in the instances of HEI participation** growing from the initial 492 instances in 2004-2008 to as many as 2,925 instances in the 2014-2020 programme period. This increase can be partly explained by the more consistent reporting of associated partners by EM Masters in recent years which was encouraged since the beginning of the programme. In the two recent programme periods, the number of instances of HEI participation is almost on par with that of other types of organisations, although the degree of involvement and closeness of cooperation differs between the two groups.

Instances of participation in EM Master's projects by type of organisation and programme period (n=9,763)

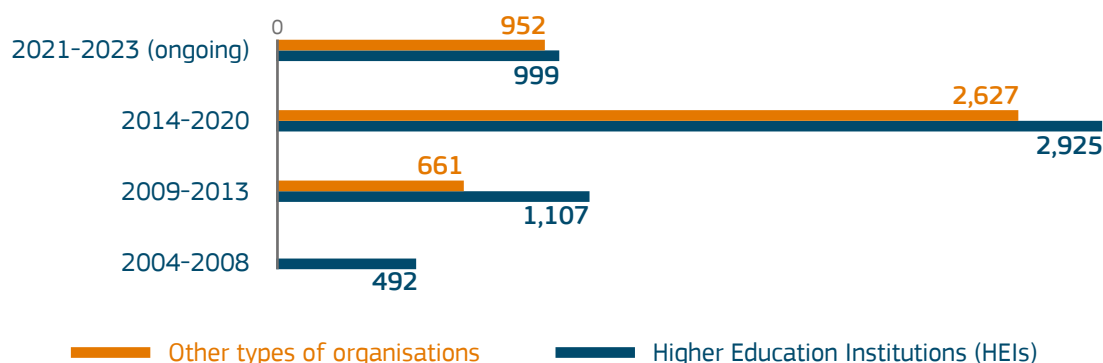


Figure 3. Instances of participation in EM Master's projects by type of organisation and programme period

In 2019, the **number of instances of participation** (1,242 instances, including 887 instances by HEIs and 555 by other types of organisations) was the highest. This was also one of two years with the highest number of selected Master’s projects.

Of the 9,763 instances of participation in EM Master’s recorded until 2023, 585 instances (6%) were in the role of **coordinator**, 2,392 instances (25%) were in the role of **full partner**, and 6,786 instances (69%) in the role of **associated partner** (Figure 4).

41 The term refers to the number of times the same entity participated as coordinator, full partner, or associated partner in the delivery of multiple EM Master’s programmes within the same or across different funding periods.

Instances of institutional participation in EM Master's projects by role and programme period (n=9,763)

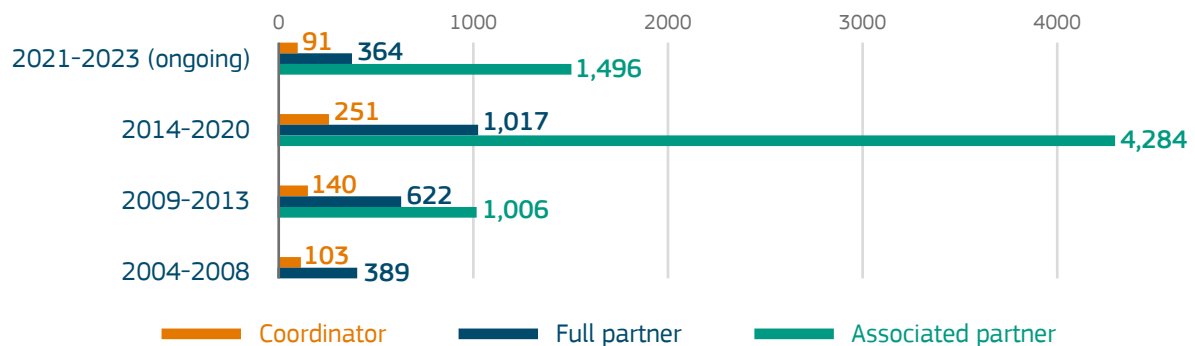


Figure 4. Instances of institutional participation in EM Master's projects by role and programme period

The roles of coordinator and full partner tend to be almost exclusively filled by HEIs (100% of coordinators and 97% of full partners). In turn, the role of associated partner attracts both HEIs and other types of organisations, the latter being nonetheless almost two times more prevalent in associated roles (62% of associated partners in comparison to 38% HEIs associated to EM Masters).

During the four programme periods, the total of 9,763 instances of participation included **6,812 (70%)** participations by institutions (HEIs and other types of organisations) from **countries associated to Erasmus+** or predecessor programmes and **2,951 (30%)** participations by entities from **non-associated countries**.

Zooming in on the regions of institutions involved as **associated partners** (for the regions of coordinators and full partners see section 2.1.3), there are clear differences in their participation patterns by type of organisation as of 2009. **Other types of organisations** involved as associated partners come, in their large majority (80% in 2009-2013 to 86% in 2021-2023) from Europe, showing a similar pattern to that of HEIs involved as coordinators or full partners (Figure 5).

In contrast, **HEIs** participating as associated partners in EM Master's projects have a much more diverse origin. Only about a third of them are based in Europe (29% in 2009-2013 to 36% in 2021-2023 ongoing), one in five are based in Asia (18% across programme periods), between 15% and 17% are from Latin America and the Caribbean and about one in ten (15% to currently 10%) come from Other European countries and EU neighbouring regions (Figure 5).

Instances of participation of HEIs and Other types of organisations in EM Masters as associated partners by region of origin and programme period (n=6,786)

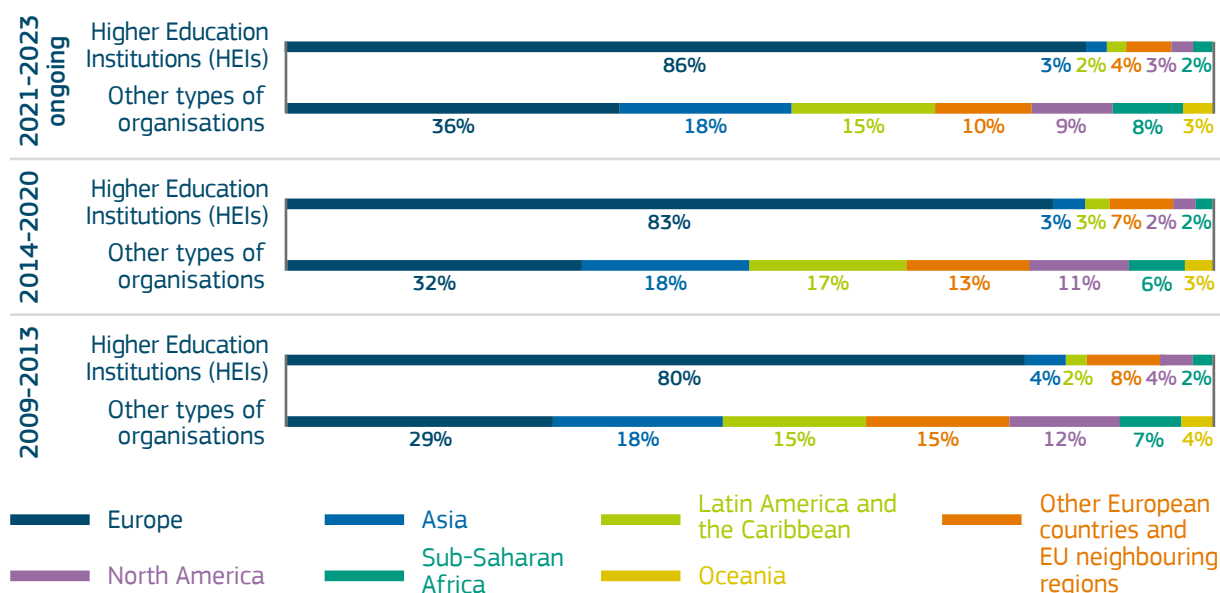


Figure 5. Instances of participation of HEIs and other types of organisations in EM Masters as associated partners by region of origin and programme period

All in all, institutions (HEIs and other types of organisations) from **140 countries** from Europe and beyond have partnered in EM Master's programmes and related projects by 2023.

The top 30 most represented countries account for 85% (i.e. 8,260) of all institutional participation instances over the two decades (Figure 6).

Institutions (HEIs and Other types of organisations) based in **France (1,095)**, **Spain (974)**, **Germany (689)**, **Italy (638)** and **Portugal (490)** most frequently participated in EM Master's programmes across the four programme periods (Figure 6).

Eleven out of top 30 countries of institutions participating in EM Master's programmes are from **non-associated countries to the Erasmus+ programme**. Apart from the UK (an Erasmus+ programme country until 2021), which maintained a high level of participation in the programme (394 instances) over the four programme periods, institutions based in the **United States (317 instances)**, **Brazil (216)**, **China (135)**, and **India (109)** most frequently participated in the programme.

Comparing participation between 2014-2020 and 2021-2023 (ongoing), the **fastest risers** in the above-mentioned top 30 are HEIs and other types of organisations from **Romania** (increase in instances of participation by a factor of 20), **Slovenia** (increase by a factor of 10), and **Greece** (increase by a factor of 8). Among **non-associated countries**, the fastest risers are India (increase by a factor of 21), Brazil (factor of 17), Mexico (factor of 14), the United States (factor of 13), and China (factor of 8).

Instances of institutional participation in EM Master's projects by institution's country and programme period (top 30) (n=8,260)

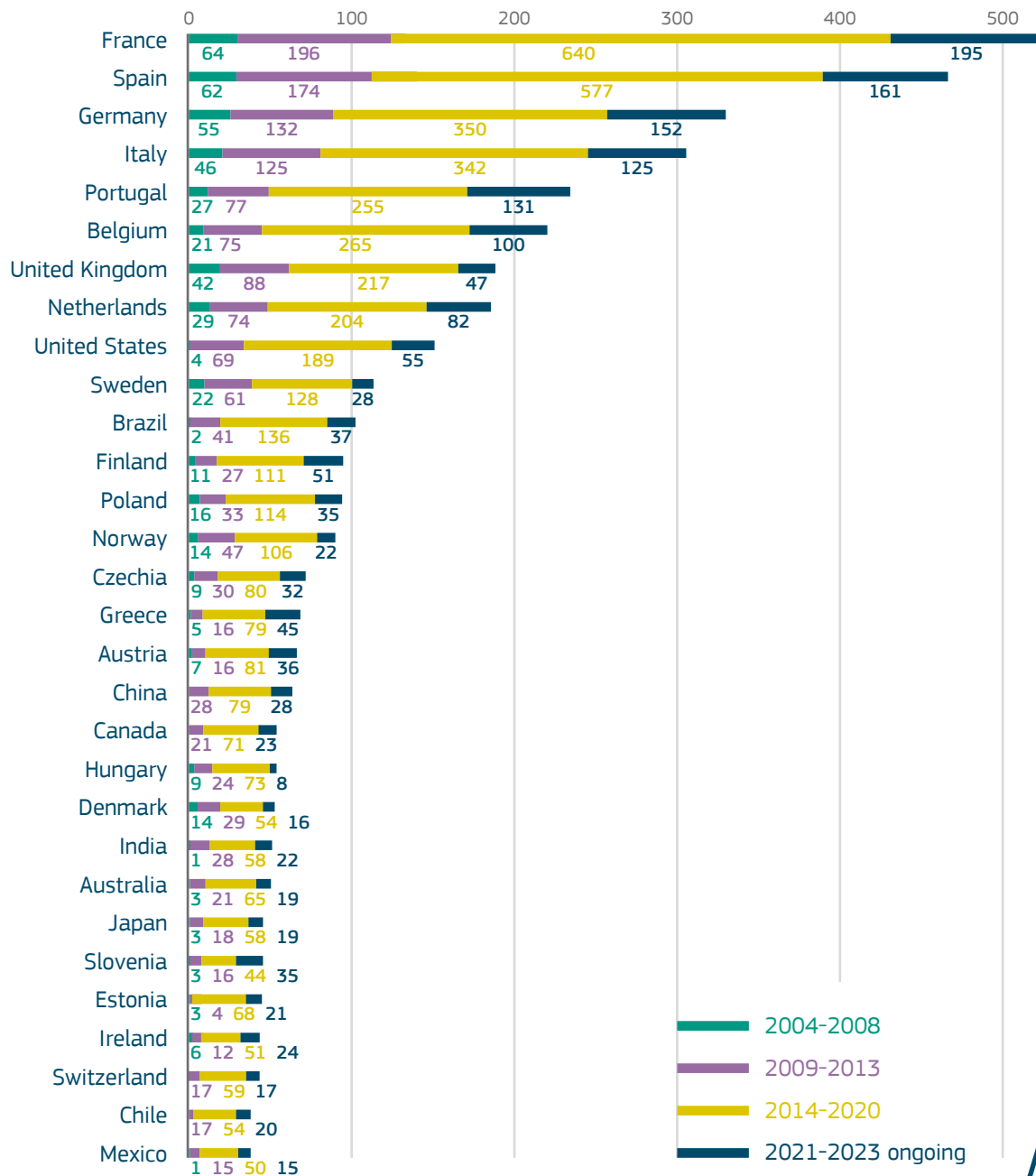


Figure 6. Instances of institutional participation in EM Master's projects by institution's country and programme period (top 30)

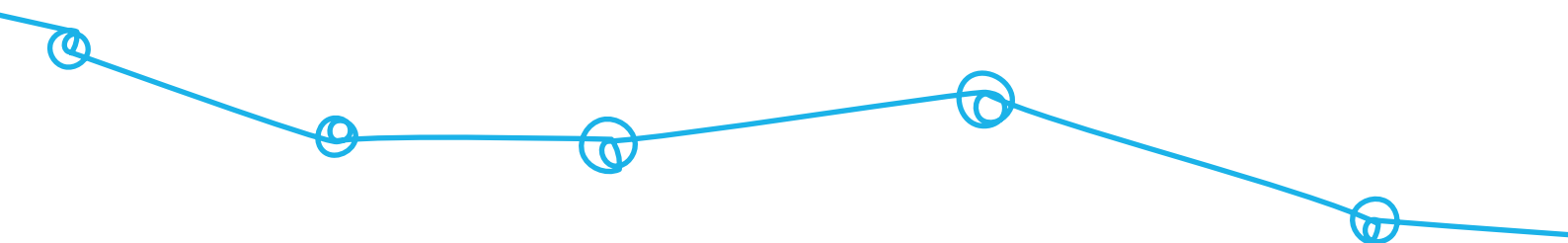
2.1.3 Instances of full participation (coordinator or full partner) by HEIs

Over the four funding periods, **5,523 instances of participation by HEIs** included 585 (11%) participations in the role of **coordinator**, 2,334 (42%) in the role of **full partner** and 2,604 (47%) in the role of associated partner. Consequently, there were **2,919 instances of full participation by HEIs** (i.e. as coordinator or full partner). The latter correspond to about **600 unique HEIs** estimated to have participated as coordinator or full partner in EM Master's programmes and related projects over the two decades⁴². On **average**, one HEI participated about **4.9 times** in EM Masters.

As the growth in the instances of institutional participation happened in parallel to the increase in the number of funded EM Master's projects, the **average size of EM Master's core consortia** (i.e. the coordinator and full partners) has remained **relatively stable over time**. The latter slightly changed between an **average of 4.8 partners** per project in 2004-2008, 5.4 partners in 2009-2013, 5.1 partners in 2014-2020 and **5.0 partners** in 2021-2023 (ongoing).

Of 2,919 instances of full participation by HEIs, **2,450 (84%) were by HEIs** from **associated countries** to Erasmus+ or predecessor programmes (of which 547 instances as coordinator and 1,903 as full partner). In turn, **469 (16%)** instances of full participation were by HEIs from **non-associated countries** (of which 38 as coordinator, and 431 as full partner).

In terms of specific **regions of HEIs** involved as coordinators or full partners, most instances of **full participation were by HEIs based in Europe**⁴³ (Figure 7), ranging from 87% of all regions in 2004-2008 to 89% of all regions in the current programme period up to 2023. Over time, there has been a slight decrease in the share of instances of participation by HEIs from Other European countries and EU neighbouring regions (from 9% in 2004-2008 to a preliminary 5% in the current period). This is in part due to countries changing their status under Erasmus+, notably Serbia becoming an associated country, without being immediately compensated by the initial uncertainty around the UK becoming a non-associated country. To be noted also that, prior to 2014, participation of institutions from non-associated countries was concentrated in the externally-oriented sub-actions – ECW, EMA21 and EMA22 – where their total instances of participation outnumbered those of European institutions.⁴⁴



⁴² This figure refers to HEIs participating in all/different EM programme generations.

⁴³ Europe here encompasses EU member states and other countries officially associated to the Erasmus+ programme, based on the situation at the time of the study (2024). European countries not associated to Erasmus+ are covered in the "Other European countries and EU neighbouring regions" regional grouping (cf. Annex 3). The latter also include the UK, for the entire four funding periods, as its status was non-associated in 2024 (with little implications for the picture prior to 2021, as the total instances of participation of UK institutions accounted for less than 5% of all instances in countries associated to Erasmus+ and predecessor programmes).

⁴⁴ Specifically, they amounted to 55% in the ECW in 2004-2009 and 53% in 2009-2013, and to 57% in EMA21 and 54% in EMA 22 in 2009-2013. The highest level of participation by region was from "Other European Countries and EU neighbouring regions" in the ECW sub-action in 2004-2009 (27%) and in EMA21 in 2009-2013 (23%). Asian institutions enjoyed a high participation in all the sub-actions from 2004 to 2020 (from 17% under ECW in 2004-2008 to 27% in EMA22 in 2009-2013).

Instances of HEIs participation as coordinator or full partner in EM Master's projects by region of origin and programme period (n=2,919)

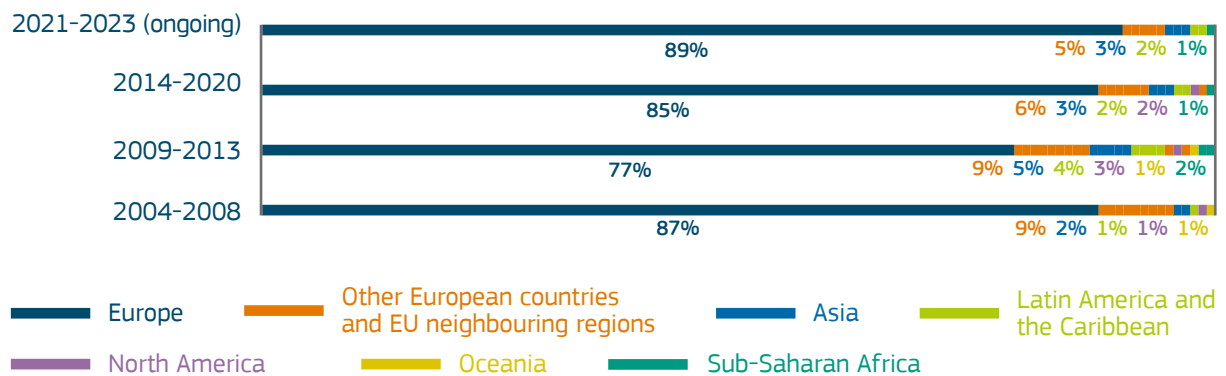
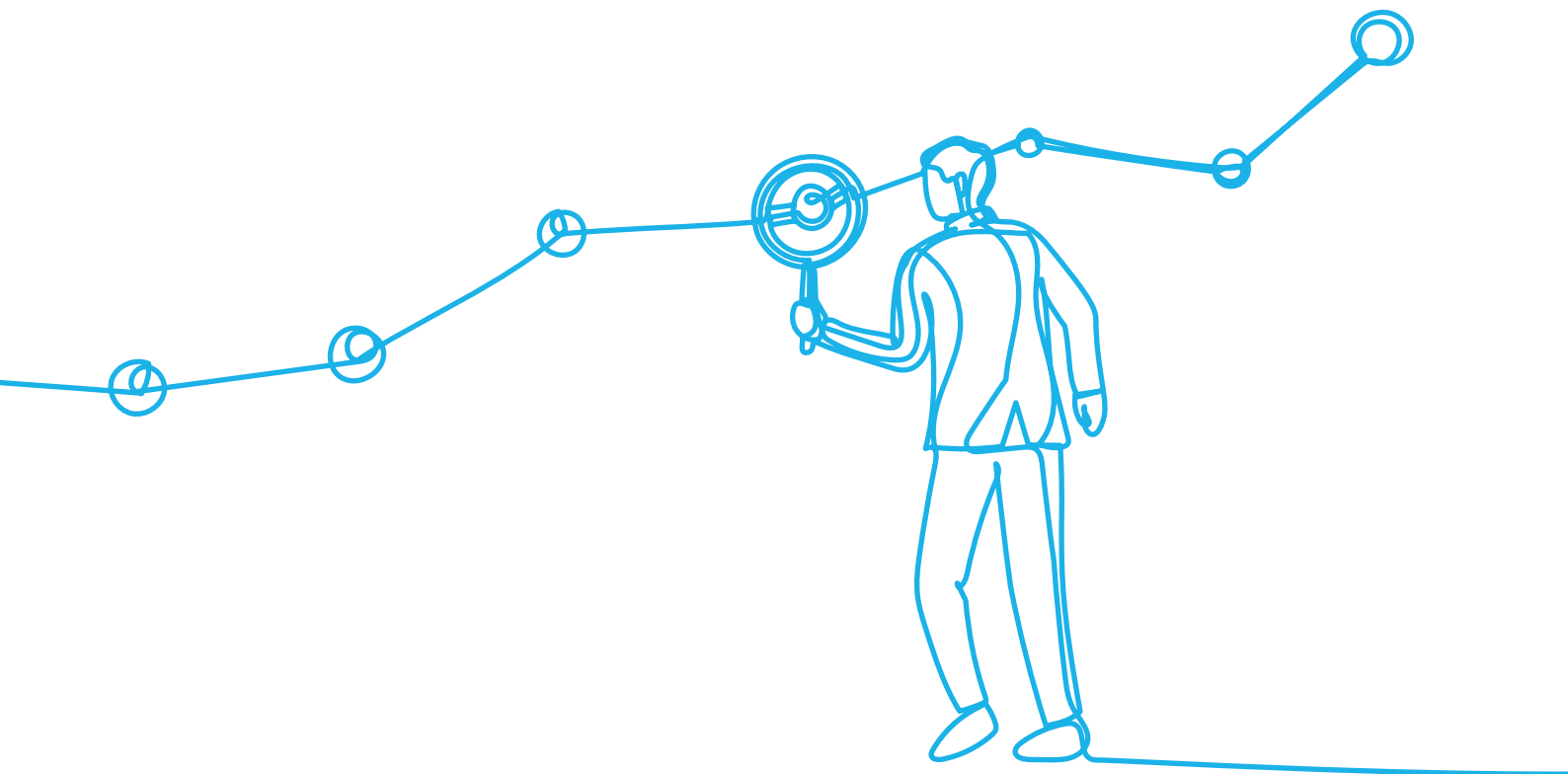


Figure 7. Instances of HEIs participation as coordinator or full partner in EM Masters by region of origin and programme period

Diving into the **countries of HEIs participating** in EM Master's projects in 2004-2023 (Figure 8), HEIs from **France (376 instances), Spain (339 instances), Germany (255 instances), Italy (250 instances) and Portugal (170 instances)** had the highest level of **full participation** (as coordinators and full partners, combined). Among these, HEIs from

- France (148 instances), Spain (71), Belgium (63), the Netherlands (44) and Germany (43) most frequently served as **coordinators**.
- Spain (268 instances), France (228), Italy (214), Germany (212) and Portugal (140) were most often involved as **full partners**.



Instances of participation of HEIs in EM Master's projects by role and country of origin in 2004-2023 (top 30) (n=4,430)

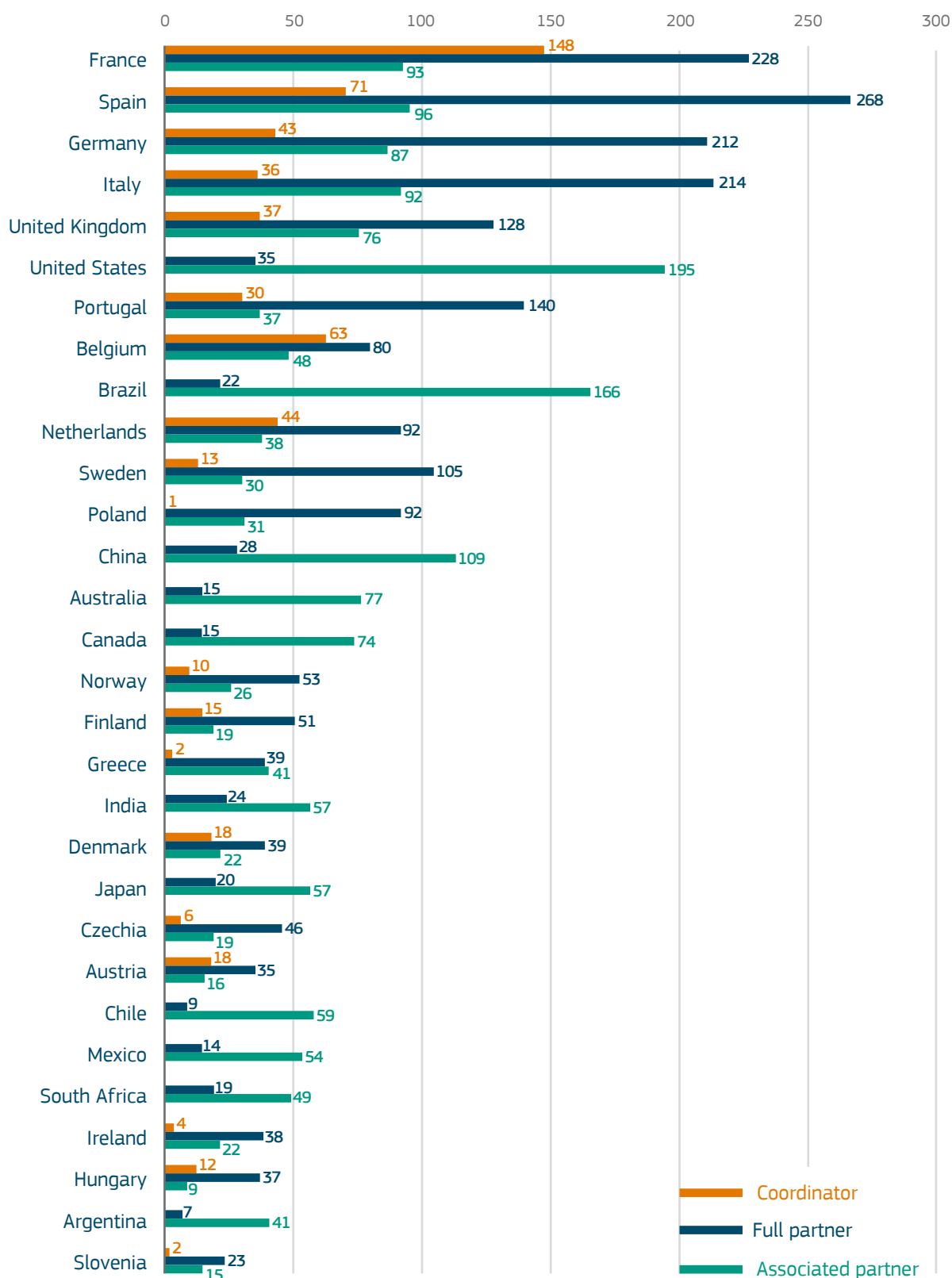


Figure 8. Instances of participation of HEIs in EM Masters by role and country of origin in 2004-2023 (top 30)

Zooming in on the **full participation** (coordinator or full partner) of HEIs from **non-associated** countries to the Erasmus+ programme, apart from the UK (with 37 instances as coordinator and 128 instances as full partner) HEIs from the **United States** (35 instances as full partner), **China** (28 as full partner), **India** (24 as full partner), **Brazil** (22 as full partner) and **Japan** (20 as full partner) had the highest participation (for further details, see section 5.3).

When it comes to HEIs from **non-associated countries** involved as **associated partners** in **EM Masters**, the highest involvement was by HEIs from the United States (195 instances), Brazil (166), China (109), Australia (77) and Canada (70).

The HEI coordinators or full partners with the **largest participation and portfolios of EM Master's projects (programme iterations)** over the two decades are Ghent University (43 Master's iterations), the University of Padua (39 iterations), the University of Groningen, the University of Barcelona, the Autonomous University of Barcelona and the University of Bologna, all with 31 Master's iterations (Figure 9). Ghent University has also the highest number of EM Master iterations as **coordinator** (22), followed by the University of Glasgow (18 iterations) and KU Leuven (15 iterations). The University of Padua (36 iterations) is the most represented full partner in EM Master's iterations to date, followed by the University of Barcelona (30 iterations) and the Autonomous University of Barcelona (27 iterations).

Top 10 HEIs by institutional instances of participation as coordinator and full partner in EM Masters in 2004-2023

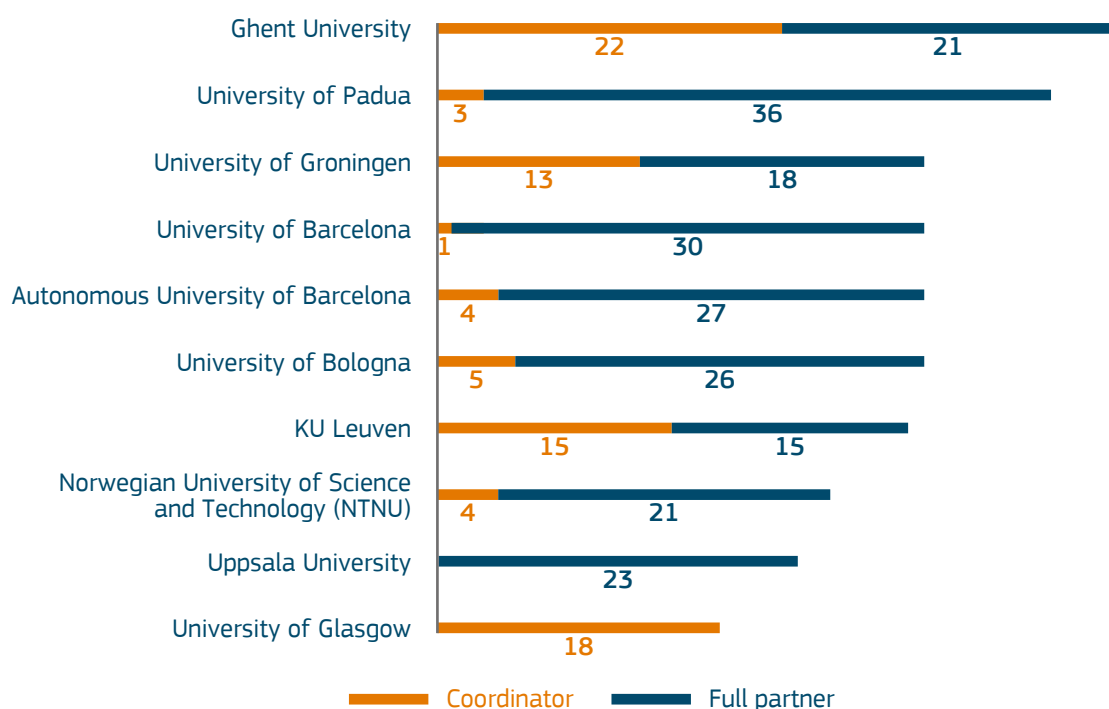


Figure 9. Top 10 HEIs by instances of participation in EM

Figure 9 also showcases the diverse long-term strategic patterns of participation for the top 10 institutions involved. While some HEIs opt to act exclusively as coordinators (e.g., the University of Glasgow) or full partners (e.g., Uppsala University), others try to alternate or balance these roles (e.g., Ghent University). The different factors behind such long-term trends are investigated below.

2.2 Evolution of EM Master's programmes and institutional portfolios

Building on the historical institutional participation trajectories, this section explores the evolving pathways of individual EM Master's programmes and trends in EM Master's institutional portfolios, based on the primary data collected through the study surveys.

As highlighted above, a considerable share of the HEIs participating in EM are involved in multiple EM Master's programmes, which have become known as **institutional portfolios**. Such portfolios can include both unique EM Master's programmes and their iterations. The idea of an institutional portfolio also implies the existence of common support or coordination processes, or central or faculty-level mechanisms to support continuity and standardised approach.

The survey sample revealed generally **positive trends across various features** of the institutional portfolios. These features include the number of enrolled students, study programmes managed by an institution, or institutional partnerships, as well as the diversity of study fields and faculties involved, and the sources of funding, which have evolved over time.

- Nearly half of the central and faculty-level respondents (48%) reported an **increase in the number of non-EU/EEA students** enrolled, in line with one of EM's key objectives. This was accompanied by a **rise in the number of EU/EEA partner institutions** (48%) (Figure 10).
- Furthermore, 45% of the respondents reported an increase in the **number of EM Master's programmes** at their institutions or faculties, as well as an increase in the number of study fields covered (43%) and faculties involved (43%), which demonstrates the **programme's appeal** and the **spillover effect of participation** (Figure 10).
- The number of funding source used to support EM Master's programmes remained unchanged (33%) or increased (27%) at two thirds of the respondents (Figure 10).

Evolution of EM programme portfolios over time (central and faculty-level perspective; n=82-83)

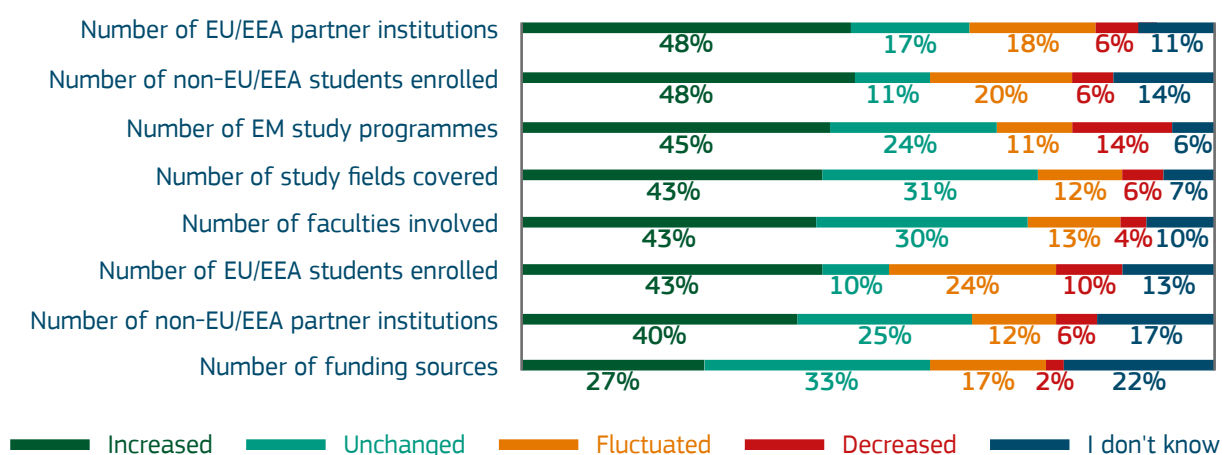


Figure 10. Evolution of EM Master's programme portfolios over time (central and faculty-level perspective)

The **key drivers** behind such positive trends include the **prioritisation** of EM Master's programmes at institutional level, particularly through internationalisation strategies and dedicated support structures. This was reflected in several illustrative statements: *"There was a strategic decision to engage with EM funding in 2012. Central and local support enabled the general increase in the listed elements across the board."* *"Our institution currently has around 20 joint programmes, half of which receive external funding. The driving force behind this is the fact that our leadership understands that internationalisation and learning from foreign partners is the way to go forward, which is reflected in the support they give this agenda."* Box 7 provides an example of a strategic approach to Erasmus Mundus at the University of Padua, Italy.

Box 7. Strategic approach to Erasmus Mundus at the University of Padua, Italy

Strategic approach to Erasmus Mundus at the University of Padua, Italy

The University of Padua is currently involved in 11 EM Master's programmes. The overall number of EM Masters has steadily increased thanks to the university's strong commitment to joint programmes and Erasmus Mundus as part of its institutional strategy aiming to foster international reputation and attract highly qualified international students.

An increase in the number of EM programmes has enlarged the number of partner institutions, both from the EU and worldwide, and multiplied the number of both EU/EEA and non-EU/EEA students enrolled. It has also significantly contributed to internationalisation at home, stimulating an open and international learning environment. Finally, it pushed the university to innovate and internationalise its administrative and support services to better respond to specific needs of joint programmes and participating students.

The number of fields and faculties covered has also increased over time, as the university's EM Masters are managed by eight different departments and range from agriculture to nuclear physics. The university has also started using Erasmus+ (KA131/171) as well as institutional funds to support self-funded students.

Source: The University of Padua, Italy

The feedback shows that the **first successful participation** in an EM Master's programme can lead to greater institutional engagement with EM, as illustrated by the following quote: *"The experience with our first EM programme has increased our interest in becoming more involved in relevant programmes. We hope to attract more students through appealing and highly visible programmes."*

Several participating institutions with larger programme portfolios reported a **snowball effect**, triggering higher interest and greater engagement: *"The increase was steady. Once a certain critical mass in the number of participations is obtained, the visibility and shared experience leads to further participations."* Yet such effects also require **significant commitment** to Erasmus Mundus: *"We coordinate 11 EMJM programmes and are an associate partner in another. We have heavily invested in these programmes and have dedicated staff working on them."*

Growing visibility within an institution based on the successful practices of one or several faculties is an important factor in broader commitment, as the following quote shows: *"The number of students, study programmes and study fields covered increased with an increase in the number of EM programmes. Over time, more colleagues became interested in the programme and we also increased central-level support by involving our European Project Center to provide administrative support."*

Growing participation has been propelled by **bottom-up interest** in the **quality of students**, particularly learners from outside the EU/EEA, as shown in the following statement: “*EM programmes have been seen as an excellent mode of educational collaboration, and **the EM students recruited are of a very high level compared to the student averages**. EM students graduate on time, with good grades. These have been the main reasons for increasing the number of EM programmes.*”

On the other hand, **students** have been reported to play a role in raising the visibility of their EM programme across the institution, acting not only as beneficiaries but also as **important agents of institutional change**: “*EM students were interested in specific research topics and contacted lecturers from different (and new) faculties, who have become more closely connected with our EM programme, e.g., by supervising students and including them in their work at faculty level.*”

Finally, institutional portfolios expansions were driven by the perceived benefits for joint education provision, and links to research, pointing to a “*Progression from pure student and staff mobility to more developed and diverse collaboration, e.g., joint programmes and courses, spin-off activities/projects with the partners, larger networks, research collaboration etc.*” where “*Departments are ready to implement joint programmes and see the benefit of joint education towards joint research.*”

The **trends for individual EM Master’s programmes** reported by **programme-level respondents** are equally positive, particularly in terms of the number of non-EU/EEA students enrolled (59% of the respondents) and non-EU/EEA partners involved (42%) despite recent geopolitical developments and the COVID-19 pandemic, emphasising the global dimension of Erasmus Mundus. The number of EU/EEA partners involved, as well as the number of fields covered and funding sources remained relatively stable (Figure 11).

Evolution of individual EM programmes over time (programme-level perspective; n=161-164)

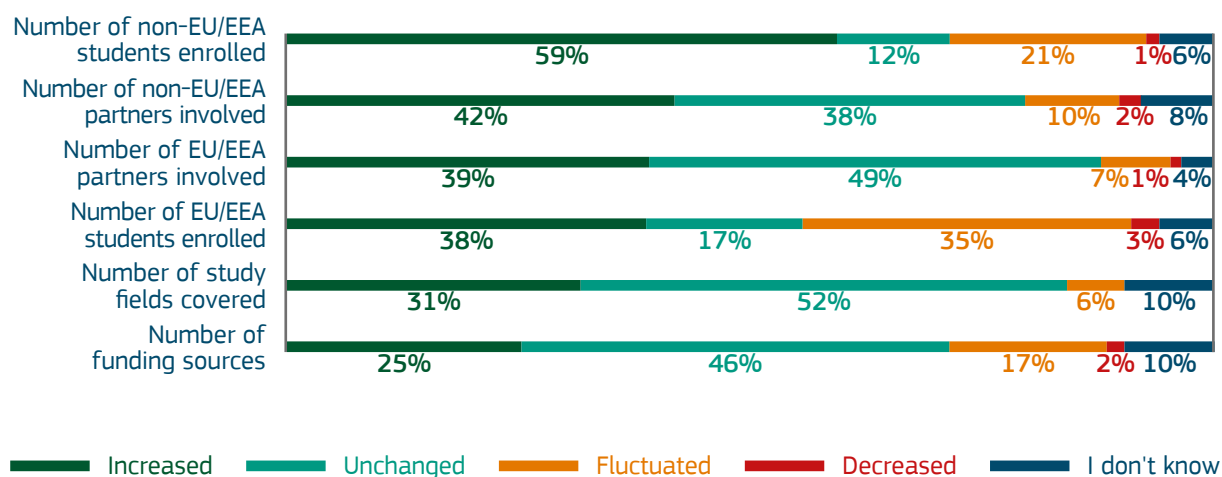


Figure 11. Evolution of individual EM Master’s programmes over time (programme level perspective)

Other positive changes reported by several programme respondents include:

- **Growing visibility and geographic outreach** (e.g., “We recruited more partners by promoting the programme in different regions”);
- **Stronger collaboration with other stakeholders** (e.g., “More and more companies, research centres and municipalities decided to join as associated partners”);
- Rising number of **self-financed students** (e.g., “The programme became more known and could attract more self-financed students”; “We managed to gradually increase the number of self-financed EU students from 2 to 25”);
- **Joint certification**, specifically the move to awarding a **joint degree** (e.g., “In the previous edition we organised a double degree programme, but now we manage a joint Master’s degree programme”).

Connections to other cycles of study and research were found to be particularly important for the participating programmes: “We are attracting more and more students to Europe and most then do their PhD in Europe. We are becoming a resource for PhD funding. Collaborations within partnerships are also increasing, becoming multidisciplinary and allowing the academic and private worlds to exchange and share. Research programmes are launched within the partnership and there is a good dynamic with the involvement of alumni with students.”

2.3 Sustainability and governance pathways

Sustainability is one of the key factors of EM Master’s programme management. It entails a variety of aspects, such as “**funding diversification, sustained leadership commitment**, the relevance of the course vis-à-vis social needs, the evolution of international policies and priorities amongst the consortium partners” (European Commission, 2017c). Resulting from collective consortia effort, it requires an accurate understanding of the different elements at stake and careful planning.

Due to its inherent complexity, establishing measures that could help evaluate the sustainability of individual or sets of EM programmes can be methodologically rather challenging. One such measure can be the **number of iterations or EU funding periods** EM Master’s programmes undergo throughout their lifecycle. When a programme moves from one EU funding period to another, its quality and impact is reconfirmed through a competitive process. Such continuity ultimately requires the long-term **commitment of EM programme owners**, especially coordinators, as well as **robust institutional support mechanisms** (e.g., dealing with staff turnover).

Looking at the **EACEA historical data**, almost one fifth of the unique EM Master’s programmes (**18%**) supported with EU funding between 2004 and 2023 are **long-standing, having received EM funding three to five times**. Overall, 25% of the unique EM Master’s lasted for two EU funding periods. On the other hand, over half of the total 349 unique EM Master’s programmes had one iteration only. This number includes a sizeable subset of ca. **140 newcomer EM programmes** funded under the previous (2014-2020) or current programme period (2021-2027), which demonstrates Erasmus Mundus’ inclusivity and **openness to new beneficiaries**. This number also includes ca. 60 EM Master’s programmes that have evolved into other forms of cooperation or are no longer active (Table 8).

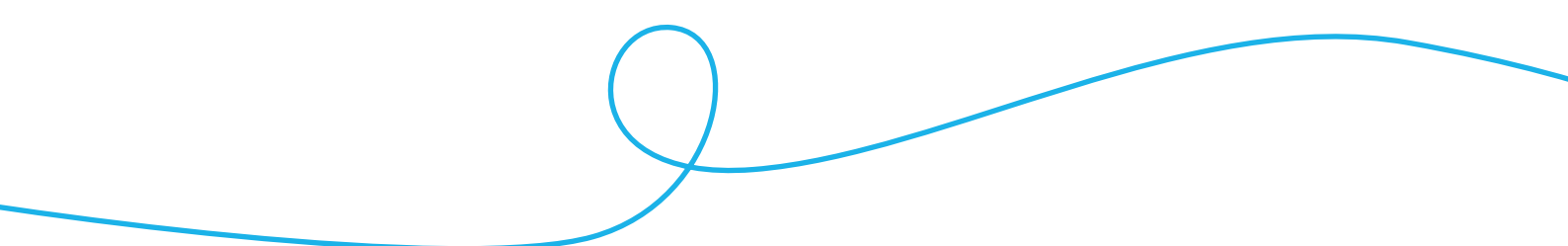


Table 8. EM Master's programmes (projects) per iteration (instances of EU funding granted under different funding periods)

Iteration (EU funding period)	Number	%
1 st iteration	200	57%
2 nd iteration	86	25%
3 rd iteration	42	12%
4 th iteration	18	5%
5 th iteration	3	1%
Total (unique programmes)	349	100%

The study survey results shed further light on the reasons behind some negative trends reported at central (e.g., decrease in the number of EM programmes) and programme levels (e.g., programme discontinuation), mainly related to administrative burden (61% of respondents mention this issue), financial constraints (50%), and the discontinuation of EU funding (39%) (Figure 12).

Reasons for fewer EM Master's programmes (central level) or programme discontinuation (programme level) (n=18)

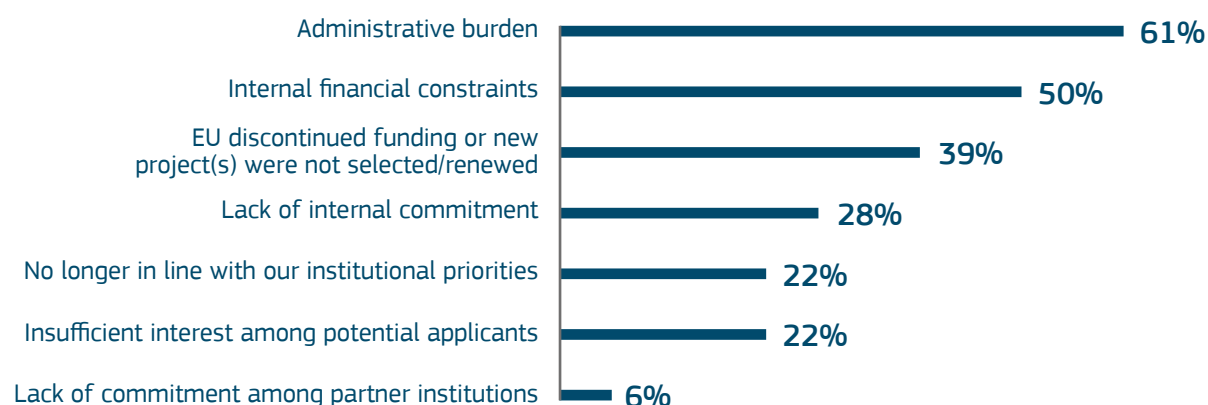


Figure 12. Reasons for fewer EM Master's programmes (central-level perspective) or programme discontinuation (programme-level perspective)

With the continuing simplification of programme rules aiming to reduce the overall administrative burden, **funding diversification** remains one of the core elements of sustainability. The study survey findings indicate that **Erasmus Mundus** continues to be the main source of financial support both for student scholarships (89%) and programme management (82%)⁴⁵ although the importance of other sources of funding has been growing for many programmes (Figure 13).

- **Institutional co-funding** is common for programme management and for granting students financial support in the form of additional scholarships, (partial) tuition fee waivers or living allowances, as well as access to university services at standard student rates.
- **National and regional funding** combined are the second most important source of funding for student scholarships after Erasmus Mundus (37%).
- **Other Erasmus+ actions** were reported to be used to support mobility of students without a scholarship or to enhance innovation (Figure 13).

The **awareness of the diverse funding sources** used for student scholarships is **higher at programme/department level**. This is shown in the feedback obtained from programme-level survey respondents who overrated the use of tuition fees, and institutional and national co-funding, whereas central and faculty-level respondents attached higher importance to institutional co-financing of programme management costs. This is probably because central-level coordinators are not necessarily fully aware of the EM programme's efforts to attract additional funding for scholarships, for example, from companies, research centres or national and international funding bodies. At the same time, programme-level respondents have less knowledge of central administration costs, particularly at institutions applying full economic costing methods.

Funding sources used for EM Master's programmes at programme, central and faculty levels (n=256; multiple choice)

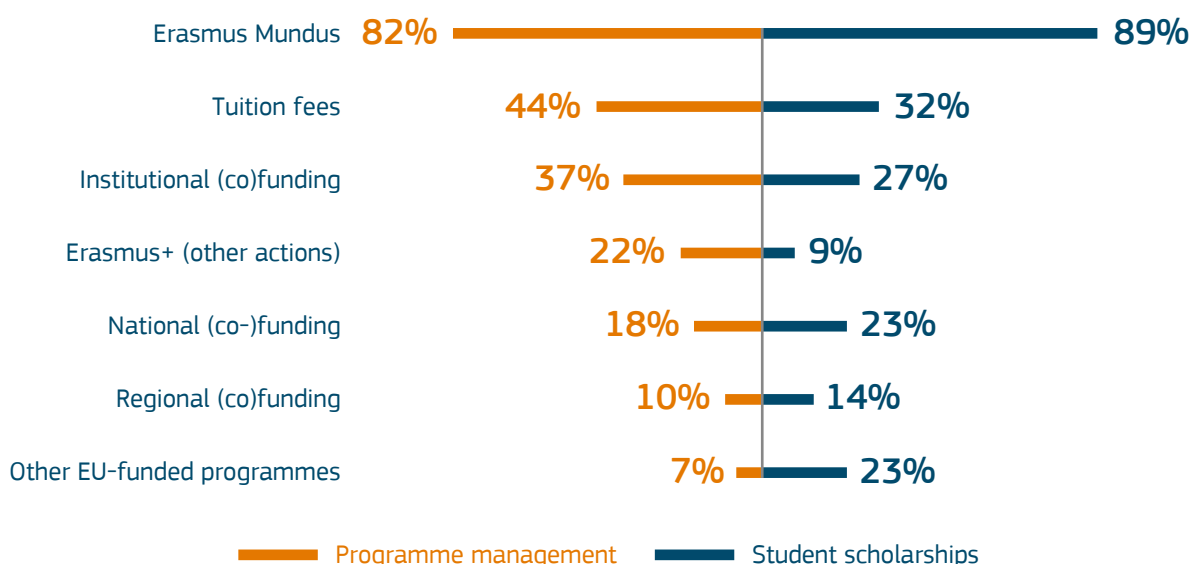


Figure 13. EM Master's programme funding sources at programme, central and faculty levels

⁴⁵ Erasmus Mundus does not account for 100% of responses given that some respondents represented EM Masters that are no longer active or programmes waiting for the results of their next funding period.

Interestingly, the survey findings indicate that the EM Master's programmes in the sample only rely partly on EM funding for student scholarships. Thus, only 12% of the survey respondents indicated that the vast majority of their programme students (i.e. 91-100%) were EM scholarship holders. In contrast, **the share of EM scholarship holders was below 60% at nearly 40% of the respondents**, indicating that the remaining student cohort was funded by non-EM sources (Figure 14). These figures show that the majority of the sampled EM programmes demonstrate rather **high levels of funding diversification** covering student participation.

Share of EM scholarship holders in respondents' EM Master's programmes (n=124)

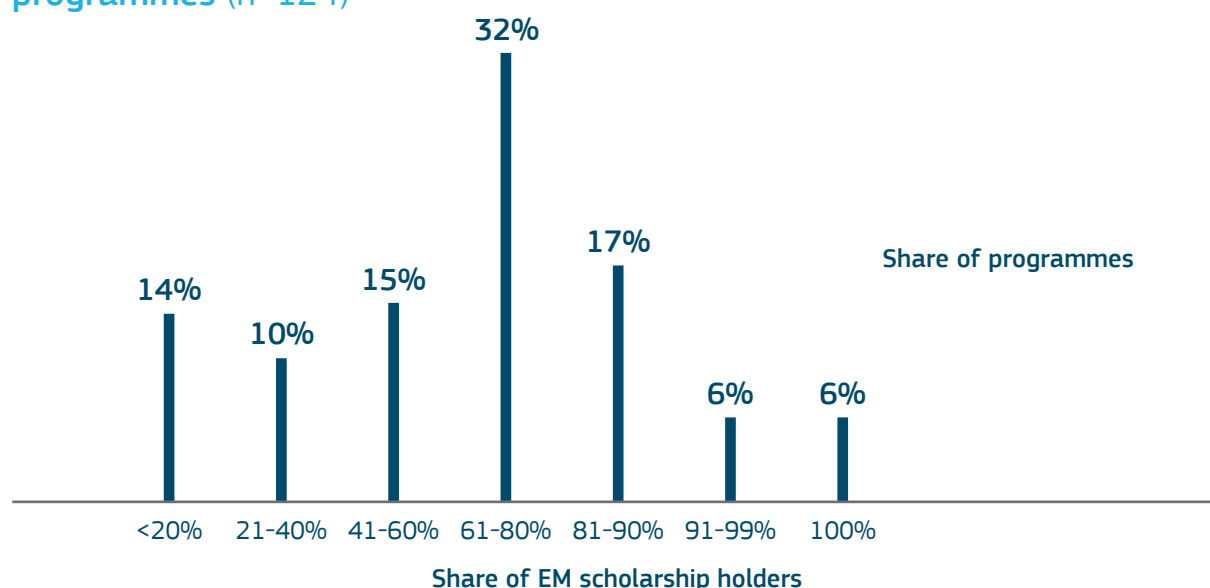


Figure 14. Share of EM scholarship holders in the respondent's EM Master's programme(s)

Furthermore, a significant share of respondents (42%) report that their EM Master's programmes provided support to one or two **student cohorts with no EU funding**, typically to cover a gap year between the two applications.

The qualitative evidence obtained shows that EM Master's programmes make significant **attempts to enhance their financial sustainability**, for example, by increasing the number of self-funded students and attracting various sponsorships. However, it would currently be hard to maintain even programmes with high shares of self-funded students without EU support, given that different programme partners are subject to various national and institutional funding models and realities. Furthermore, greater use of tuition fees can potentially reduce the geographic and socioeconomic diversity of the study programmes, which is currently bolstered by EM scholarships.

The following statement illustrates the **financial challenges** experienced by an EM Master's programme in a context of tuition fees: *"The EMJM programme is not sustainable for our university. We have to charge high tuition fees for non-EU/EEA students because we don't receive government funding for those students and these fees are twice as high as the funds that can be provided from EMJM. In the new EMJM programme higher funds from the consortium could be possible, but only if the consortium does not have other partners with high*

non-EU/EEA fees and/or the other partners want to allocate the needed budget to our university. Sometimes we can find money for our own university scholarship funds, but this can only cover small numbers of students, a maximum of four or five per year. As a result, the student numbers are very low for our university, while the amount of time that needs to be spent on arranging the joint programme is so high, so the cost-benefit balance gets lost."

Looking at sustainability more holistically by emphasising **effectiveness** rather than efficiency, multiple programmes report continuing **efforts to enhance their overall quality, academic excellence, geographic diversity, and appeal** while also achieving significant impact on their own institutions and learners, as illustrated in the following statement: *"We are increasing the attractiveness for self-funded students. We are progressively improving the academic programme, teaching methodologies and coordination among consortium partners and associate partners."*

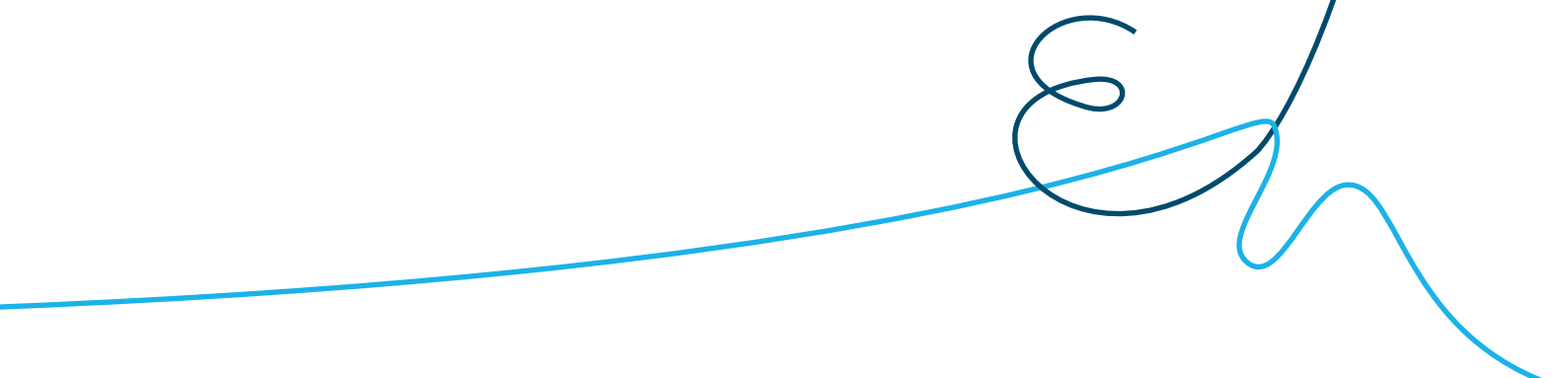
"For us, sustainability also means appeal. So, we regularly monitor the field of study, research trends, training trends, and looking for scholarships for our students."

"We believe programme quality is the most fundamental ingredient for sustainability. Academic and organisational quality assurance is addressed at all stages. We also focus on our alumni network and different forms of promotion to ensure sufficient recruitment of highly qualified students in future."

"If we measure sustainability as the number of self-funded students, this is the most complicated parameter to reach. This number has never moved above 5-10% over the different academic years and cohorts despite the consortium's efforts. The trend seems to be increasing, but not enough to reach a high number of self-funded students. However, we believe sustainability needs to be redefined: from the viewpoint of the project outcomes for the consortium members (i.e. contacts and relationships, alumni in key positions at other HEIs and in industry, research carried out by former students who go on to become PhD students), sustainability is clearly achieved."

"Sustainability is discussed frequently and jointly among all partners. The consortium strives to make the participation of all committed full partners possible. All partners receive not only part of the tuition fees, but also support from their faculties to keep the programme running at their institutions. While the programme would be sustainable (due to a high number of self-funded students) without EM funding, some partners might not be able to continue being a full partner."

As highlighted above, the sustainability of EM Master's programmes depends on many factors that go beyond pure financial considerations. One such key factor and enabler is **intra-institutional collaboration and support**. While department-level academic staff plays a crucial role in delivering the programme, EM Masters also garner **support from several central and faculty level units**. The most actively involved units include the **Registrar's Office** (38%) as well as the International Relations Office at both central and faculty levels (36% and 35%, respectively). The **Academic Affairs Office** also plays a significant role particularly at faculty level (29%) (Figure 15). This multitude of institutional units involved in the delivery of EM Master's across the institution is very important for triggering changes in both administrative processes, and learning and teaching (i.e. through cross-faculty collaboration) (cf. Chapter 3).



Institutional units involved in the EM Master's programme support (programme-level perspective; n=169-173)

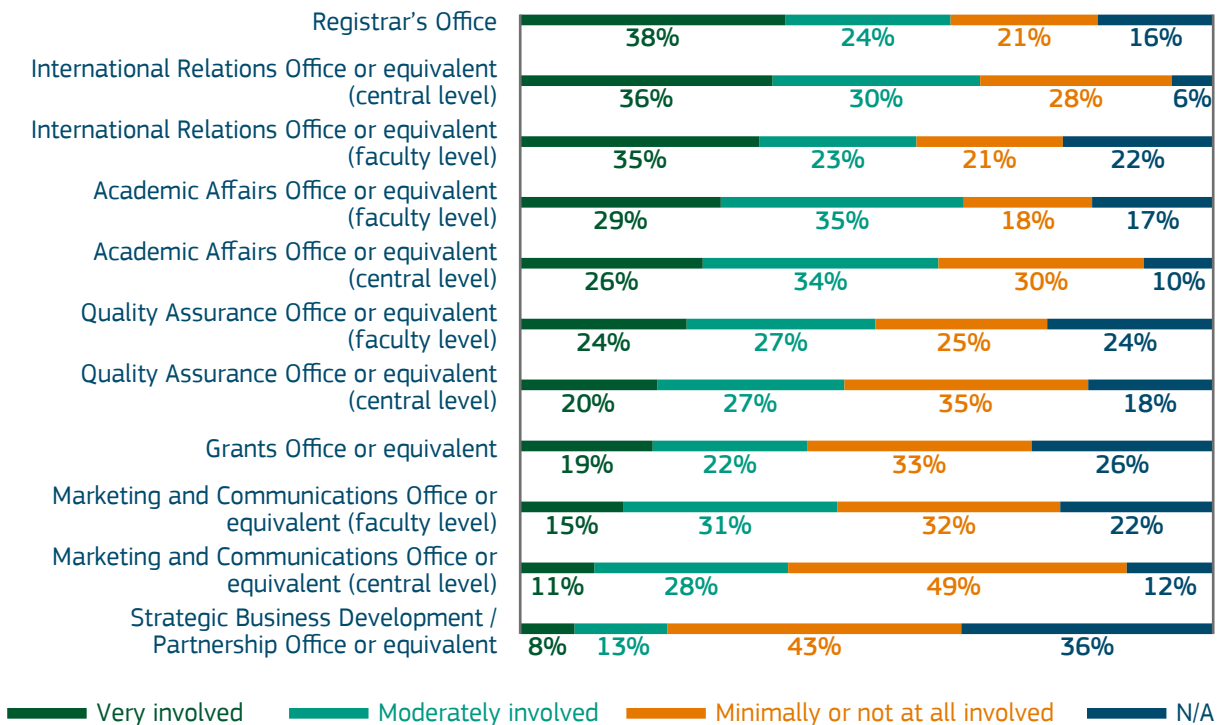


Figure 15. Institutional units involved in EM Master's programme support at central and faculty level (programme-level perspective)

Another manifestation of the sustainability of EM Master's programmes, and a distinctive element of their governance structure, is the level of **jointness** or degree of collaboration on various academic and administrative matters within the consortia. According to the survey respondents, **the top five areas of closest cooperation** are joint selection processes (95%), joint set-up of the mobility track (88%), joint communication platform (80%), joint recruitment campaigns (77%), and joint diploma supplement (73%) (Figure 16).

Degree of jointness in cooperation (programme-level perspective; n=163-173)

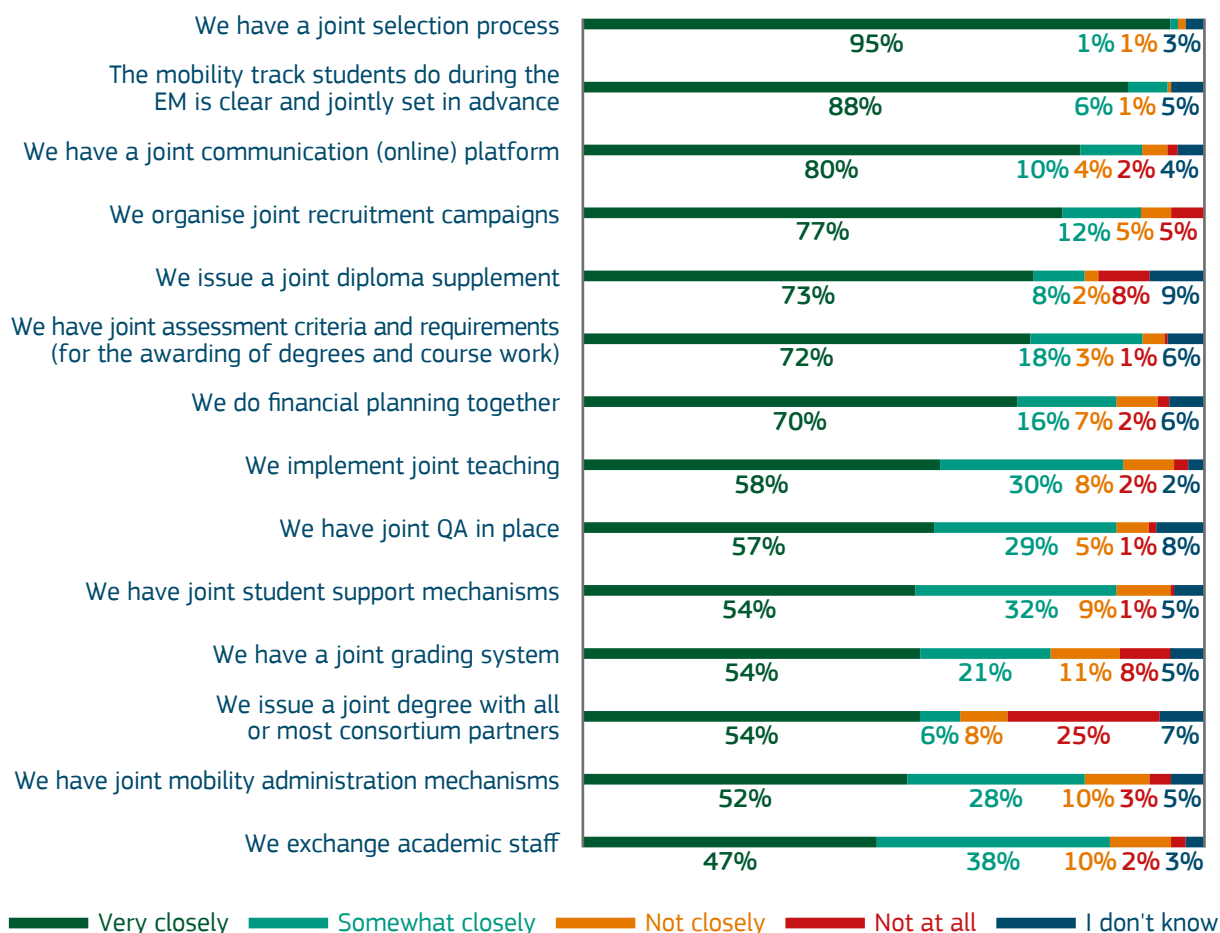


Figure 16. Degree of jointness in cooperation (programme-level perspective)

Areas marked by lower levels of cooperation include the **award of a joint degree** involving all or most consortium partners, where **60% of respondents** report working “Very closely” or “Somewhat closely” together (Figure 16). However, more than half of the programmes that do not yet have a joint degree (55%) **plan to move to a joint degree arrangement** in the near future and several others consider this possibility in the longer term, especially if national rules and legislation provisions allow, as evidenced by the “Other” responses (Figure 17). Such plans can be illustrated by the following statements: “We always foresee moving to a joint degree, but we also want to avoid creating different situations between the partners (above all European). For example, we do not want to create a double diploma situation between Italy and France (already possible) and thus create a situation of “diversity” towards Greece and Portugal.”

Short-term plans to move to a joint degree arrangement
(programme-level perspective;
n=111)

- Yes
- No
- Other
- I don't know

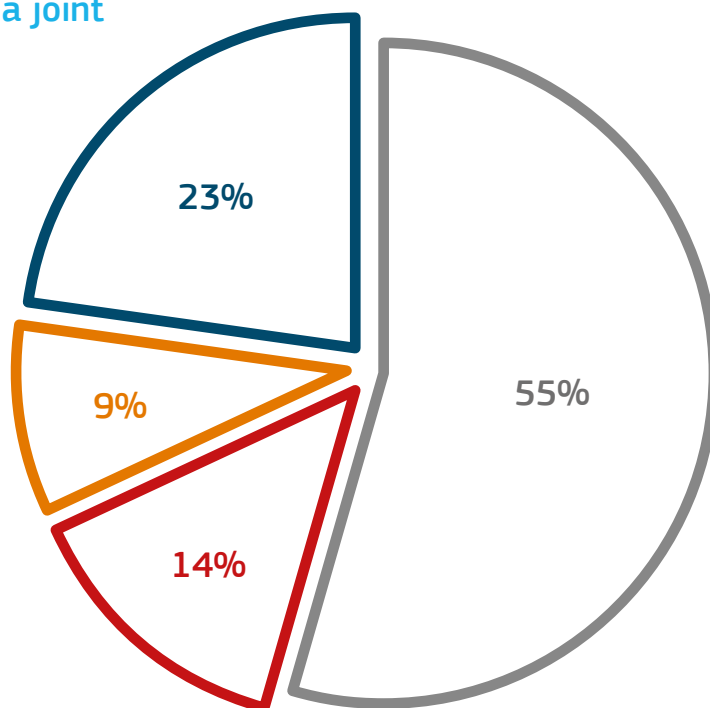


Figure 17. Short-term plans to move to a joint degree arrangement (programme-level perspective)

As demonstrated above, EM Master's programmes yielded far-reaching support at different levels, which has enabled their long-term, and largely positive, transformation. The next chapters explore the ways in which Erasmus Mundus and EM Master's programmes have shaped institutions, individuals (including students and alumni), and higher education systems and landscapes in Europe and beyond.

3. Institutional impact of Erasmus Mundus

Drawing on an in-depth examination of key inputs and outputs at Master's level, this chapter offers a detailed account of the positive changes and success stories facilitated by Erasmus Mundus at various **institutional levels** including central, faculty and programme specific contexts. It outlines the beneficial impacts on three fundamental institutional pillars: learning and teaching, international cooperation, and administrative processes. These effects are elucidated through both quantitative and qualitative data gathered during the study, providing a comprehensive view of the programme's achievements across these critical areas.

3.1 Initial objectives and overall perceived impact at different levels

Diving into the impact of the EM programme at institutional level requires first taking stock of the initial objectives of the respective study programmes and their related HEIs, compared with the wider policy aims of Erasmus Mundus.

The specific objectives declared by the respondents from programme and central levels showed a **high degree of convergence with the overall EM policy objectives** since 2004 (cf. Chapter 1). Specifically, the main objectives focus on attracting top talent from around the world, and further enhancing of the programmes and institutions' global visibility and appeal. These goals were dependent on the enhanced quality of learning and teaching through intense collaboration between academics at different partner institutions. They piloted inter- and multi-disciplinarity, joint curricular innovation and integration, to ultimately deliver academic excellence.

Nearly all respondents (a combined 94%) rated **recruiting excellent international students** as their top objective (Figure 18), followed by the aspiration to either create **new partnerships through this collaboration**, or enhance existing ones (91%). The goal to **increase visibility and reputation in Europe** came in third place (87%). Increasing the visibility and reputation of participating institutions beyond Europe was the least important goal (61%).

Interestingly, programme and central-level respondents espoused a similar hierarchy of objectives (Figure 18), although the level of their endorsement was even higher at programme level, with over 90% of programme representatives (strongly) agreeing with each of the top five objectives shown below.

Objectives pursued by institutions, faculties and study programmes while participating in EM (n=256; multiple choice)

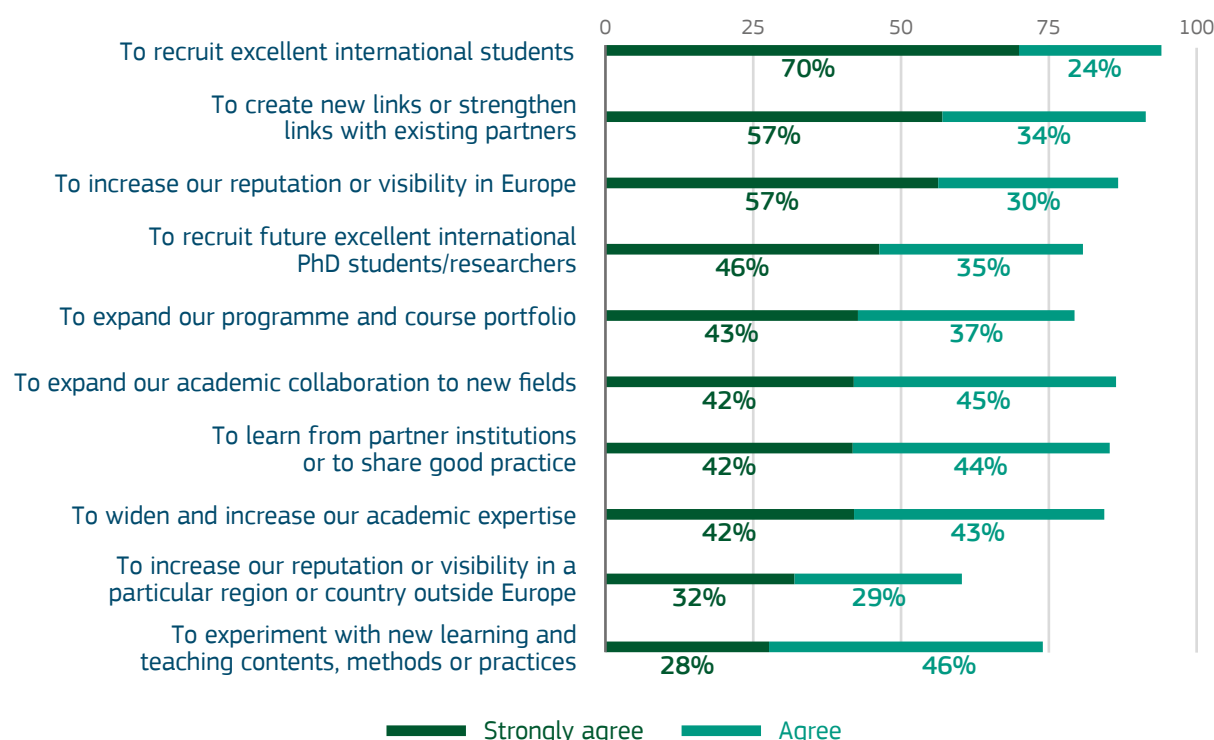


Figure 18. Objectives pursued by institutions, faculties and study programmes while participating in EM

The top objectives of EM Master's programmes reported by survey respondents speak of the innate **bottom-up character of this form of collaboration**, which is initiated by pioneering academics and administrative staff committed to the joint design and delivery of this type of education at the participating HEIs. Unlike other types of (strategic) partnerships and fully-fledged institutional alliances subsequently funded through European education and training programmes, the initial, driving ambition of EM funded cooperation was not to initiate broader institutionalised collaboration, nor to incentivise institution-wide transformation(s).

Nonetheless, the multiple positive changes triggered by EM participation and attested by almost all survey respondents were **not confined to the respective programme level, nor to the primary area of learning and teaching**, despite the original thrust for academic excellence. Overall spillover effects and impact are identifiable not only at study programme level, but also at the **faculty** and **wider institutional level**, and are more wide-ranging in nature. Three in four respondents (**74%**) reported that the EM experience helped deepen and widen international cooperation at programme, faculty and institutional levels. Two thirds (**65%**) reported important advances in the areas of learning and teaching triggered by EM, while **59%** highlighted improvements in the **administrative processes** related to the delivery of joint programmes in general, which were also beneficial for the implementation of other forms of international cooperation (Figure 19).

Perceived impact of Erasmus Mundus on three areas (all respondents)

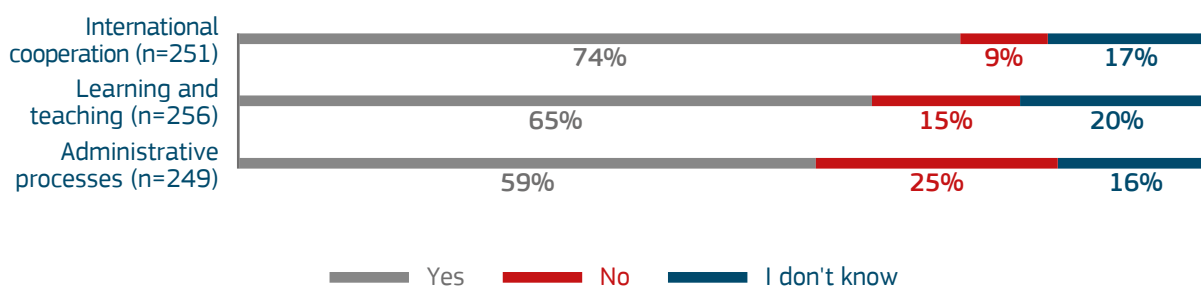


Figure 19. Perceived impact of Erasmus Mundus on three areas (programme and central-level perspectives)⁴⁶

The survey respondents, programme representatives and experts convened through the different workshops spoke freely of the **multi-dimensional and comprehensive nature of the changes prompted**, sparking or enhancing internal collaboration and peer-learning between the units and levels at individual institutions following involvement in Erasmus Mundus. Such feedback is illustrated in the following statements: *“The programme has been critical in boosting academic, research, transfer and management aspects in the consortium institutions. The lessons learned, the alumni network established, the research, academic and knowledge transfer achieved thanks to the EMJMD programme are extremely valuable for the consortium institutions.”*

“The EM programme enhances collaboration between our department and other departments participating in EM Master’s programmes, and also results in the sharing of experiences and practices with all administrative units. Coordinating complex joint degree programmes such as EM programmes requires intense internal and inter-institutional academic and administrative cooperation, thereby building capacity for developing and managing complex research and educational programmes.”

EM Master’s programmes also served as **pioneers** for the EHEA, allowing experimentation and the testing of new approaches to joint curricular design and delivery, accreditation, administrative cooperation, and student recruitment, inevitably affecting (all) related services in partner institutions. Consequently, EM Master’s programmes set a **new quality standard at participating HEIs**, and became **models** for the **set-up of new joint programmes** at Master’s level, while also contributing to **quality improvements in all other programmes**: *“We experience our EM programme as one of the state-of-the-art projects in Europe in terms of flexibility, mobility, content and teaching, learning and assessment approaches and European accreditation. It therefore inspires other programmes and initiatives. It also shows that intensive international cooperation is feasible and proves legal and organisational challenges can be overcome when there is sufficient commitment and drive. It demonstrates that organising European degrees is possible.”*

“The EM Master’s programme, which was launched when the department was created, has strongly contributed to the development of Master’s programmes, serving as the academic backbone of a strong course portfolio, supporting research excellence, attracting international attention and talented students and enhancing the visibility and reputation of the department/university in this field. It has also served as a model for the development of various forms of partnership with other HEIs and professional partners.”

⁴⁶ The survey included the following question: Do you see any significant (direct or indirect) changes in learning and teaching/international cooperation activities/administrative processes that could be associated with your institution’s/faculty’s/department’s participation in Erasmus Mundus?

Last but not least, Erasmus Mundus was also reported to **induce positive individual changes** for **students** (including alumni), and **staff (academics and staff in administrative roles)**: *“The EM programme is a great international programme: students and teachers become different after participating in this programme. It definitively changes the professional and even personal paths of everyone involved.” “Significant impact on staff skills, especially for the administrative staff involved in coordination (becoming open-minded, reactive, proactive, with improved levels of English, and greater ability to innovate in terms of their working methods).”*

A common thread among respondents who answered “I don’t know” or “No” to the question about positive changes triggered by the EM programme was the **difficulty in establishing full causality**, and in distinguishing the changes induced by EM Master’s programme(s) from those generated by other forms of international collaboration. Multiple experts noted that this was easier to establish in earlier years than at present, twenty years since the launch of the programme. This is largely because HEIs were involved in fewer international activities at the time, making ensuing improvements more noticeable and more directly connectable to the original activities that triggered them. On the one hand, EM Master’s programmes smoothed the path for other, and later more strategic, forms of international collaboration, put the respective institutions on the world map for international student recruitment, and further professionalised the administrative services. On the other hand, it is this very diversification that makes the programme’s current impact more indirect. It is thus harder to isolate the spillover changes generating positive changes of their own.

Establishing causality is further challenged by programme and institutional **staff turnover**: institutional memory is often thinned through these natural changes. Several experts noted that newer colleagues would certainly take the current situation and much smoother functioning of internal processes for granted, without realising the baseline twenty years ago, and that many improvements that have led to the current situation (e.g., in accreditation, joint certification) were triggered by Erasmus Mundus.

Nevertheless, the responses offered by the vast majority of survey respondents able to comment on the perceived positive changes triggered by Erasmus Mundus revealed some **interesting patterns**.

First, **respondents from larger countries**, with higher institutional representation in EM, both in sheer numbers and in the number of programmes per institution reported **positive changes less often** than those from countries with less participation in Erasmus Mundus. Respondents from France, Germany, Italy, Spain and the Netherlands, who jointly account for 54% of all survey responses, underreported impact in all three areas (61%, 59%, 62%) in comparison with all of the other countries in the sample (68%, 75%, 64%) (Table 9). Interestingly, respondents from France and Italy were more often positive about impact across the three areas than those from Germany and the Netherlands (Table 9).

Furthermore, **fewer central-level respondents in larger countries reported positive changes** in learning and teaching and international cooperation than programme-level respondents. This may be due to the higher decentralisation of large, comprehensive institutions in the respective countries making institutional-level impact harder to assess. Such institutions also tend, comparatively speaking, to be more internationalised than their counterparts in smaller countries, which could make the type of international cooperation facilitated by EM seem more normal, and its direct added value less obvious. Central-level staff also have a better overview of all the other, more institutionalised cooperation tools and programmes, facilitating comparative assessment with Erasmus Mundus.



Table 9. Institutional impact reported by the share of respondents from top 5 countries with high representation in the sample (all levels)

Country (n=256)	Learning and teaching	International cooperation	Administrative processes
France	72%	78%	61%
Italy	68%	68%	63%
Spain	61%	71%	43%
Germany	55%	70%	42%
The Netherlands	50%	56%	50%
Top 5 average	61%	59%	62%
Other countries	68%	75%	64%

Second, **Erasmus Mundus has a high impact on both European (programme countries) and international partner institutions** (Figure 20), with international partners more positive about the impact on their learning and teaching content, methods or practices (82% vs. 64%) and international cooperation (82% vs. 72%) than their European counterparts (bearing in mind that international respondents represent much smaller numbers in the sample).⁴⁷

Perceived impact of Erasmus Mundus on three areas

(EU/EEA respondents: n=245; non-EU/EEA respondents: n=11)



Figure 20. Perceived positive impact on three main areas by respondent's HEI region of origin

Third, **Erasmus Mundus made a positive impact on a variety of HEIs**, regardless of their institutional type, size of institution or programme, and status (public vs private) (Table 10 and Table 11). The only variation is that universities of applied sciences more often reported positive change in the areas of learning and teaching (87%), and international cooperation (74%), whereas comprehensive universities and other types of HEIs (e.g., foundations) more commonly reported an impact on administrative processes than other types of HEIs.

⁴⁷ The survey included the following question: Do you see any significant (direct or indirect) changes in learning and teaching/international cooperation activities/administrative processes that could be associated with your institution's/faculty's/department's participation in Erasmus Mundus?

Table 10. Institutional impact by type of HEI in EM Master's programmes

Type of HEI / Impact area	Learning and teaching	International cooperation	Administrative processes
Comprehensive university (n=182)	65%	72%	59%
University of applied sciences / University college (n=23)	74%	87%	48%
Technical university (n=34)	65%	74%	53%
Specialised institution (n=6)	50%	83%	50%
Other (n=11)	55%	46%	64%

Furthermore, at programme level, smaller EM Master's programmes (in terms of the average student intake) more often reported impact on learning and teaching content, methods and practices (75%), and international cooperation (83%) (Table 11).

Table 11. Institutional impact by size of student cohort in EM Master's programmes

Size of student cohort / Impact area	Learning and teaching	International cooperation	Administrative processes
Large (>40 students per intake) (n=15)	60%	73%	60%
Medium (20 - 40 students per intake) (n=83)	72%	77%	66%
Small (up to 20 students per intake) (n=57)	75%	83%	63%

Fourth, while there seems to be **no correlation between the type of certification offered by the programmes and the instances of reported impact**, EM programmes offering multiple degrees reported slightly more common positive changes in international cooperation (83%) and administrative processes (66%) than those delivering other types of degree (Table 12). Considering that awarding multiple degrees typically represents the first step most joint programmes take before eventually moving towards a joint degree, this difference might be explained by the hypothesis that less internationalised institutions can see higher impact from such first steps.

Table 12. Institutional impact by type of certification in EM Master's programmes

Type of certification / Impact area	Learning and teaching	International cooperation	Administrative processes
Double degree (n=33)	73%	76%	52%
Joint degree (n=71)	75%	76%	61%
Mixed arrangements (depending on the partner) (n=26)	73%	73%	62%
Multiple degree (n=41)	73%	83%	66%
Other (n=2)	0%	50%	50%

Fifth, **coordination pays off**, as the impact on coordinating institutions seems more visible and, thus, is more commonly reported, especially in the areas of international cooperation (85%) and administrative processes (66%) (Table 13). This finding reflects the additional responsibility that coordinators take on in driving the necessary changes for a successful implementation of the programme at consortium level. This could mean

that, in practice, coordinators can elicit more change at their home institutions. Interestingly, a greater share of respondents representing **associated partners reported positive changes in the field of learning and teaching** despite their 'lighter' consortium status, although the statistical base behind this finding is rather small.

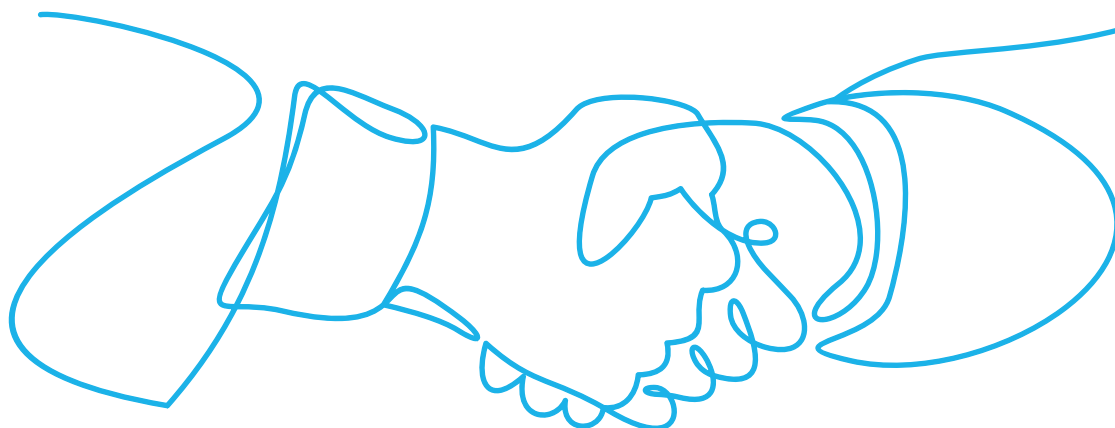
Table 13. Institutional impact by partner status in EM Master's programmes

Partner status / Impact area	Learning and teaching	International cooperation	Administrative processes
Coordinator (n=113)	74%	85%	66%
Full partner (n=50)	70%	64%	52%
Associated partner (n=7)	86%	71%	29%
Other (n=3)	33%	0%	33%

Sixth, the **impact of EM is most visible, and most widely reported at the level of the study programmes themselves**. Respondents working directly within EM Master's programmes reported positive changes more often than those working at faculty or central levels, in all three impact areas: learning and teaching (73% programme vs. 48% central level), international cooperation (79% vs. 65%) and administrative processes (62% vs. 52%) (Figure 21 and Figure 22). Interestingly, both groups reported the most positive changes in international cooperation (79% and 65% respectively).

Furthermore, the share of programme-level respondents reporting "no" changes is significantly smaller than the share of central-level respondents, confirming that professionals closer to programme delivery and implementation are also best suited to fully observe such impact.

Seventh, **academics and administrative staff involved in EM Master's programmes have different views on where they see the biggest impact of EM**. Programme-level respondents with academic roles more commonly reported impact on learning and teaching (81%) and international cooperation (83%), whereas a higher share of respondents representing administrative staff reported positive changes in administrative processes (69%) (Table 14). A smaller share of respondents with mixed administrative and academic roles reported impact on international cooperation (65%) and administrative processes (50%) (Table 14). As most study programmes and institutions lack systematic activities and tools to monitor and evaluate impact, these response patterns are probably due to respondents commenting more easily on the areas they are closer to or directly involved in.



Perceived impact of Erasmus Mundus (programme-level perspective)

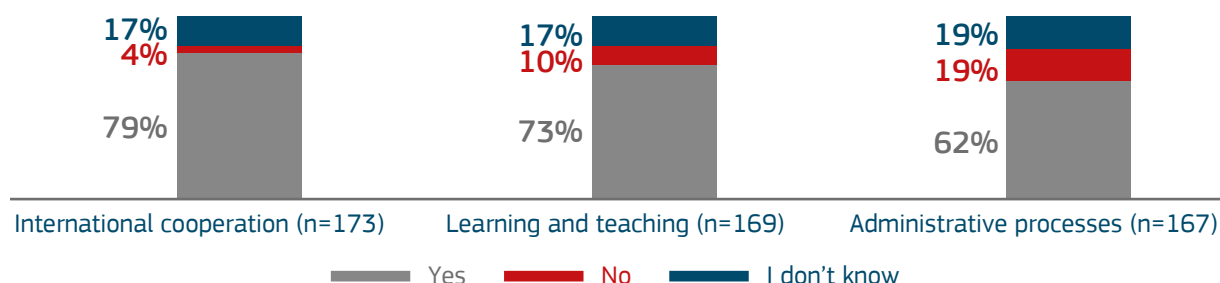


Figure 21. Perceived impact at programme level

Perceived impact of Erasmus Mundus (central and faculty-level perspective)

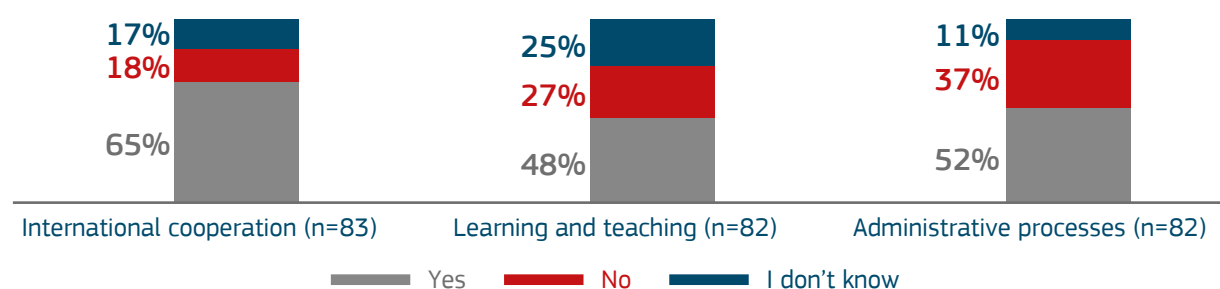


Figure 22. Perceived impact at central and faculty level

Table 14. Institutional impact by the respondent's role in EM Master's programmes

Respondent's role / Impact area (n=165)	Learning and teaching	International cooperation	Administrative processes
Academic role	81%	83%	57%
Administrative role	56%	69%	69%
Mixed role	75%	65%	50%

Finally, some variation was established for **fields of study**. Programmes in Exact Sciences such as **Mathematics** (85%) and **Physics** (83%), as well as **Economic Sciences** (76%) and **Life Sciences** (72%) more commonly reported impact across the three areas (Table 15). This indicates that Erasmus Mundus enables these areas to open up to new international collaborations, novel pedagogies, and administrative innovations. In contrast, fewer Social Sciences and Humanities, and Information Science and Engineering programmes strongly represented in the sample reported lower impact, especially on administrative processes (66% and 61%) (Table 15).

Table 15. Institutional impact by field of study covered by EM Master's programmes

Field of study / Impact area (n=173)	Learning and teaching	International cooperation	Administrative processes	Average
Physics	89%	89%	78%	85%
Mathematics	100%	50%	100%	83%
Economic Sciences	91%	64%	73%	76%
Life Sciences	74%	77%	65%	72%
Other	62%	85%	62%	70%
Environmental and Geosciences	88%	81%	56%	67%
Social Sciences and Humanities	73%	73%	53%	66%
Chemistry	64%	82%	55%	66%
Information Science and Engineering	62%	71%	50%	61%

3.2 Impact on learning and teaching

The section zooms in on the impact of Erasmus Mundus on learning and teaching. It provides a nuanced, **comparative perspective** based on programme and central/faculty-level respondents' diverse perceptions and illustrates some of the impacts with several examples from the field.

EM Master's programmes are generally perceived to have a **large positive impact on various areas of learning and teaching** although central/faculty and programme-level respondents have different perceptions. For those at programme level, Erasmus Mundus' influence on learning and teaching is predominantly linked to **enhancing teacher capacities and promoting their professional development**. Meanwhile, respondents from central and faculty levels identify **enriching the curriculum** with a more international and innovative scope as its most significant impact. Unsurprisingly, academic staff with direct experience of learning and teaching tend to report a higher impact on learning and teaching than administrative staff.

3.2.1 Programme-level staff perceptions

Delving deeper into the programme and department-level impacts, a significant majority of survey respondents described EM as a **catalyst for a broad spectrum of changes**, aptly summarised by the statement *“The changes have been overwhelming and relevant across all facets of teaching and learning.”*

Figure 23 illustrates the domains where Erasmus Mundus is “largely” or “partly” credited with notable changes. The **biggest impact is reported on enhancing teacher capacities** and fostering professional development. This includes broadening opportunities for exchange and collaboration (75% of respondents selecting “largely”), as well as boosting teaching skills related to the subject (68%) and to interdisciplinary and multidisciplinary approaches (66%). The general view is that **both programmes and staff members have benefitted**: *“The EM programme has been excellent in applying innovative teaching methods, student-centred experiences, and faculty and coordinators’ work to constantly improve the learning content, methods, and practices.”*

Erasmus Mundus is broadly perceived as a **life-changing experience for teachers**, as noted by several respondents: *“The EM programme has changed our way of teaching and researching. Fundamentally, it has had a great impact on our understanding of other universities and the ways they work, as well as their teaching and learning practices. This has been invaluable for all of those involved and it has brought us closer as a higher education community while being immensely rewarding professionally and personally.”*

“The various EM programmes in which I have been involved have literally changed my life as a teacher. I found renewed motivation, improved my language skills and knowledge of other education systems and cultures, developed new fields of expertise, dramatically improved the quality of my teaching documents.”

Box 8 illustrates how such positive changes in learning and teaching skills and competences were implemented by the SMACCs programme.

Transformations in curriculum design characterised by an increased focus on international topics (66%), the use of intended learning outcomes (63%), and the incorporation of transferable skills (61%) alongside a research-based learning approach (59%) were rated as next significant. Box 9 and Box 10 offer illustrative examples of such enhancements in learning and teaching content and curriculum design, as implemented within the WE-TEAM and PROMISE study programmes.

Furthermore, large innovations in **teaching practices** have been observed, such as the introduction of new learning and teaching formats (60%), the adoption of challenge-based learning approaches (60%), and the emphasis on student-centred learning (58%) (Figure 23).

Respondents were positive, but less overwhelmingly so, about the EM contribution to **support services for academic staff** such as the provision of consultations, advice, and incentives to enhance teaching in an international context or incorporate innovative teaching methods as illustrated in Figure 23.

Lastly, just over one third of respondents considered Erasmus Mundus contributed to the implementation of a **new language policy**. However, numerous respondents noted its impact on language proficiency, especially in English. One respondent highlighted that the consortium *“promotes English as a teaching language, but also the need to teach in the host language and to ask the EM students to join lectures in the host language – to share lectures and work with the local students.”*

Main changes in the faculty or department's learning and teaching contents, methods, or practices associated to the EM programme (programme-level perspective; n=122-125)

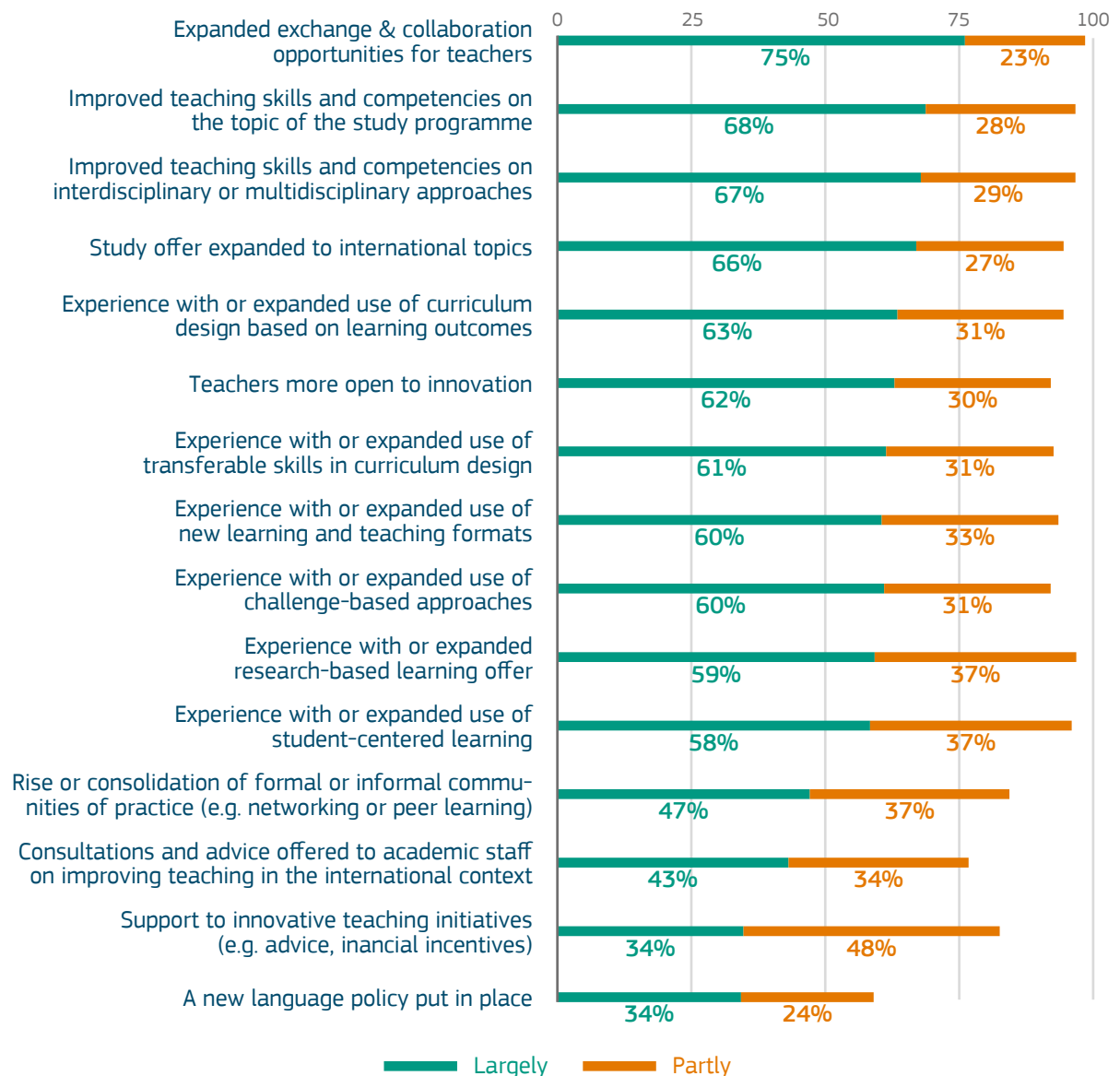


Figure 23. Main changes in the faculty or department's learning and teaching contents, methods, or practices associated with the EM programme (programme-level perspective)

While workshop participants concurred with the survey's identification of the top areas most affected by EM, they particularly stressed the **role of national context** in achieving sustainable and scalable innovations in learning and teaching, including the adoption of digital technologies. Additionally, they observed that EM's impact was more significant on modifications to curriculum content and processes than on learning and teaching methodologies. In this context, they noted the need to adjust teaching strategies to accommodate the varied national, educational, and disciplinary backgrounds of EM Master's students, which often entails a more intensive initial teaching effort to establish a common foundational understanding among all students. Lastly, workshop participants concurred that, on average, student feedback is more valued in EM Master's programmes, even though it does not always result in tangible changes.

*Box 8. Improving teaching skills and competencies (SMACCs)***IMPROVING TEACHING SKILLS AND COMPETENCIES****Erasmus Mundus Joint Master in smart cities and communities (SMACCs)**

SMACCs is a two-year EM Master's programme focused on "educating the next generation of engineers and scientists in smart cities and communities." The consortium is coordinated by University of Mons in Belgium (Wallonia). The programme was launched in 2017 under Erasmus Mundus. The number of HEIs collaborating has remained stable over the first and the current second programme iteration, supported by Erasmus Mundus, with a total of four main partners and ca. fifty associated partners from the public and private sectors, collaborating on Master Thesis topics and internship opportunities.

The implementation of the EM Master's programme led to several adaptations in the teaching practices, contents and skills of the consortium partners in order to cope with students' heterogenous educational and professional background, in line with the interdisciplinary nature of the Smart City concept.

The consortium developed additional teaching materials to bring students onto common ground (usually taking the form of a video summarising the fundamental knowledge on a topic before the start of a course). In addition, driven by formal (e.g., regular quality surveys) and informal exchanges with students, the partners introduced a series of use cases to illustrate the course principles in practice and better contextualise existing courses in relation to the topic of Smart Cities and Communities. They also experimented with challenge-based learning and created new courses related to Smart City pillars used beyond SMACCs. Over the years, they noticed improvements in the academics staff's English-language teaching skills.

Source: SMACCs

*Box 9. Improving learning and teaching content (WE-TEAM)***IMPROVING LEARNING & TEACHING CONTENT AND PROCESSES THROUGH INTERNATIONAL COLLABORATION AND KNOWLEDGE EXCHANGE****International Master of Science in Textile Engineering (WE-TEAM)**

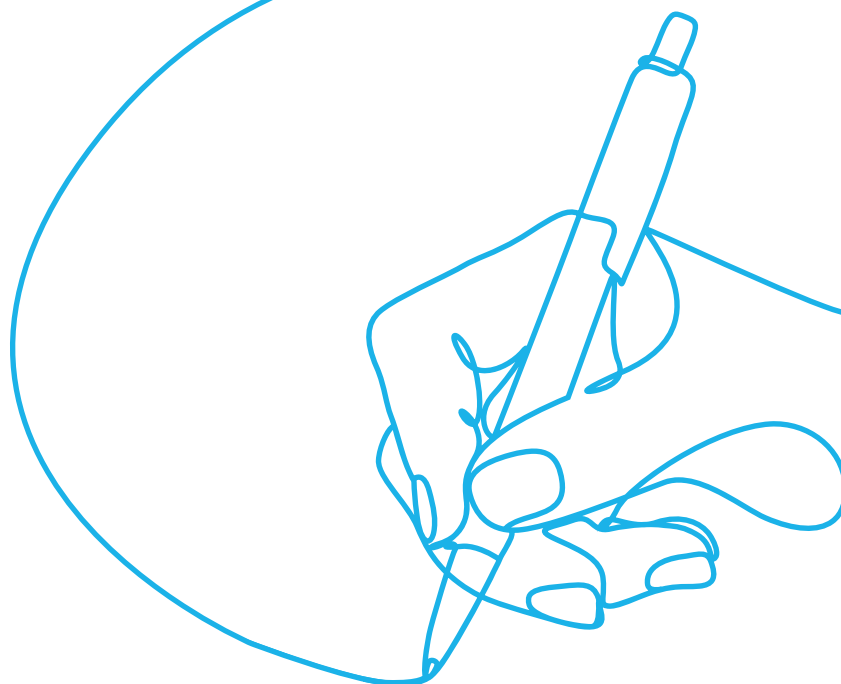
WE-TEAM is a two-year EM Master's Programme aiming to "educate the next generation of textile engineers". The programme was launched in 2020 under Erasmus Mundus, in its first and current programme iteration. The international consortium consists of six HEIs, coordinated by Ghent University in Belgium (Flanders).

Thanks to their strong international cooperation and knowledge exchange in several thematic areas, the partners largely improved the overall programme's coherence by consolidating courses in several areas (e.g., biotechnology) and jointly developing curriculum content (e.g., biomaterials, bioprocesses, bio applications). Additionally, the consortium streamlined the use of digital technologies having reached an agreement on the software to be used to support students' proficiency in using digital tools for product design and manufacturing.

In addition to extensive student and staff mobility, WE-TEAM developed two dedicated courses to enhance 21st century skills. The Co-creation course focuses on communication, teamwork and entrepreneurial skills, whereas Scientific Thinking provides insights into the mechanisms of thinking processes.

For WE-TEAM, Erasmus Mundus has offered a unique opportunity to improve learning and teaching content and processes, which would otherwise have not been possible at whole-programme level.

Source: WE-TEAM



Box 10. Fostering curriculum design based on intended learning outcomes (PROMISE)

FOSTERING CURRICULUM DESIGN BASED ON INTENDED LEARNING OUTCOMES

Erasmus Mundus Joint Master in Sustainable Mineral and Metal processing engineering (PROMISE)

PROMISE is a two-year EM Master's programme focused on "training future leaders to take mineral and metal processing engineering into a sustainable future". The programme was launched in 2021 under Erasmus Mundus. The consortium consists of four partner universities from Austria, Chile, Croatia and Finland, coordinated by the University of Oulu.

Even though PROMISE is a fairly new EM Master's programme in its first iteration, it was instrumental in applying curriculum design based on intended learning outcomes, including at universities already using innovative student-centred teaching approaches. Specifically, the partners improved the course didactics by organising project-based learning activities addressing the challenges facing the mining industry. The programme curriculum was designed according to industry needs as part of academic-industry-based curriculum development applying mixed methods to enhance the instructional effectiveness, innovation and student professional development, while fostering interest among students and industry partners.

The PROMISE consortium proposed a paradigm shift by changing or transitioning from linear to a circular model considering the use of resources, while transferring new innovative knowledge to current and future generations of mineral processing professionals and raising the partners' capabilities and skills in developing courses addressing different aspects of sustainability in mineral and metal processing.

Source: PROMISE

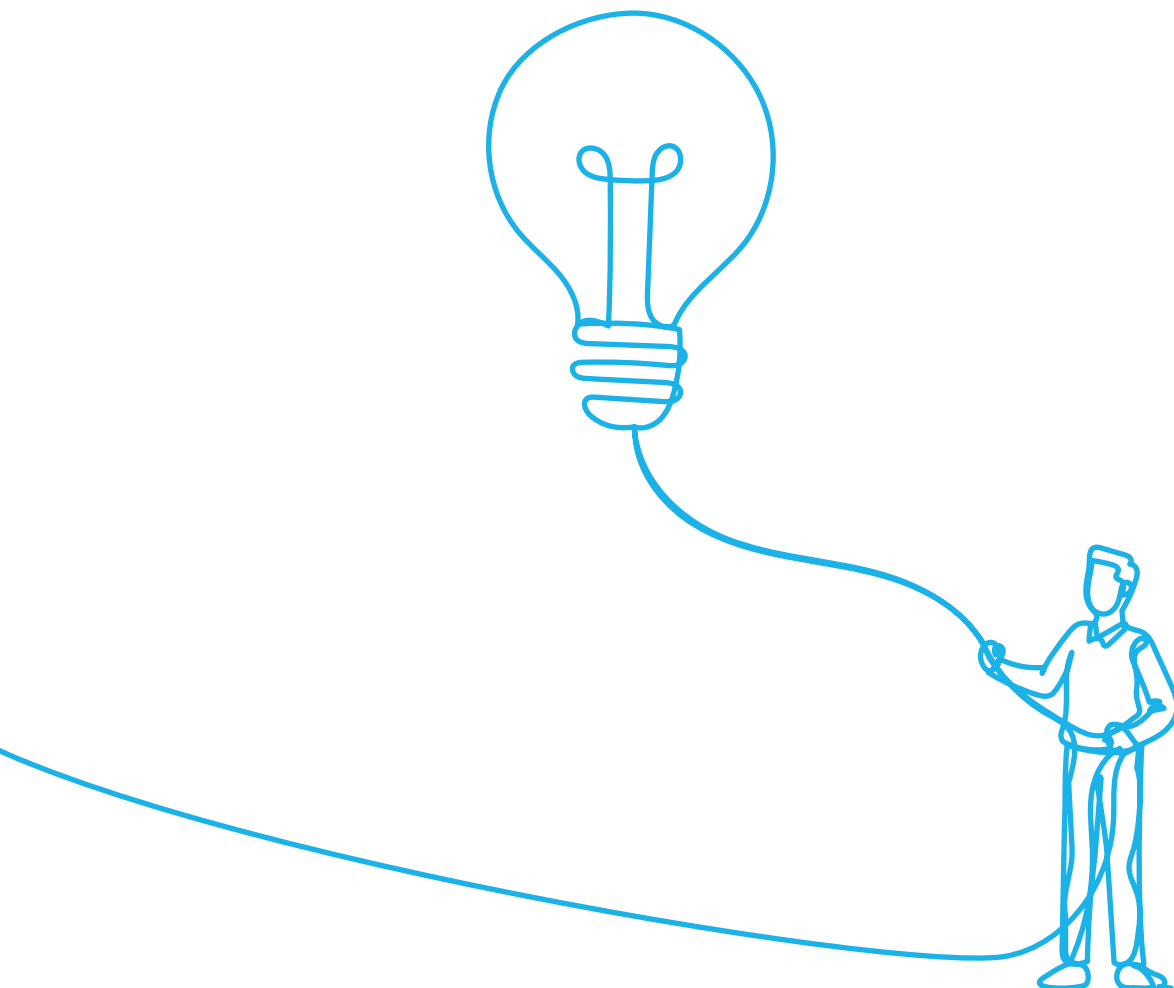


3.2.2 Central and faculty-level staff perceptions

Central and faculty-level respondents were **less likely than programme-level respondents** to attribute impacts on learning and teaching to EM. One respondent noted: *"Whereas the impact cannot be denied, it is sometimes difficult to ascribe changes to EM alone, but rather to the wider changes taking place under Bologna. (...) There is an undeniable impact on expanding course to cover a more global perspective and on the development of joint degree practice."*

Most see the programme as having, at least to some extent, contributed to improvements. Figure 24 presents the learning and teaching areas where EM was "largely" or "partly" associated with significant changes by this group of respondents. **Largest impact is ascribed** for an **expanded range of courses on international topics** (81% of respondents selecting "Largely"), adapted to a more global student population (67%), with new interdisciplinary or multidisciplinary topics (61%), taught using new learning and teaching formats (60%). One quote sums up central-level respondents' general impression: *"A clear outcome of EM participation is the increase in internationalisation and multidisciplinary approaches and improvements in the learning content and teaching methods. Both teaching methods and content of some courses had to be at least partially adapted to students from different disciplines."*

Specific innovations in the teaching formats mentioned include blended learning, peer learning, challenge-based learning, hands on laboratory sessions, online courses, joint courses, and English-language instruction. As one respondent mentioned, one of the main changes brought about by Erasmus Mundus was *"getting inspired by the didactical methods of EM partners."* This in turn contributed to the **diversification of the academic offer** at partner institutions.



Main changes in the institution or faculty's learning and teaching contents, methods, or practices associated to the EM programme (central-level perspective; n=15-25)

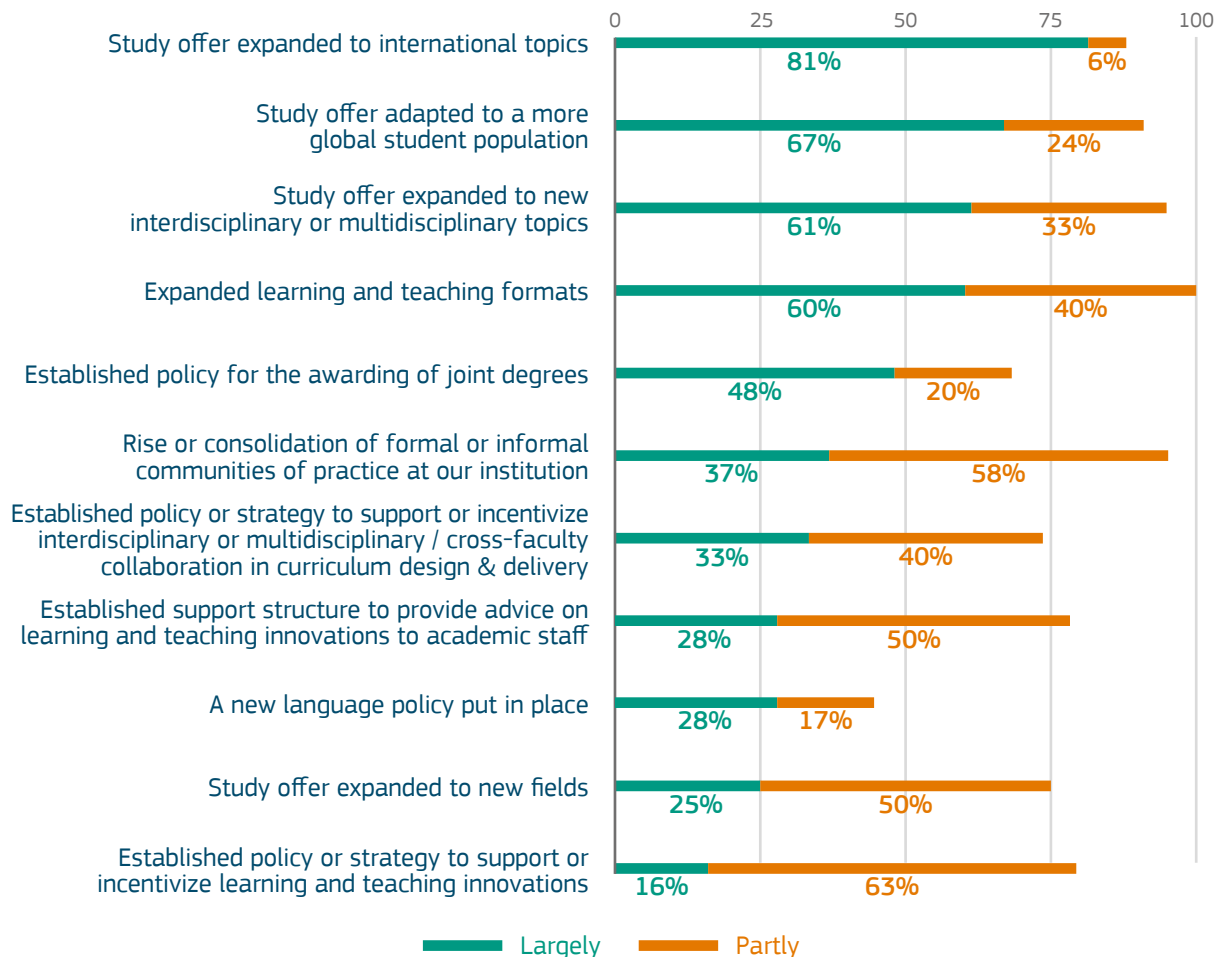


Figure 24. Main changes in the institution or faculty's learning and teaching contents, methods, or practices associated with the EM programme (central-level perspective)

Survey respondents acknowledged the EM programme's more **partial contribution to changes in policies and strategies to award joint degrees** (with 48% largely and 20% partly acknowledging its impact) and initiatives to encourage interdisciplinary or multidisciplinary collaboration across faculties in curriculum development and implementation (33% largely and 40% partly). EM also played a role in **establishing new language policies** (28% largely and 17% partly) and fostering learning and teaching innovations (16% largely and 63% partly). Moreover, Erasmus Mundus contributed to the development and strengthening of support structures, such as formal and informal communities of practice (37% largely and 58% partly), and provided guidance on innovative teaching methods to academic staff (28% largely and 50% partly), as shown in Figure 24.

Workshop participants highlighted the qualitative dimension of the impact achieved, reflected in the **quality of delivery**, including collaboration with new stakeholders, progress on graduate employability and jointness of curricula, as well as **improvements in assessment** (both teachers' assessment of learning outcomes

and students' assessment of the courses). Another reported area of improvement was the **adaptation of existing Master's programmes to the requirements of EM**, especially in less internationalised disciplines. This was echoed by one of the survey respondents who indicated that *"The EM programme has taught us that we are part of a worldwide field, the topic (...) is embedded in international resolutions and is a global paradigm change. We also experienced existing research paradigms and our own positioning in that field."*

3.3 Impact on international cooperation

International cooperation is seen as the **top area positively impacted by EM** by both programme and central-level respondents. This is particularly noteworthy as, according to the experts consulted in the different workshops, **the impact on international collaboration takes longest to materialise**. Due to the high degree of jointness, most academic and administrative staff resources go into the actual set-up, delivery and consolidation of the EM Master's programme in the first years. The changes in teaching and learning and related administrative procedures triggered by the new collaboration requirements emerge more rapidly and visibly, as the programme's good functioning depends on these improvements.

Respondents in both academic and administrative roles reported only having time to think about further collaboration and building on the lessons learned, once the programmes were up and running smoothly, which typically takes a few years. They also stressed that the impact on, or extent of further international collaboration largely depends on the extension of EU funding beyond the initial programme set-up years, as well as on leadership's view of importance of (institutionalised) partnerships.

Previous studies showcase the tangible direct benefits and spillover effects of transnational collaboration partnerships at macro (regional/national), meso (institutional) and micro (level) (Craciun and Orosz, 2018; Karvounaraki et al., 2018). Such spillover activities cover a broad spectrum at institutional level, from an increase in other international partnerships, to strengthened research and teaching capacity, to more and better scholarly output, and increased attractiveness for foreign students and academics.

Both programme and central-level respondents largely agreed that the **highest, albeit intangible, cooperation-related benefit** from EM participation is a **better understanding of the European higher education landscape** (76% and 60% respectively) (Figure 25 and Figure 26). The experience of working closely with partner institutions and study programmes to jointly deliver the EM Master's programme brought the respective institutions into close contact with their, initially only European, partners' institutional and national realities, specific academic traditions and administrative practices, as well as with national regulatory frameworks. This knowledge eased subsequent cooperation, both with the same and new partners although this goal was not fully formulated in these terms at the time of Erasmus Mundus' launch. This experience was captured in several statements: *"Our programme acts as a gateway to Europe in general, and Eastern Europe, helping us to understand complex issues such as development processes, e.g., through an improved understanding of transition economies."*

Both groups of respondents placed the **expansion of student mobility** (62% programme-level and 47% central-level) and the gains in **international student recruitment** in second place in the hierarchy of EM induced cooperation changes (Figure 25 and Figure 26). This was a remarkable achievement in several respects. EM Master's programmes acted as a gateway to the world, particularly for

smaller, specialised institutions enabling them to recruit students from outside Europe, and of an incredible diversity (a total of 179 nationalities at programme level) (cf. Chapter 3) for the first time. This change was illustrated by the following statement: *“Prior to our EM Master’s programme, our art courses had no foreign student (except for Erasmus mobility exchange students here for a single semester’s mobility). We had no curricula in English or self-funded places. None of the academy’s study programmes were promoted to EU or international students.”*

Such a global student body placed the respective institutions on the global map of quality education providers, while also helping them upgrade their national standing. One respondent notes: *“By coordinating the programme, EU-level awareness of the university grows. The EM programme significantly contributed to our university becoming the most international university in our country.”*

Beyond the growing numbers and diversity of incoming students, there is growing interest leading to high selectivity of the programmes: *“We observed a strong interest in studies during the Spring 2023 intake – 700 candidates for 35 study places (20 EMJM scholarship holders, 15 self-funded). Our team discussed the reasons for this – it feels as joint degrees are more attractive to students because they include international mobility, faculties, peers, and multi-cultural experiences.”*

Study programmes tremendously valued the excellent quality of EM student applicants, which symbolises course quality, and further encourages EM Master’s programmes to innovate and enhance quality: *“Students who joined an EM Master’s achieved more maturity than local students. They are better prepared to start a professional career.”*

3.3.1 Programme-level staff perceptions

Programme-level respondents clearly highlighted increased interest in joint programmes thanks to Erasmus Mundus. **Half of the respondents secured additional funding for new joint programmes either largely (28%) or partly (22%) due to their first EM programme(s).**

Erasmus Mundus helped **increase the attractiveness** of the respective study programmes not only for international students, but also for **international institutional partners**. It has played an important to partial role in the programmes **invited to join other cooperation projects under Erasmus+** (as reported by 74% of respondents) or research-based partnerships under the **EU framework programmes for research** (61% combined) or specifically related to the **European Institute of Innovation and Technology – EIT** (25%) (Figure 25).

To sum up, three in four programme level respondents reported becoming involved in subsequent education cooperation projects thanks to EM, and between one in four and two in three in spin-off research cooperation projects, as the following statement illustrates: *“Our EM programme triggered a virtuous circle from a research perspective too. The staff exchange, seminars and summer schools we organise provide an opportunity to discuss funding applications and research collaborations, and to plan joint research activities. We are currently working on a book of research outputs from these initiatives.”* Box 11 provides an example of a strategic approach pursued by the TCCM programme.

This also explains the very high share of respondents (88%) who named **experimenting with different formats and types of partnerships** as one of the biggest changes. Such partnerships also included new ways of working with industry, increasing the programme’s visibility for future employers, as highlighted in the comments: *“Our industry collaboration is much stronger now than under the former programme (running until the 2015 intake). Industry representatives on our Advisory Board play an active role in annual meetings and are quite well connected with us for information about internships and theses.”*

Last but not least, a **combined 89%** of respondents mentioned that they also witnessed **an increase** not only in student mobility/exchanges, but also in **staff exchanges**, which is a key enabler of the diversification of partnerships, and development of a more strategic approach to international collaboration, beyond individual study programmes (Figure 25).

Main changes in the faculty or department's international co-operation activities associated to the EM programme (n=129-131)

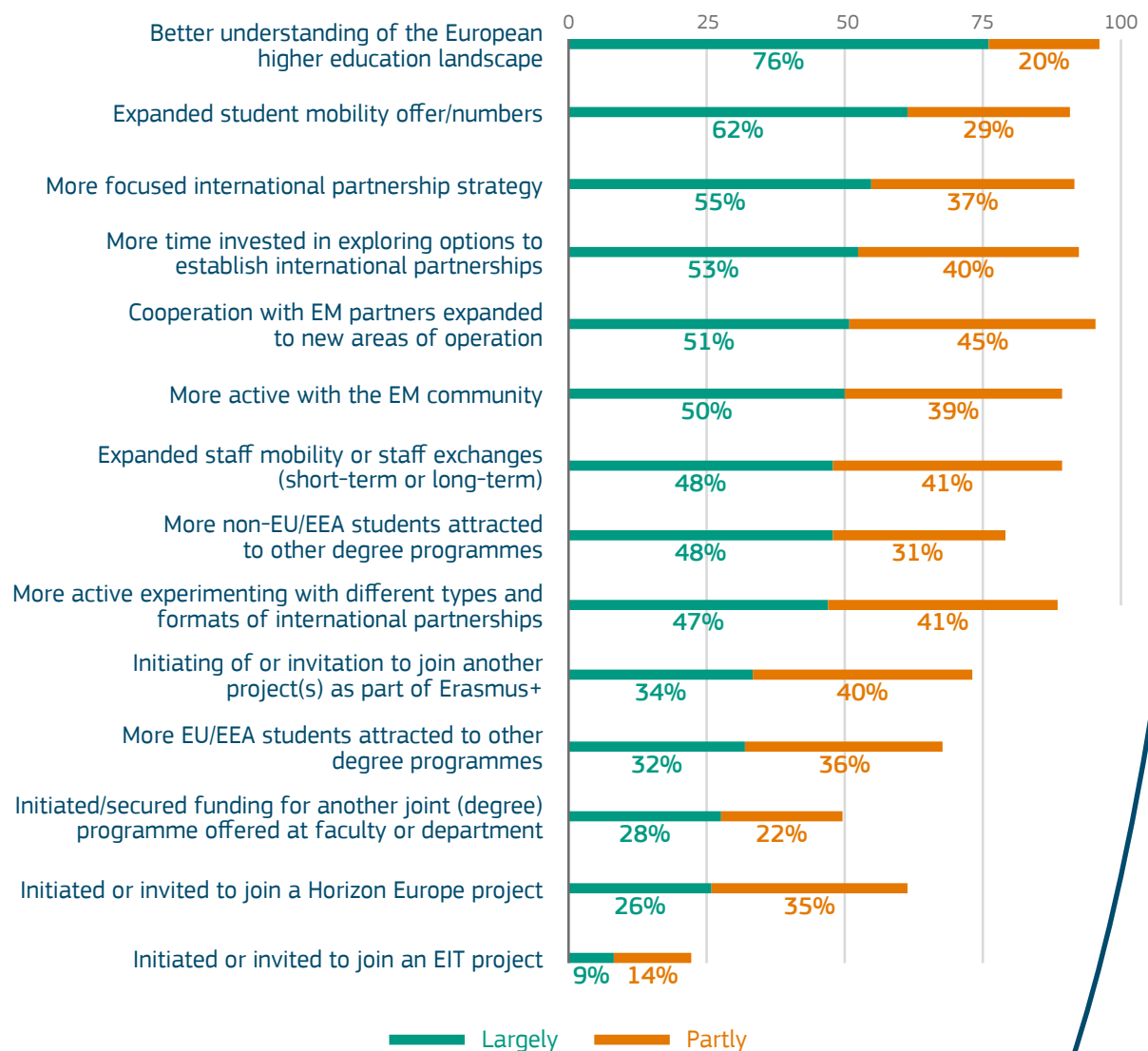


Figure 25. Main changes in the faculty or department's international cooperation activities associated with the EM programme

Box 11. Strategic approach to collaboration and links with joint doctorates (TCCM)

STRATEGIC APPROACH TO COLLABORATION AND LINKS WITH JOINT DOCTORATES

Erasmus Mundus Joint Master Degree (EMJMD) in Theoretical Chemistry and Computational Modelling (TCCM)

TCCM is a two-year joint programme co-coordinated by the Universidad Autonoma de Madrid and the Université Toulouse III – Paul Sabatier. The programme was launched under Erasmus Mundus in 2009.

The development of the TCCM Master's programme led to an improved international partnership strategy, which enabled the programme to expand the initial partnership from seven different HEIs and EU countries, to nine institutional partners, and over 20 associated partners and affiliated centres, including those outside of Europe.

The partners expanded their initial Master's level cooperation to a complementary European Joint Doctorate funded by Marie Skłodowska-Curie Innovative Training Networks (ITN-EJD). The opportunity for pursuing a research career via doctorate is marketed in the promotion of the TCCM programme, increasing its attractiveness to talented international applicants. It thus also secures a steady pool of excellent and highly motivated potential PhD candidates and allows partners to retain Master's level graduates. The fact that all Master's students have contact with other institutions has also promoted mobility at PhD level. Most of TCCM students continue their studies at PhD level, typically at one of the consortium's universities different from the one where they were registered during their Master's level studies.

Source: TCCM

3.3.3 Central and faculty-level staff perceptions

Central and faculty-level respondents also report **perceived growing prestige and visibility** associated with the EM brand and signal the **diversification of types of partnerships** (Figure 26). This is evident in the growing number of external invitations to join other **European** (a combined 80%) and **non-European partnerships** (a combined 74%), as well as in broader **reputational gains**. A total of 48% of the respondents believe that participation in EM has largely or partly positively contributed to their institution's positioning in national or international rankings. Box 12 showcases the related benefits achieved by the AMASE programme.

The **perceived deepening and diversification of collaborations with existing EM partners** to new areas (a combined 89%) is also noteworthy. Two in three respondents declared that EM has also largely or partly improved **access to other university networks** (combined 69%) (Figure 26).

Main changes in the institution or faculty's international cooperation activities associated to the EM programme (n=50-53)

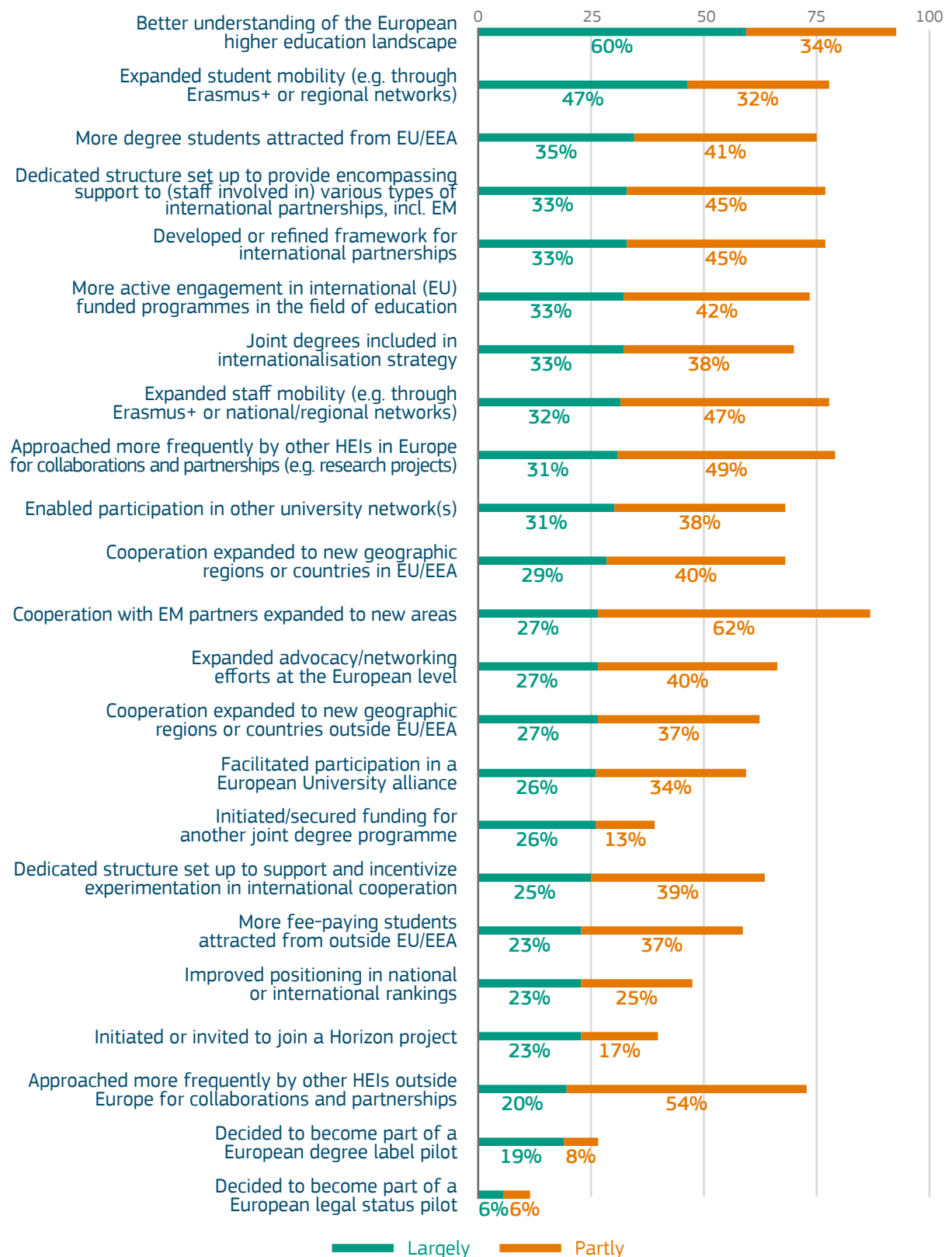


Figure 26. Main changes in the institution or faculty's international cooperation activities associated with the EM programme

*Box 12. Expanding international cooperation and student mobility (AMASE)***EXPANDING INTERNATIONAL COOPERATION AND STUDENT MOBILITY****Joint European Master Programme in Advanced Materials Science and Engineering (AMASE)**

AMASE is a two-year EM Master's programme coordinated by EUSMAT, the European School of Materials at the Saarland University in Saarbrücken, Germany. The programme was launched in 2005, under Erasmus Mundus, initially as a collaboration between four HEIs. In its current programme iteration, the fourth supported by Erasmus Mundus, the collaboration was extended to six partners.

Thanks to the AMASE programme, the coordinator university established new concepts and methodologies for guidance and advisory services for international students, which were applied to other programmes. Due to the increasing number of international study programmes, there was a need for a unit responsible for the coordination of international activities at the materials science department. This is how EUSMAT was born.

EUSMAT's flagship programme, AMASE catalysed the set-up of new exchange programmes in research and education funded by Horizon 2020, the German Academic Exchange Service (DAAD), the Franco-German University, the German-Argentinean University Center, and Interreg Programmes.

Thanks to AMASE, EUSMAT has greatly expanded its expertise in supporting the mobility of incoming and outgoing students and researchers, and managing an alumni network. AMASE also helped establish connections to universities and research centres worldwide directly benefitting the newly created exchange programmes. The department has also significantly reinforced its marketing activities, and enhanced its reputation and the visibility of the entire programme portfolio.

Source: AMASE



Connections to **involvement in European Universities alliances** are particularly worthy investigating, given this initiative's centrality at policy and sectoral level. One in four respondents declare that the EM experience **largely contributed** to their institution's participation in a European Universities alliance (**26%**), with an additional one in three saying this experience **in part contributed** (**34%**) (Figure 26).

Drawing a clear causal link between EM (as a bottom-up form of in-depth cooperation, rooted in academic realities at programme level) and the European Universities Initiative, which strives to be a larger, institutionalised form of cooperation driven by top leadership, is challenging, and largely dependent on national and institutional contexts and diversity. The following quote provides further illustration: *"There are institutions where this kind of multilateral cooperation (i.e. in networks and alliances) is long-standing and predates Erasmus Mundus, and there are perhaps institutions where a programme of this kind has driven awareness of the possibilities and the potential. I think participating in Erasmus Mundus has facilitated joining an alliance in some institutions. In other cases, it has not really been particularly relevant."*

Nonetheless, among those that report a direct EM contribution to the current collaboration in European Universities alliances⁴⁸, recurrent topics are:

- The support given through the **formalisation of pre-existing networks**, which allowed for joint agenda setting and the identification of common areas of interest, beyond initial EM Master's projects.
- The **reduction of barriers** to more in-depth cooperation, through similar changes in administrative processes among partner institutions, after which *"the step to cooperate in a European Universities alliance is not that big."*
- The **sharing of expertise in joint and double-degree programmes** and broadening the pool of prospective PhD students in relevant research fields, for alliances in which the further development of joint programmes is central. In such cases, some EM Master's programmes seemed to opt for broadening their EM cooperation and enabling the transfer of expertise by involving new alliance partners, along with standing EM partners, as illustrated by one respondent: *"The experience acquired in the delivery of a true joint degree is a tremendous support for the implementation of joint degrees with other partners in our European alliance."*

At present, **288 of the 438 HEIs** involved in a European Universities alliance have prior (and current) experience with EM Master's programmes. And consequently, an approximate number of 312 institutions with EM experience are not (yet) formal partners in a European Universities alliance (Figure 27)⁴⁹.

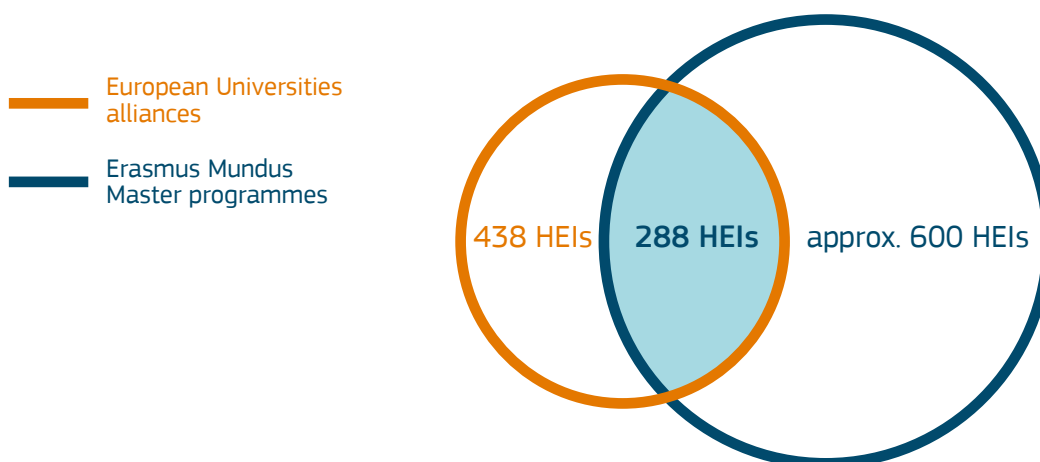


Figure 27. Cross-participation of HEIs in EM Masters and European Universities alliances

48 The following question was included in the survey: If your institution's EM experience has facilitated your participation in a European university alliance, in what ways has it been useful.

49 The total number of unique institutions in EM Master's programmes is based on earlier approximates by the EACEA.

To date, these initiatives are distinct and complementary in their strengths, despite both being excellence oriented. **Erasmus Mundus** strives to foster excellent education and further internationalisation in a bottom-up manner, via study programmes based on a jointly designed and fully integrated curriculum, with academics in the driver's seat. The **European Universities Initiative** aims to facilitate the emergence of new forms of excellence by pursuing a cross-institutionalised approach to international cooperation, based on a joint long-term strategy for education, and, in some instances, for research. This approach, driven by institutional leaders, strives to drive systemic, structural, and sustainable impact at all institutional levels, while also being supported by academics. In practice, the strong bottom-up nature of EM translates into a solid buy-in from academic staff who are involved in the design, implementation, and delivery of joint programmes at all stages, something that European Universities alliances are striving to accomplish more of. On the flip side, EM Master's programmes can encounter challenges in getting institutional buy-in and recognition from leadership, which can stifle the transfer of positive impact from the programme to the institutional level.

3.4 Impact on administrative processes

Overall, EM Master's projects are perceived to have a **positive impact on various administrative processes**. This perception was shared by the majority of respondents across all institutional levels explored but was more prevalent at programme level (62% of respondents compared to 52% of respondents at central/faculty level) (Figure 21 and Figure 22).

Both respondent groups associate EM Masters with **improvements in internationalisation processes**, whether this involves international student services, recognition of prior learning, or processes to support international cooperation in education and research. However, central and faculty-level respondents were less likely to attribute large impacts on changing administrative processes to one programme, as one respondent explained: *"It is hard to ascribe developments solely to EM participation, but it cannot be doubted that participation, alongside wider developments, played a role in bringing change. Some procedures and support structures were already in place and adapted to the particular needs of EM students or EM programmes and their particular structure."*

3.4.1 Programme-level staff perceptions

From a programme-level perspective, the largest areas of impact involved **better services for international students**: welcome services (68% of respondents), international recruitment (67%) and admission, particularly credential evaluation (62%), **mobility guidance and counselling** (59%) (Figure 28), as stressed by one respondent: *"The University's International Office and general administration services improved communication with students and administrative processes. For instance, we now offer new forms and information in English. We have also improved many activities for foreign students (e.g., welcome services, visa support)."* Further examples of related improvements are provided in Box 13.

There are also significant innovative changes to internal administrative processes, systems and strategies like international recruitment (67%), prior learning recognition (62%), monitoring graduate employment outcomes (49%), inclusion and diversity (46%), and QA process alignment across study programmes (35%) (Figure 28).

Improvements in student recruitment, admission and support were also pushed by what are perceived as a high administrative overhead: *"EM programmes require significantly adapting current administrative processes at all levels. It takes a lot of energy to mould our administration to a new Master's programme, as we are always asking for modifications/exceptions to the standard rules at local levels."*

Reported difficulties involved the need to adjust eligibility and selection criteria to attract students with suitable profiles, managing the volume and quality of applications assessments, working around more rigid centralised admissions systems, coordinating joint intake processes, providing support for special requirements, and dealing with internal and international coordination issues.

Many respondents mention they have overcome **difficulties in exchanging grades** among partners delivering transcripts, ensuring quality and issuing joint degrees by trying to synchronise procedures: *“The issuing of a joint diploma was a challenge. However, we have achieved grade recognition. We synchronised some administrative processes related to selection, the exchange of marks and information between partners, quality, etc.”* or the *“main achievement is an easy system of marks transfer based on a fixed table and percentile in the cohort with automatic recognition.”*

Main changes in the faculty or department's administrative processes associated to the EM programme (n=104-105)

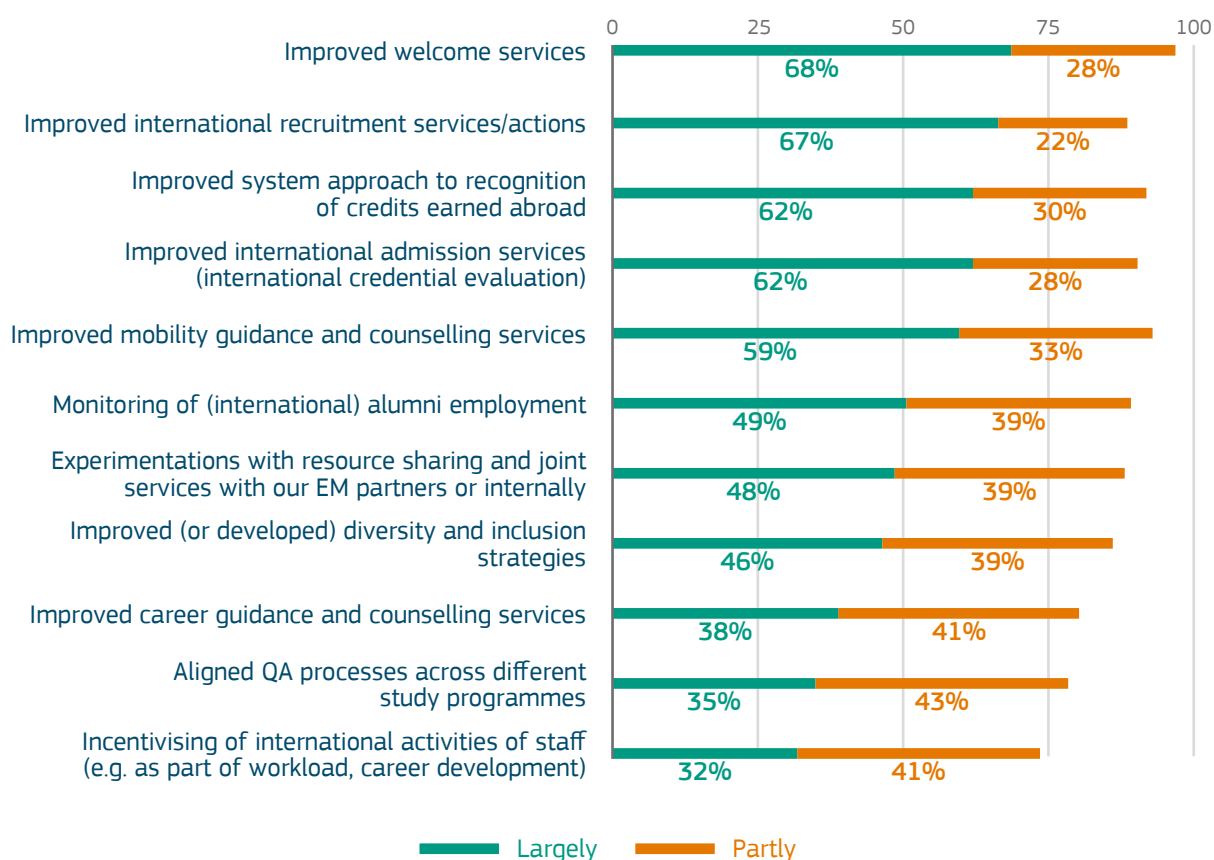


Figure 28. Main changes in the faculty or department's administrative processes associated with the EM programme

Programme-level workshop participants had a high endorsement of the core impact areas. They also argued that EM Master's programmes tend to have **insufficient visibility and appreciation** at central level and by senior management. They highlighted that the degree of EM impact may differ among the partners, as coordinating institutions often experience bigger changes to administrative processes than other partners. The related impact is also less visible at bigger institutions where Erasmus Mundus *“is just one of many international programmes.”* According to workshop participants, visa and immigration issues account for a big share of the EM administrative workload. Many survey respondents reported on their experiments with resource-sharing and joint services with EM partners or internal efforts (87%) to decrease the burden (Figure 28).

*Box 13. Improving student services (IDOH)***IMPROVING STUDENT SERVICES****Erasmus Mundus Joint Master in Infectious Diseases and One Health (IDOH)**

IDOH is a two-year EM Master's programme aiming to offer an "innovative Master's degree in infectious diseases emphasising three aspects of the One Health concept: humans, animals and the environment". The programme was launched in 2016, under Erasmus Mundus. Coordinated by Université de Tours (France), the consortium consists of three partner HEIs. The number of partners has remained stable during the first and second (current) programme iterations, supported by EM.

The EM programme has helped expand the coordinator's capacity to offer high-quality student services. IDOH has fostered the internationalisation of internal services, e.g., by developing English-language or bilingual administrative documents, and offering English courses for staff. Student services include early contacts with consulates and immigration bodies to facilitate visa and resident permit procedures, advice on opening bank account, accommodation, and local financial aid. Such services are provided by staff responsible for international students, in collaboration with internal services (Student office, Finances department, Accountancy) and external support. The IDOH consortium also shared their student service expertise with other EM coordinators and applicants (e.g., by sharing its experience of a joint diploma). Thanks to the enhanced student services, IDOH offers a quality welcome to students, allowing them to focus on academic performance, and promotes Europe as an attractive study destination.

Source: IDOH

*Box 14. Joint administrative processes (SDSI)***JOINT ADMINISTRATIVE PROCESSES****Erasmus Mundus Joint Master in Service Design Strategies and Innovations (SDSI)**

SDSI is a two-year EM Master's programme with a focus on "service design, management and leadership". The programme was launched in 2022 under Erasmus Mundus. SDSI brings three partner HEIs together in the current (first) programme iteration supported by Erasmus Mundus. Coordinated by the Art Academy of Latvia, the consortium has introduced multiple joint activities to offer better services to students and decrease the administrative burden of international programme management. Some examples of such joint administrative processes include:

- Sharing different programme implementation tasks (e.g., a joint marketing and publicity plan for SDSI);
- Joint student recruitment and selection, including joint evaluation of student applications, candidate interviews, and confirmation of selected students;
- Joint welcome events offered to all students by representatives of all consortium partners;
- Joint student guidance and advisory services for international mobility;
- Joint staff professional development activities with co-funding from the EU;
- Automatic credit recognition for course units delivered by the consortium partners (including the MA thesis).

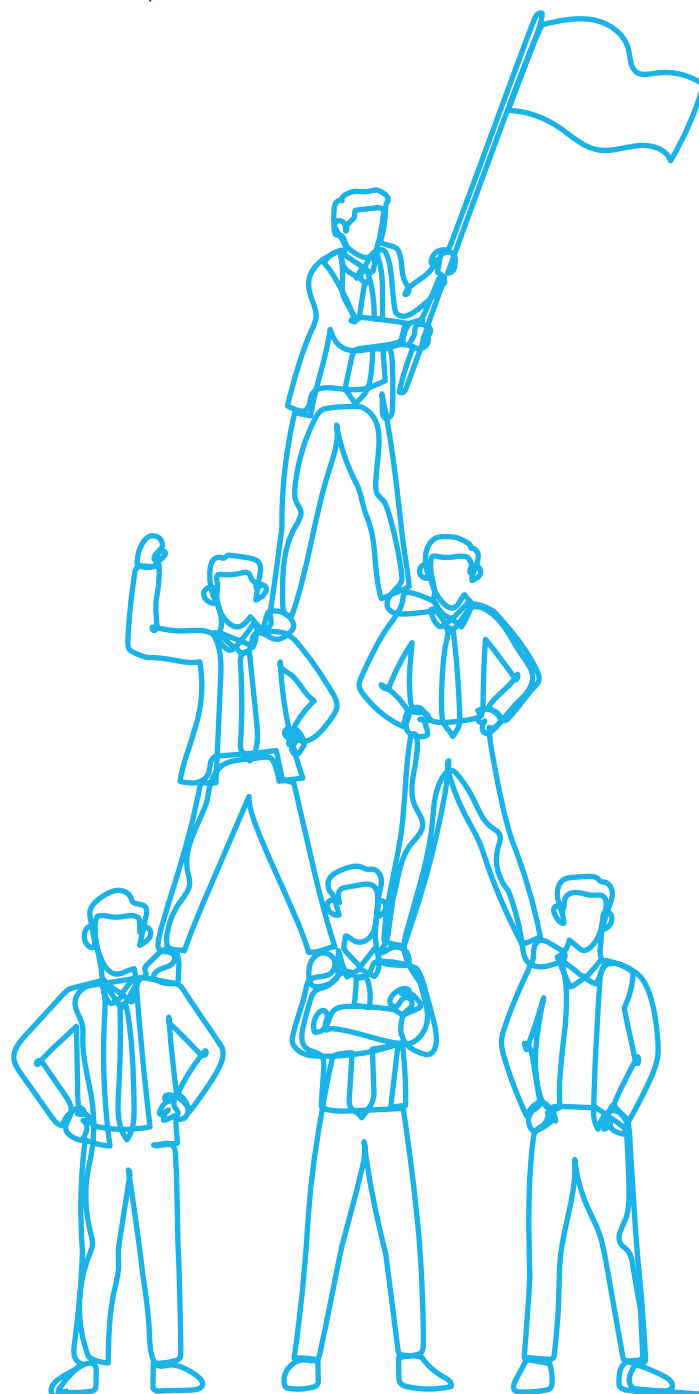
This array of activities shows that the administrative tasks spanning outreach to graduation can be performed in a truly joint manner to benefit all parties involved, including students, staff members, and partner institutions.

Source: SDSI

3.4.2 Central and faculty-level staff perceptions

Central and faculty-level respondents were less likely than programme-level respondents to attribute impacts on administrative processes effects to Erasmus Mundus. Yet the majority see EM as having contributed to improvements to at least some extent. Central-level workshop participants suggested that EM has a significant **impact on central administrative processes** due to the **multitude of units that need to be involved** in the design and delivery of the programme.

From a central and faculty perspective, EM largely helped **improve internal regulations related to joint programmes** or joint degrees (55% of respondents), create structures or processes to support **cross-faculty collaboration** in an international context (40%), improve internal systems and approaches to recognise credits earned abroad (33%), optimise internal systems for managing projects with European partners (29%), and improve welcome services and campus internationalisation (29%) (Figure 29).



Main changes in the institution or faculty's administrative processes associated to the EM programme (central-level perspective; n=40-42)

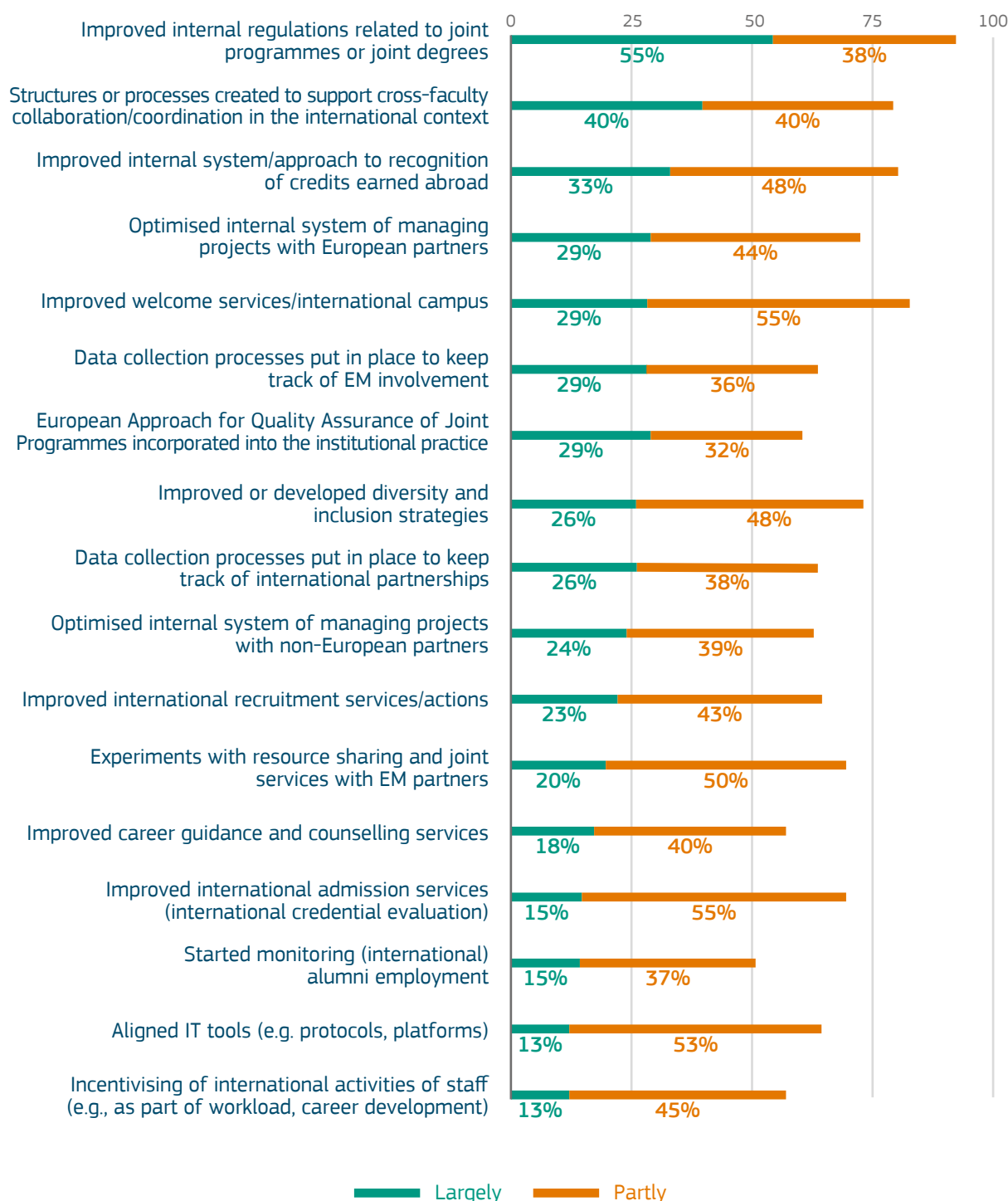


Figure 29. Main changes in the institution or faculty's administrative processes associated with the EM programme

As joint degrees have become more widespread, accepted, and even sought after, the related regulations permeate entire institutions: *“The biggest change is that we created an EM working group involving colleagues from the International Office, Student and Educational Affairs and Legal/Institutional Affairs two years ago. We have also created a protocol for any of our staff in case they consider to start a joint Master’s degree.”* Given the developments around a European degree kickstarted by the European Universities Initiative and the European Strategy for Universities, such knowledge and capacities may serve institutions well.

In terms of **services**, workshop participants argued that Erasmus Mundus had an unquestionable impact on admission processes, tuition fees, student support (i.e. new administrative positions were created such as visa advisors or housing assistants), and joint degrees. As they are resource intensive to develop, there is a willingness to adapt existing structures or use them more broadly beyond the EM Masters at faculty and central level.

Box 15. Capacity-building for international cooperation (EGEI)

CAPACITY-BUILDING FOR INTERNATIONAL COOPERATION

Erasmus Mundus Joint Master in Economics of globalisation and European Integration (EGEI)

EGEI is a two-year EM Master’s programme aiming to provide students with “a global career in economics and business”. The programme was launched in 2012 under Erasmus Mundus, initially as a collaboration between nine HEIs. In its current and second programme iteration, supported by Erasmus Mundus, EGEI brings together eight partner institutions. Coordinated by the University of Bari Aldo Moro (Italy), the programme has opened new cooperation opportunities for the partners and fostered their capacity to offer quality student services.

The cooperation between EM partners expanded to new research projects and skill-transfer networks (e.g., a network for the study of effects of economic sanctions with UGhent) while the related research activities have been designed to enhance overall teaching quality and academic excellence and to improve the consortium partners’ international reputation.

As the coordinator of EGEI, the University of Bari Aldo Moro faced entirely new programme management challenges. This led to the development of new formal and informal procedures supporting student and staff mobility, encompassing scholarship management, visa, tax, health, security issues, and student counselling.

The case of EGEI shows that participation in the EM programme can lead to improvements in administrative processes that have the potential to benefit the whole institution.

Source: EGEI

4. Impact on students and alumni

By catalysing the aforementioned enhancements in learning and teaching contents, methods and practices, international cooperation activities, and administrative processes, **Erasmus Mundus elevates the academic experience for all students** at HEIs hosting EM Master's programmes. The action's more direct impact on students and alumni lies in providing **unparalleled opportunities for top-tier students globally to pursue academic and career paths** in Europe, offering a unique blend of educational and professional advancement.

Building on the EACEA dataset on scholarship holders, and their mobility flows in the context of EM Master's programmes, this section first highlights key figures in terms of the attractiveness of Erasmus Mundus for top international students. In a second step, tapping into two existing datasets compiled in the framework of the REDEEM2 project and in two editions of the Erasmus Mundus Joint Master Graduate Impact Survey (GIS) (Jühlke et al., 2022 and Jühlke et al., 2024), it sheds light on alumni's motivation for choosing an EM Master programme, their degree of satisfaction with the Erasmus Mundus experience, as well as the overall impact perceived by students and graduates.

4.1 Student participation and mobility instances

Over the two decades since the creation of Erasmus Mundus, the 585 Master's projects (corresponding to 349 unique Master's programmes) funded by the action attracted **34,197 carefully selected and highly talented scholarship holders** (Table 16) from as many as **179** different **countries of origin**.

Table 16. Total number of EM scholarship holders per programme period

Programme period (of the related Master programmes)	Number of EM scholarship holders
2004-2008	5,632
2009-2013	8,969
2014-2020 (ongoing)	17,782
2021-2023 (ongoing)	1,814
Total	34,197

The number of scholarship holders at Master's level rose steadily, doubling between the 2009-2013 and 2014-2020 programme periods (Figure 30). The **highest annual number** (3,353) was recorded for **scholarship holders** in EM Master's programmes selected in **2019**, which was also one of two years with the highest number of Master's projects (51) selected in an annual call (Figure 2).

In the current 2021-2027 programme period, the yearly numbers presented only cover the first intakes (i.e. "editions") of scholarship holders in Master's programmes selected in 2021-2023. Their numbers will exponentially grow in coming years, with most Master's programmes selecting 4-5 intakes of both scholarship holders and non-scholarship holders (i.e. students funded by other funding sources or their own means) during the EM project funding period (Figure 30).

EM scholarship holders per EM Master's programme year of selection (n=34,197)

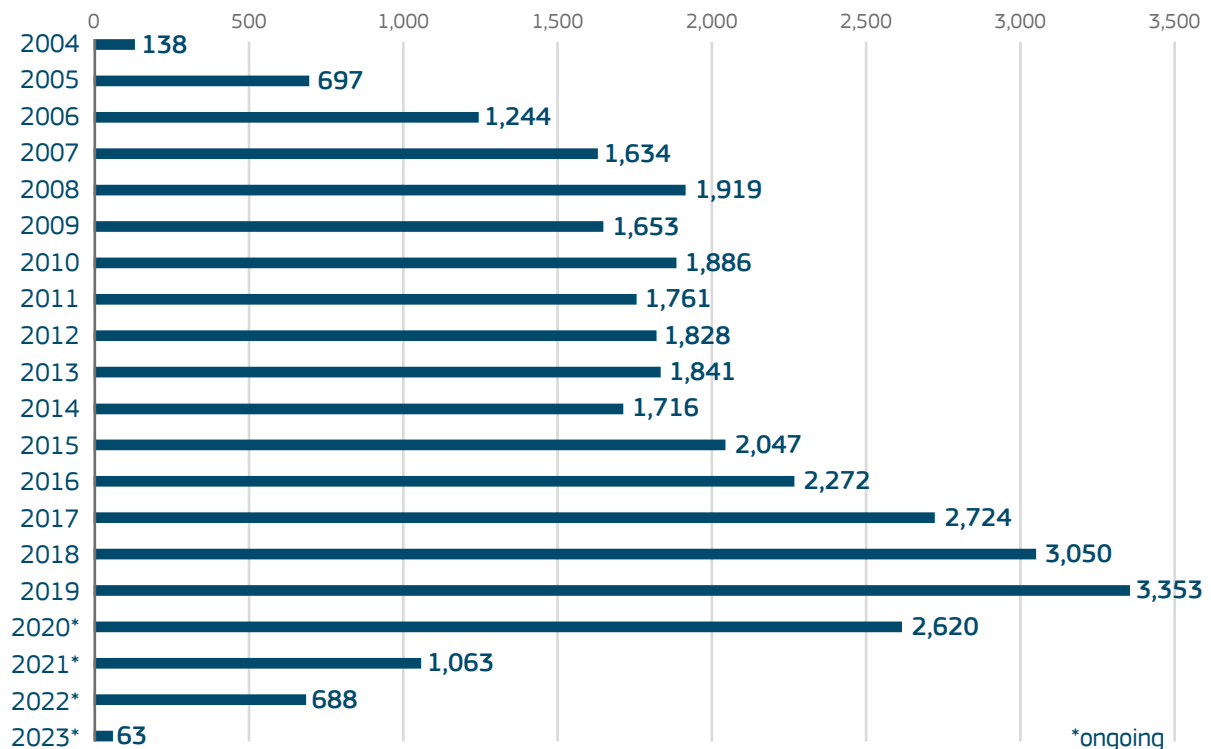


Figure 30. Total number of EM scholarship holders studying in EM Master's programmes per programme period

While initially equipped with a scholarship scheme exclusively reserved for students from non-European countries, EM scholarships were opened to students from associated countries in 2009. Over the entire 20 years of the programme to date, the **share of scholarship holders from associated countries is 18%**, whereas the **share of scholarship holders from non-associated countries is 82%**, confirming Erasmus Mundus maintains a primarily global focus in its scholarship component. Further changes in the programme rules removed all limitations for participation of European and non-European students who can study in all countries worldwide (including their own) provided that they respect the minimum mobility requirements. This shift enhances the attractiveness of these destinations within Erasmus Mundus.

To date, **over a third of scholarship holders came from Asia (34%)**, followed by those from **Europe (18%), Latin America and the Caribbean (17%)**, and other **European and neighbouring countries not associated to Erasmus+ (14%)** (Figure 31).

Total EM scholarship holders in 2004-2023 (ongoing) by region of origin (n=34,197)

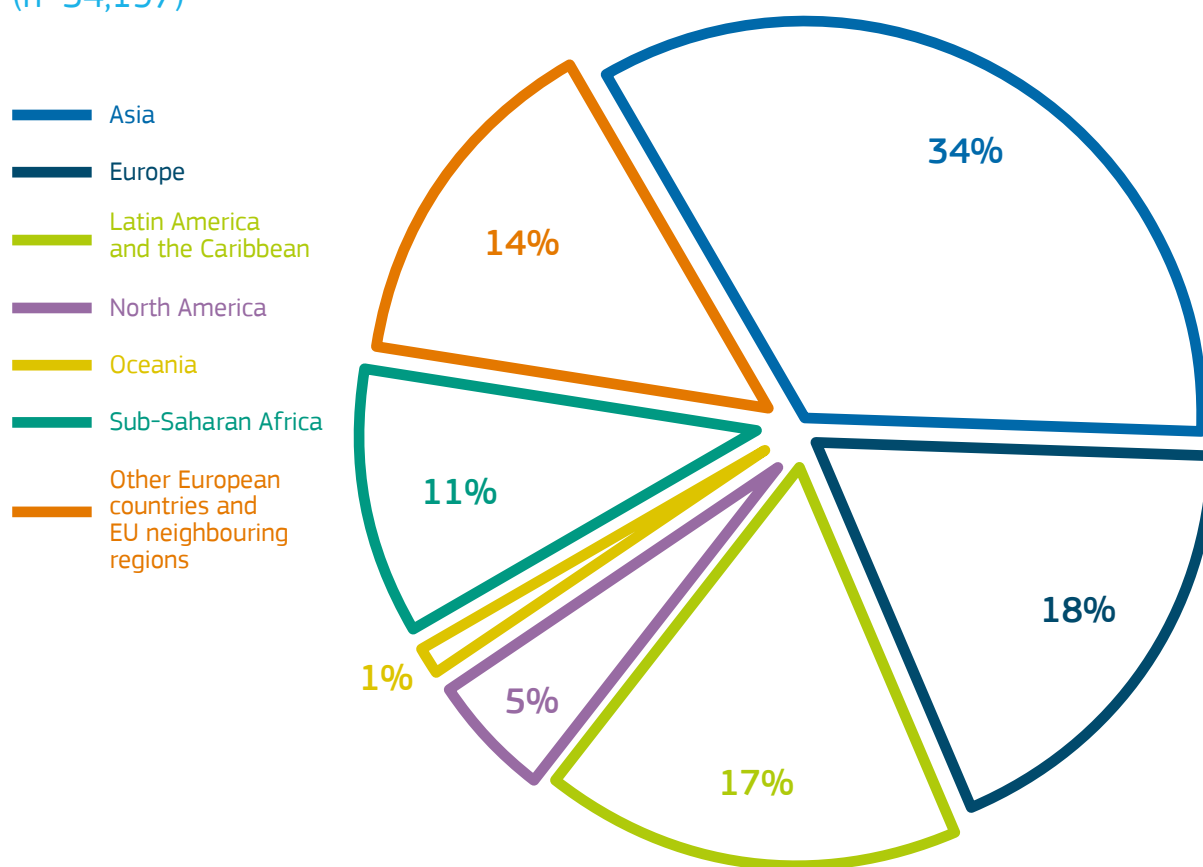


Figure 31. Total number of EM scholarship holders by region of origin in 2004-2024⁵⁰

The share of Asian scholarship holders decreased from 50% in the first programme period (2004-2008) to less than a third (31%) of the preliminary scholarship holders in the current programme period (up to 2024). The share of European scholarship holders grew from 4% in 2004-2008, when the programme mainly targeted non-EU/EEA top talents, to an initial 27% European scholarship holders in the first three years of the current programme period. These shares will further evolve, as new Master's programmes and new cohorts of scholarship holders will be selected by 2027.

Gender balance is close to perfect at the level of the overall group of scholarship holders over the four periods (49.8% identified as female vs 50.1% identified as male), with some differentiation by region (Figure 32). Female scholarship holders slightly outnumber their male counterparts in most geographical regions, reflecting the overall trend of higher education participation. The opposite is true for Sub-Saharan Africa, although the difference is improving. The "non-binary" and "X" options were added for the current programme period.

⁵⁰ Europe here encompasses EU member states and other countries officially associated to the Erasmus+ programme. European countries not associated to Erasmus+ are covered in the "Other European countries and EU neighbouring regions" regional grouping" (cf. Annex 3).

Distribution of EM scholarship holders by gender, programme period and region of origin (n=34,197)

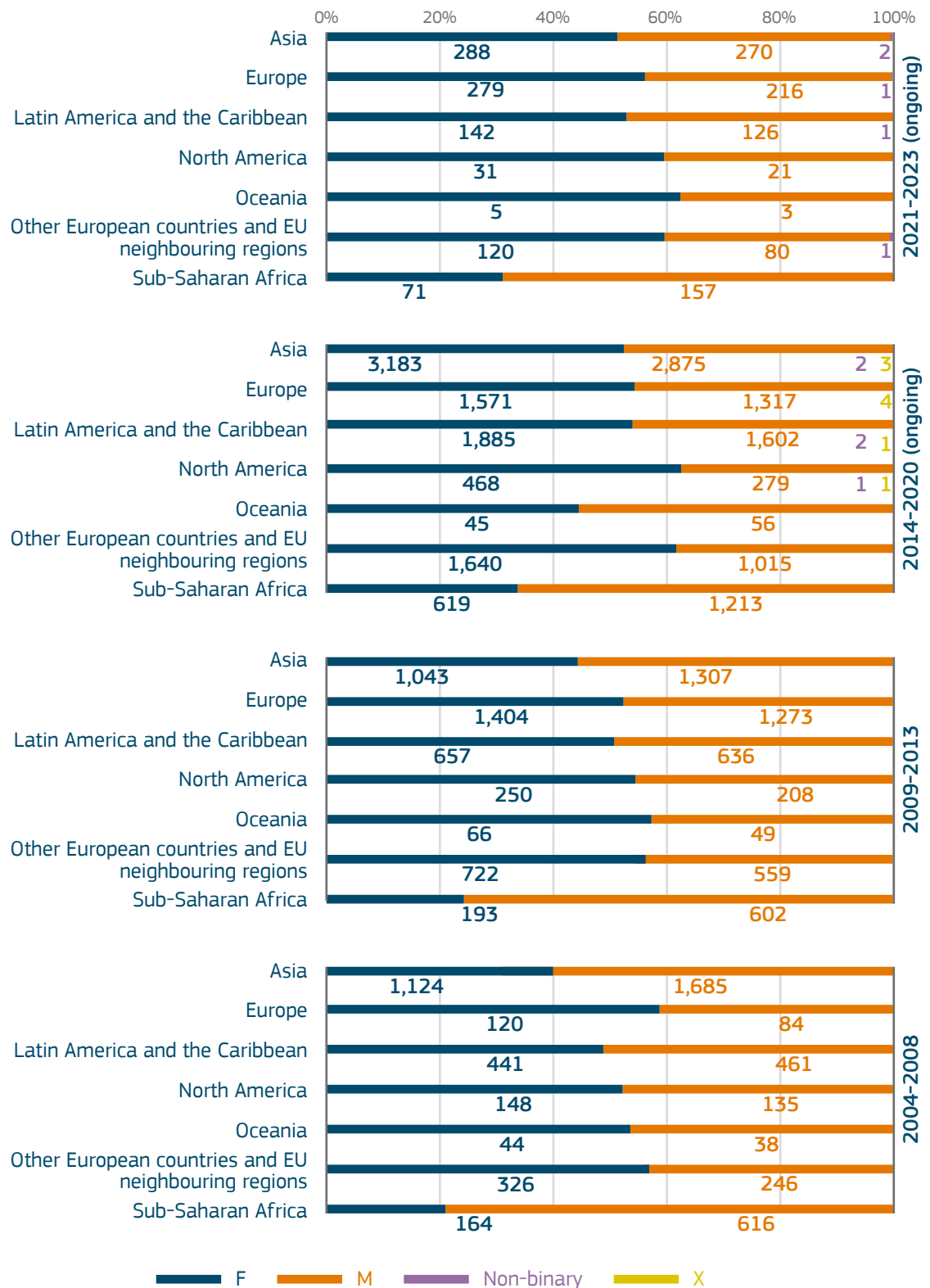


Figure 32. Distribution of EM Master's scholarship holders by gender, programme period and region of origin

Over the four programme periods, the **largest group of scholarship holders came from India (2,199)**, followed by students from **Brazil (1,544)**, **China (1,505)**, **Mexico (1,357)** and **Pakistan (1,236)** (Figure 33). The top 30 countries of origin of EM scholarship holders include 24 non-associated countries, reconfirming that most scholarship holders continue to come from outside Europe. Regarding the **six countries associated to Erasmus+**, students from **Spain** obtained the highest number of scholarships over the two decades (**774**) followed by **Germany (705)**, **Serbia (588)**⁵¹, **Italy (563)**, **Türkiye (534)** and **France (499)** (Figure 33). There is a **high concentration of students from the top 30 countries of origin in the action (70% of all scholarship holders)**, as the remaining 149 countries of origin account for only 30% of all students benefiting from an EM scholarship.

Top 30 countries of origin of EM scholarship holders by programme period of the related EM Master's programmes (n=23,960)

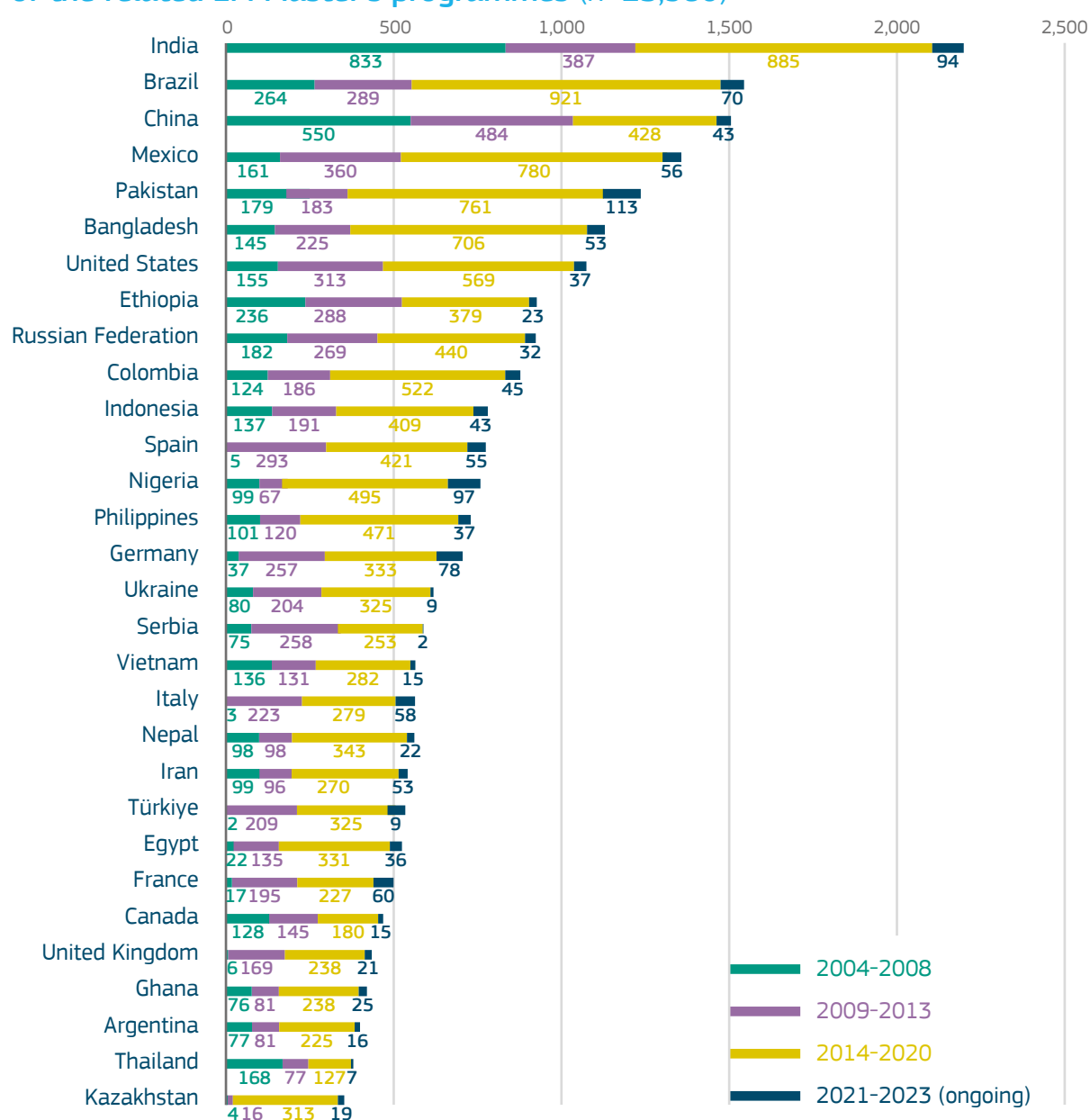


Figure 33. Top 30 countries of origin of EM scholarship holders by programme period of the related EM Master's programmes

51. Programme country since 2019.

The **34,197 EM scholarship holders** realised an impressive **111,617 mobility instances during their studies**, representing an average of three stays per student (Table 17).

Table 17. Number of mobilities of EM scholarship holders per programme period of the related Master programmes

Programme period (of the related Master programmes)	Number of mobility instances of EM scholarship holders
2004-2008	16,972
2009-2013	30,373
2014-2020 (ongoing)	60,319
2021-2023 (ongoing)	3,953
Total	111,617

The number of mobility instances increased over time, in line with the rise in the number of EM Masters and the corresponding rise in the number of EM scholarship holders (Table 17). The **highest number of mobility instances per year was recorded, to date, in 2022** (10,121) (Figure 34), while these figures only give a snapshot picture at the time of analysis. As all Master's programmes currently receiving funding under an EM project are still recruiting students, the number of scholarship holders as well as their mobility instances within the respective programmes will continue to grow throughout the project period, as well as beyond.

Mobility instances of EM scholarship holders per year of mobility of mobility (n=111,617)

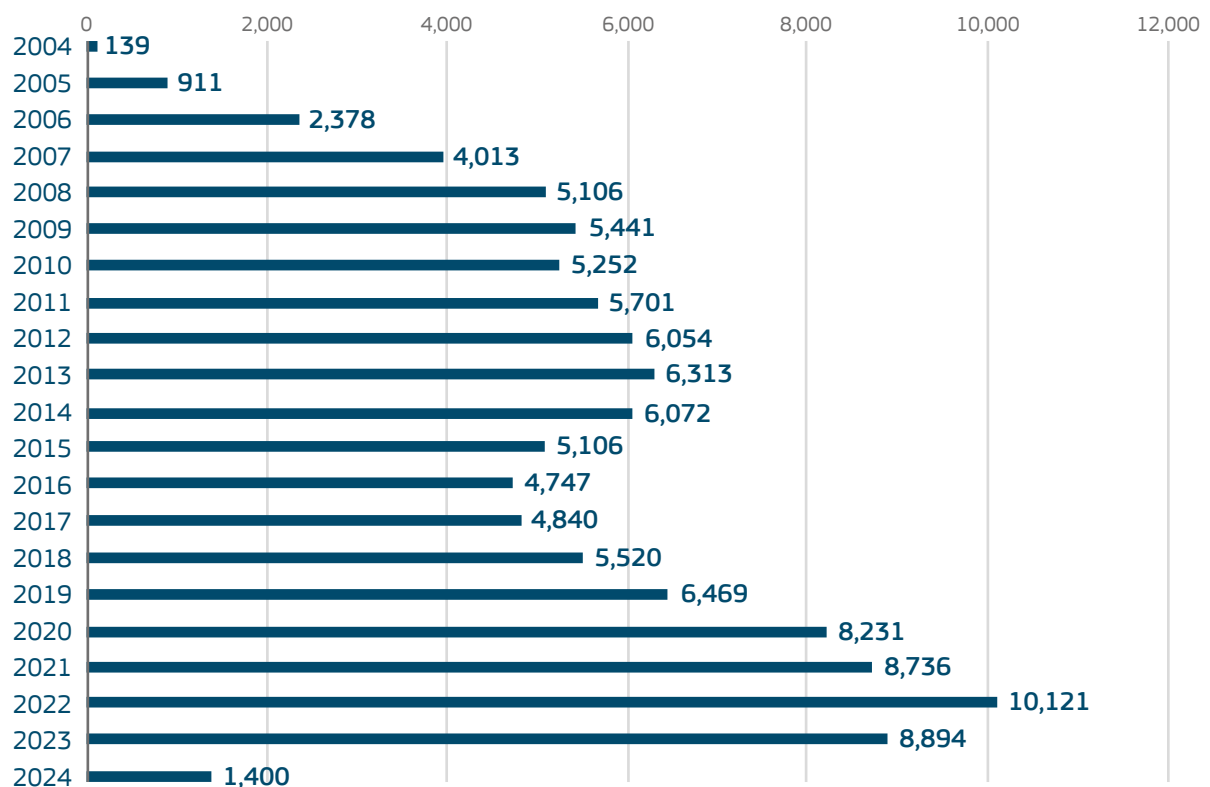


Figure 34. Mobility instances of EM scholarship holders per year of mobility

Most often, EM scholarship holders chose **host institutions** in **France (17,457 mobility instances)**, **Spain (12,634)**, **Germany (10,595)**, **Italy (9,890)**, and the **United Kingdom (8,283)**. Overall, 16% of EM Master's scholarship holders had a mobility experience in France, 11% went to Spain, 9% to Germany and to Italy, and 7% to the UK (Figure 35). These five countries together hosted more than half (52%) of all mobility instances. France, Spain, Germany and Italy are also the top four countries with the highest number of institutional instances of participation in EM Master's programmes over the same period in absolute terms (see section 3.1). The top host countries' overall appeal is based on a mix of factors. Typically, these are larger systems with many large HEIs with the resources to develop a bigger programme portfolio and a reliable international reputation.

Top 30 host countries of EM scholarship holders' mobility instances by programme period (n=109,844)

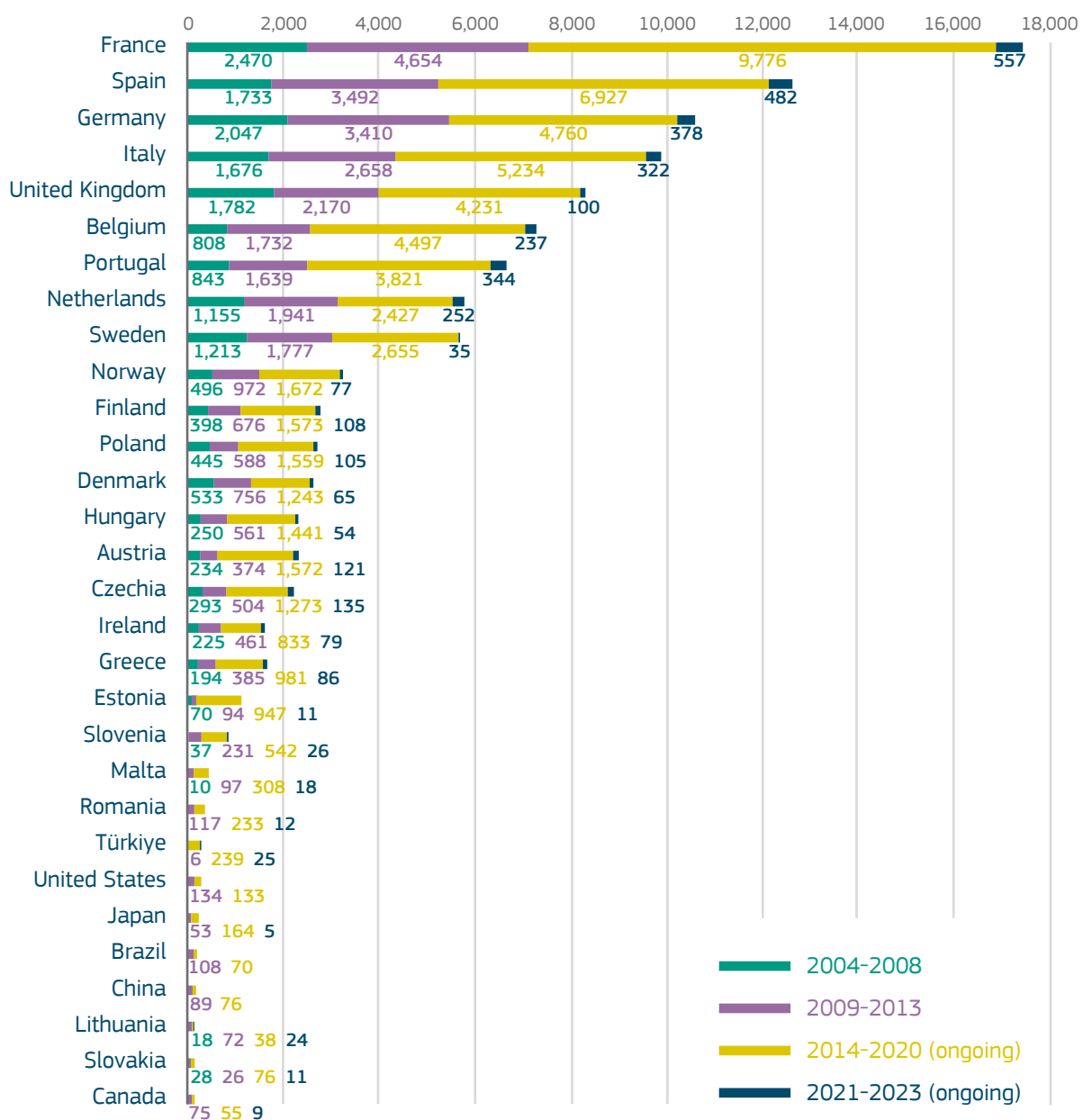


Figure 35. Top 30 host countries of EM scholarship holders' mobility instances by programme period

Excluding the UK, the **top 30 host countries** include five non-associated countries, namely the US (267 hosted mobility instances), Japan (222), Brazil (179), China (165) and Canada (139). Consequently, 24 of the top 30 host countries are associated to Erasmus+.

With more than half of the current programme period still to go, the number of students hosted by most countries still needs to reach and will possibly outgrow the mobility flows of the 2014-2020 funding period. This is so except for Austria, Finland, Japan and Türkiye, where the number of HEI hosted scholarship holders already slightly surpassed 2014-2020 levels, in line with these countries' increased levels of HEI participation in EM Master's programmes in the current programme period (2021-2027).

4.2 Student motivation and satisfaction with Erasmus Mundus

The detailed statistical data presented above showcases Erasmus Mundus' success in attracting global talent. The evidence derived from a sample of EM scholarship holders (the 2,015 EM alumni who responded to the 2022 edition of the GIS report (Jühlke et al., 2022) and 3,396 EM alumni who responded to its 2024 edition (Jühlke et al., 2024) indicates that **students typically apply to EM due to three key factors**: international experience, career/skills improvement, and attractiveness (including financial aspects, i.e. the scholarship). Graduates from different regions give these factors varying degrees of importance:

- The **international dimension** of EM Master's programmes is relevant for graduates from all regions, and particularly for those from the EU and North America/Oceania.
- Overall perceived **attractiveness** is the second driver. It is seen particularly important for students from Africa, the Middle East and Central Asia, but less so for those from the EU and North America/Oceania.
- **Career and skills development** is the third driver, and is particularly important for African alumni.

The REDEEM2 analysis (180 joint programme graduates) allows comparing Erasmus Mundus against a control group of other types of joint programme alumni. This shows that EM graduate respondents have similar motivations for most of the aspects analysed, and are particularly interested in **professional opportunities** (e.g., better salary, access to job opportunities) and **international/intercultural** experience (e.g., living abroad, learning a new language, interacting with other cultures) (Figure 36).

While the financial attractiveness reflected in "**availability of a specific scholarship**" was ranked a bit lower than the other factors, it was more important for EM graduates than for other joint programme students. In particular, 40% of the EM students considered this aspect of crucial importance while only 20% of the control group gave this answer (Figure 36).

EM students also tend to place higher emphasis on **academic content** than their peers in other types of joint programmes, as they rated gaining "deeper knowledge in my field" and the prospect of "being enrolled in a specific programme" higher. At the same time, the EM group attached lower importance to the perspective of obtaining a "double or joint certification", which may be secondary to the programme content and quality (Figure 36).

Aspects that motivated students to enroll in the joint programme (EM students vs control group; n=180) (Source: REDEEM2 project)



Figure 36. Aspects that motivated students to enrol in the joint programme (EM students vs control group) (REDEEM2 data)

According to the 2024 GIS report (Jühlke et al., 2024), alumni satisfaction with EM programmes is **exceptionally high**. Overall, 90% of all graduates in the three surveyed cohorts are (very) satisfied. Respondents in all fields of study except Social Sciences and Humanities (84%) reported satisfaction levels of over 90%, and this figure increased to 97% for Chemistry.

Areas with the highest levels of satisfaction over three semesters out of four include the attitude towards international students and the teaching staff, whereas the lowest levels were reported for digital learning tools. In addition, fewer graduates were satisfied with the facilities for study arrangements, teaching methods, and library facilities (Jühlke et al., 2024).

Furthermore, some improvements were established in terms of the level of satisfaction with **professional aspirations and networking**, which had been criticised in the 2022 GIS report (Jühlke et al., 2022). More than half of those surveyed are (very) satisfied with the internships and practical experiences undertaken during their studies, but only a quarter are satisfied with exchanges with potential employers.

4.3 Perceived impact

The latest GIS data also reconfirmed the **main impact areas** reported by EM graduates, which remained unchanged since the last round in terms of their order of importance. **Intercultural competencies** are most frequently perceived (78% of the respondents), as having been strengthened by the EM experience, followed by significant **impact on career** (69%), **personality** (66%), **attitude towards Europe and EU** (62%), subject related expertise (59%) and private life (42%) (Jühlke et al., 2024).

Geographic differences indicate that students from Africa (40% of the African respondents) and Latin America (38%), and many graduates from Asia (32%) and non-EU European countries (31%) see the greatest impact of the EM Master's programme on their career. Alumni from EU countries and North America/Oceania see impact primarily on their intercultural skills. Graduates from Africa most often report the most significant impact on their subject-related expertise (25%) (Jühlke et al., 2024).

The REDEEM2 project data showed that EM alumni are more appreciative of the impact on their **employability** than the control group, having assigned higher scores to benefits such as "better understanding of my profession", "ability to use theoretical knowledge to solve concrete problems", "ability to adapt to a new work culture" and "team working skills" (Figure 37). On the contrary, "**second language skills**" was rated much higher by the control group, probably because of the high language proficiency requirements to access EM Master's programmes, which means that applicants already had a good knowledge of the relevant language(s) before their study abroad experience. Also "intercultural competence" was scored higher by other types of joint programme graduates, potentially indicating that EM applicants typically have prior experience abroad or exposure to an international environment (Figure 37).

Perceived impact of the joint programme

(EM students vs control group; n=180) (Source: REDEEM2 project)

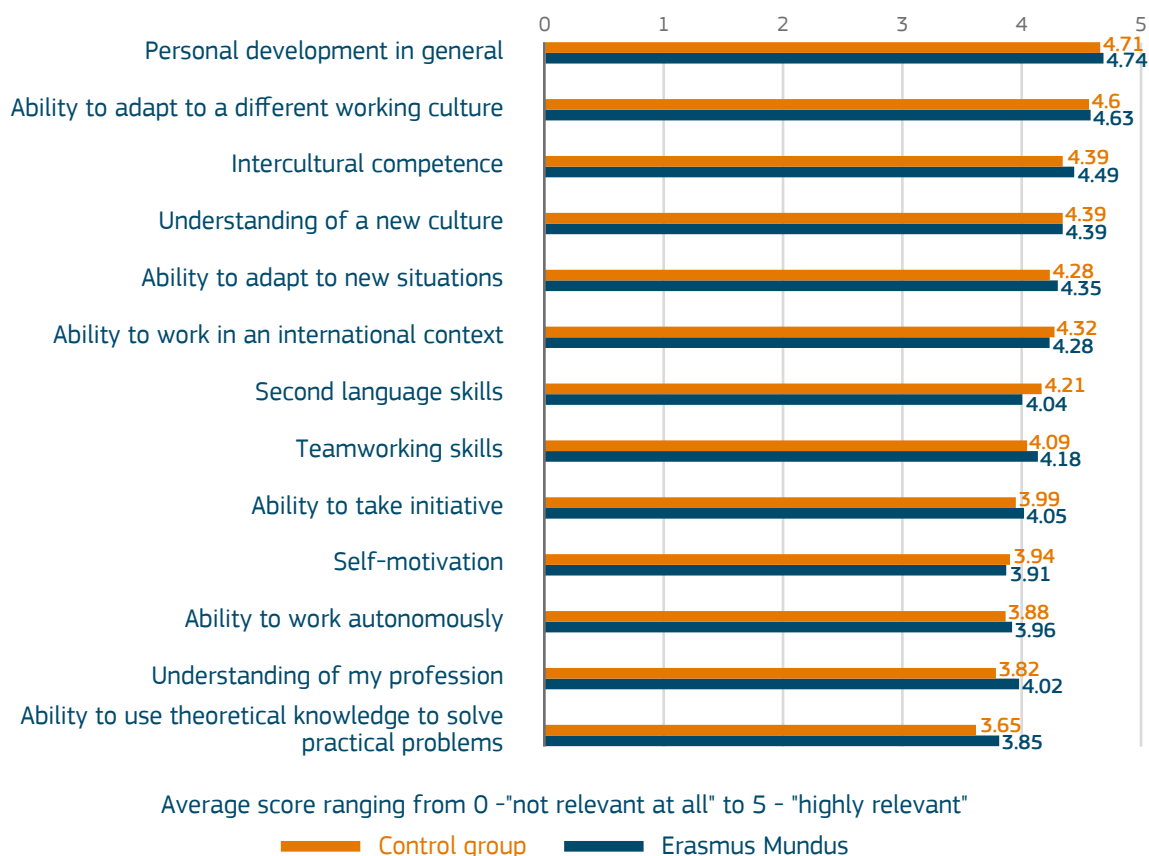


Figure 37. Perceived impact of the joint programme (EM students vs control group) (REDEEM2 data)

Employability, career pathways and remuneration levels

In the short/medium term, nearly one third of EM Master's graduates stayed in one of their former host countries (28%, excluding those for whom the respective host country was their country of origin), according to GIS 2024 (Jühlke et al., 2024). More than one third (32%) **relocated to another country** different from their country of origin or study and **40% returned to their home country**. Furthermore, more than half of the graduates who returned to their country of origin expressed the wish to live in a previous EM host country (51%). While EU citizens are more likely to return to their home country, non-EU citizens more often tend to stay in one of their EM host countries.

The REDEEM2 project data highlighted similar country related differences. In most cases and regardless of their country of origin, EM students showed a tendency to continue their career in a second or third country, in the first years after their studies. This tendency is reported to range between 68% for graduates from East Asia and Western Europe and 100% for African graduates.

The **longitudinal research across different graduation years** covered by the GIS survey shows that while a significant part of alumni stay in a host country one year after graduation (37% vs 42% who go back home), the situation is quite **different in a longer run**. Within five to six years, more graduates move to another country. A **decade after graduation, many graduates go back to their country**, while the share of those living in a host country or another country declines. Not even half as many graduates that initially stay within their host country are still living there 10 years later (Jühlke et al., 2022).

The qualitative feedback obtained through interviews with representatives of the **Erasmus Mundus Association (EMA)**⁵² shed further light on opportunities to stay and be employed after graduation. It stressed in particular that **opportunities for employment in Europe are better in some fields** (e.g., mechanical engineering) than in other countries. It also reported that *"EM students compete against graduates from highly established universities"*, relying on their rich mobility experience and a unique set of intercultural skills.



⁵² An interview was conducted with EMA representatives Ruturaj Trivedi, Vice President, and Rajon Bhuiyan, Outreach & Capacity Building Unit Director. URL: www.em-a.eu/post/ema-joins-workshop-of-new-erasmus-mundus-support-structure, last accessed on 6 February 2024.

Box 16. EMA Lifetime Achievement Award

EMA Lifetime Achievement Award, Pavan Kumar Sriram, India, MCM - Masters in Computational Mechanics (2008-2010)

Pavan Kumar Sriram is the holder of the EMA Lifetime Achievement Award, celebrating his outstanding professional achievements and contributions to the EM community. Pavan is founder of Kohort, Stanford Seed Incubated Startup, aiming to democratise access to higher education, inspired by his experience as an EM scholarship holder. Prior to that, he was Head of International Projects at DigitalNorway where he led several transformative projects under Horizon 2020 (Trinity, Innocape, and DigibCube) and played a pivotal role in DigitalNorway's appointment as the coordinator of the European Digital Innovation Hub NemoNoor under Horizon Europe.

The former Vice-President and President of the Erasmus Mundus Association (EMA) (2017-2019), Pavan was instrumental in making EMA a legal entity, navigating complex legal requirements. He initiated the "Does It Matter" project to raise awareness of the value and impact of Erasmus Mundus. His passion for entrepreneurship and innovation translated into the EMA REALISE IT project aimed at fostering entrepreneurial skills among EM alumni. Pavan helped expand EMA's network and collaborations with other organisations, furthering the association's mission. He also supported and mentored sustainability-focused initiatives, including SustEMAbility and Career Mentorship programmes.

With nearly half a million views, Pavan's YouTube channel is a platform through which he empowers students and young professionals to secure top place and scholarships across the globe, including for Erasmus Mundus, aspiring to support even more future changemakers and global citizens in the future.

Furthermore, it was highlighted that the **value of the diploma was stronger in the host country** and offered "partial employability" in other countries. The overall reputation and prestige of the EM programme was reported to play a role with some significant variations across the countries. **Reported barriers to employability** include insufficient knowledge of the local language as well as persistent administrative issues related to obtaining residence permits and visas or extending the legal stay.

Looking at more specific career progression and employability patterns, there are pronounced differences in activities in the first six months after graduation across different fields of study. For example, graduates in physics (77%), chemistry (55%) and mathematics (41%) are much more likely to continue their studies towards a PhD. In contrast, graduates of economics (46%) and social sciences & humanities (42%) are much more likely to take up work or look for a job after graduation (Jühlke et al., 2024).

Complementary REDEEM2 data established that **EM graduates tend to continue their professional pathway in their field of study**. In particular, 62% of the EM group and only 47% of the control group reported that their current occupation was fully related to their study programme. Furthermore, the share of currently unemployed EM graduates was lower than the control group (8% vs 11%). Although the percentages are rather low for both groups, EM graduates appear to be more **entrepreneurial** than their peers in other types of joint programmes, with 9.4% being self-employed vs only 2% of the control group.

The fact that EM Master's programmes are more efficient at providing knowledge and skills required by the labour market is confirmed by the higher share of EM graduates who strongly agree that the programme provided them with theoretical knowledge to solve practical problems (28% vs 22%) (Figure 38). The same is true to an even larger extent for the statement "my joint programme provided me with a better understanding of the professions related to my field of study" (38% vs 28%) (Figure 39).

"My JP provided me with the theoretical knowledge to solve practical problems" (EM students vs control group; n=180)
(Source: REDEEM2 project)

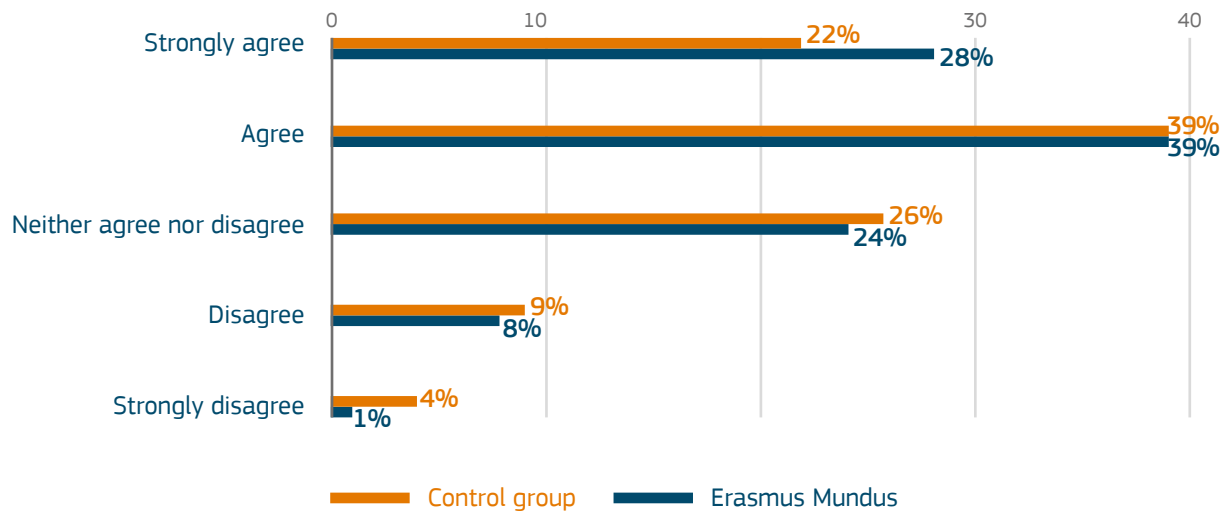


Figure 38. Theoretical knowledge to solve practical problems gained from the joint programme (EM students vs control group) (REDEEM2 data)

"My JP provided me with a better understanding of the professions related to my field of study" (EM students vs control group; n=180)
(Source: REDEEM2 project)

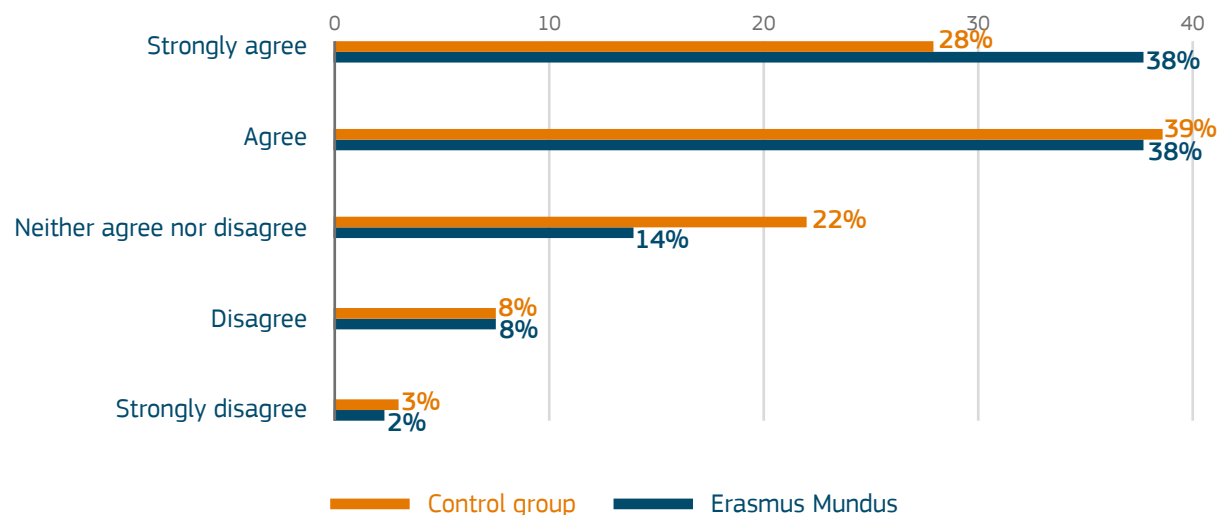


Figure 39. Better understanding of professions related to one's field of study (EM students vs control group) (REDEEM2 data)

Personal and intercultural development

The two last iterations of the GIS highlighted two sets of skills that significantly improved for a large share of EM graduates: **linguistic skills** (including verbal, reading, and writing skills) and **cognition and knowledge related skills** (e.g., sector or field-specific skills, problem solving, critical thinking). **Leadership and organisational skills** were also reported to have improved, albeit to a lesser extent. More limited improvement was reported for **innovative potential** and entrepreneurial skills, as well as advanced ICT skills (Jühlke et al., 2024). In terms of personal development, most graduates see a (rather) high improvement in **openness and curiosity** about new challenges, tolerance towards others' values and opinions, and different aspects of self-awareness (Jühlke et al., 2022).

According to the *“Asia Pacific Erasmus Mundus Students: Advantages, disadvantages, and long-term impact on their lives and communities”* study (Chiemsisoulath and Neang, 2013), participants gain the opportunity to **exchange culture and ideas** (49% totally agree) with local and foreign students as well as promote their own countries (35% totally agree) by joining the EM Master's programme. They also used this opportunity to explore European countries (61% totally agree) during their study programme. The following quotes from EMA interviewees provide further illustration: *“We are no longer the same, everything was impacted. It has 99% positive impact on personality and personal growth, no negative impact. Some cultures have taboos and we have clichés and all these go away after the first semester. Professors have their own culture, which also impacts us.”*

“One of the biggest values is the exposure to different approaches, sometimes we use the Italian approach or the Dutch one. You put a shock in the study, so that people get used to shocks.”

“The first semester was particularly helpful in understanding and overcoming intercultural differences. It would be important to provide mechanisms and tools to help students to cope with stress and get them into the multicultural mood.”

Box 17. EMA Cultural Exchange Ambassador Award

EMA Cultural Exchange Ambassador Award Diana Marcela Lizarazo Pereira, Colombia

Diana Marcela Lizarazo Pereira is the holder of the EMA Cultural Ambassador Award, celebrating her outstanding achievements in promoting cultural exchange and understanding across borders. Diana's passion for cultural exchange springs from her experience with the EM community, shaped by her background as a first-generation college student from a modest economic background.

As a graduate of the EM Global-MINDS Master's programme, Diana gained insights into the complexities of intercultural interactions, and learned to appreciate diversity and promote inclusion. During her internship, she was empowered to co-create and co-lead an intercultural competence project funded by the Irish government, in which she could apply the knowledge acquired during her Erasmus Mundus journey in practice.

Drawing on the resources of the EMA, Diana channeled her efforts into several initiatives such as the Diversity and Inclusion video series, the Interconnected Project, and the Mindful Mundus project, aimed at promoting intercultural competence and supporting student well-being. Collaborating with like-minded peers and alumni through EMA, she was able to bring these ideas to life, benefiting hundreds of students within the EMA community.

Looking ahead, Diana aspires to continue engaging in projects and initiatives that allow her to contribute meaningfully to cultural understanding and intercultural dialogue, as she remains committed to advancing mutual understanding and collaboration across diverse communities.

Prior research, however, pointed to some side effects of the unique set-up of EM programmes due to their intense mobility requirements, high academic workload and competitive nature, namely “intense speed, routine uprootedness and cosmopolitan social closure” significantly affecting student wellbeing (Czerska-Shaw & Krzaklewska, 2022). The EM Master’s programmes are looking for related solutions.

Finally, with regard to attitudes to **Europe and the European way of life**, non-EU respondents strongly agreed that they would recommend studying in Europe and that more countries should cooperate in ways like the EU does (Jühlke et al., 2022). The attitude towards the EU is most affected in alumni from (South) East Asia, North America and Oceania, and the Middle East as compared to EU citizens (Jühlke et al., 2022).

As outlined in Chapter 3, the study established the **surveyed academic and administrative staff ‘s high levels of satisfaction with EM students and graduates**. The programme respondents highlighted EM students’ **strong academic background**, and how this affected the overall academic quality and international classroom: *“We are very inspired by this project. It definitely allows us to attract some of the best students worldwide. Our spring 2023 admissions’ experience shows that the overall IQ of EM applicants seems above average. It brings the universities to the next level - these are universities where the most intelligent people study.”* They also rated the **leadership potential** of the alumni and their contribution to the respective fields of study highly: *“The programme has significant added value for both institutions and students. It is a driving force for convergence as the programme challenges institutions’ internal operations and consistency. The students are more open-minded, independent and will be strong players in chemistry and data science, for research and innovation.”*



5. Broader effects at national, European and global level

The study also investigated the **broader national, European and global level effects** that could be either **directly or indirectly** attributed to Erasmus Mundus.

The results of these explorations show a clearly positive message about the **perceived added value of the programme both for European, as well as national policies and legislative developments**. However, experts acknowledged the same challenge of assigning causality for certain developments to Erasmus Mundus alone reported at institutional level (cf. Chapter 3). This challenge is partly due to the lack of systematic and regular assessments of the impact of EM on the participating HEIs or the national higher education sector more broadly. As a result, the **reported impact and perceived changes are mostly indirect**, at both European and national level, and to an even greater extent at global level. Nonetheless, in **specific national contexts** (see the Belgium-Flanders and the Finnish case below) **more direct causality can be established for specific developments** that facilitated international cooperation and were beneficial for the wider sector, not only for the programmes and HEIs participating directly in EM.

The **impacts triggered by Erasmus Mundus at national and European level are largely interconnected**. As shown in Chapter 1, since its inception and through the evolving policy context, EM has been at the **threshold between European policies, objectives and emerging support tools** and (the potential limitations determined by) **national legal frameworks**. This *de facto* pushed for regulation changes at national level, which then influenced further European-level developments in a circular manner. The drivers or liaisons agents for these changes were, most often, HEIs. Experiencing emerging obstacles to further transnational collaboration, and observing differences with other systems, they have made demands for more harmonised legislation and regulations, which supported the overall process of further European integration in higher education (Gornitzka et al., 2007).

5.1 European-level effects

Prior research indicates that the EM Master's programmes benefitted from the implementation of the Bologna Process objectives and tools, especially through the introduction of a three-cycle system and the European Credit Transfer and Accumulation System (ECTS), that made the joint curricular development at the core of the EM Masters possible (Weimer and Barlete, 2016).

At the same time, Erasmus Mundus has been cited as instrumental in putting some of the **Bologna tools into action**, including the National Qualifications Framework (NQF), ECTS, Diploma Supplement (DS), and Quality Assurance mechanisms, having propelled their broader uptake across Europe through the development of integrated joint curricula. From its creation, EM has been perceived as at the forefront of EHEA developments and as a "catalyst" (a word often used by the experts) in advancing national reforms, notably in joint programmes and joint degree legislation (Eurydice, 2024).

Specifically, Erasmus Mundus at least partially played a pivotal role in catalysing the important shift towards a coordinated **European Approach for Quality Assurance of Joint Programmes (EQAR, 2014)**, thus paving the way for essential adaptations at national level and simplifying the process of certifying joint degrees. In the Bologna Process context, the European Approach was adopted by Ministers responsible for higher education to facilitate the external quality assurance of joint programmes based on integrated approaches that truly represent and embody their joint nature. The European Approach defined standards that are based on the agreed tools of the EHEA, without applying additional national criteria.⁵³

⁵³ For more details, see the European Quality Assurance Register for Higher Education (EQAR) www.eqar.eu/kb/joint-programmes/national-implementation, last accessed on 8 February 2024.

EM Master's programmes are now among the key users of the European Approach. They represent a large share of joint programmes that have employed the European Approach for their accreditation or evaluation. Thus, 16 out of 33 joint programmes recorded in the Database of External Quality Assurance Results (DEQAR) are EM beneficiaries⁵⁴. In turn, the efforts in accrediting EM joint programmes had an impact on the degree of jointness and collaboration in learning and teaching, as detailed in Chapter 3.

Wider use of the European Approach within the EM community has been enabled by changes in Erasmus+ funding regulations. Starting from 2018, EMJMDs have been encouraged “to take the European Approach for Quality Assurance of Joint Programmes as a basis for the external quality assurance of their course, if allowed by national legislation” (Erasmus+ Programme Guide, 2019).

Furthermore, experts highlighted a direct link between EM and a **European degree** (label), “a new type of degree awarded after transnational Bachelor, Master, or Doctoral programmes delivered at national, regional, or institutional level, automatically recognised everywhere in the EU, awarded jointly and on a voluntary basis by a group of universities across Europe in full respect of subsidiarity, institutional autonomy, and academic freedom, based on a common set of criteria agreed at European level” (European Commission, 2024). The experience gained from EM has largely informed the design of such criteria for a European degree (label) and supported their testing in practice by six Erasmus+ pilot projects⁵⁵. The latter in many cases involved a few selected EM joint programmes showing high level of compliance with the proposed criteria.

5.2 National-level impacts

Qualitative evidence gathered from the national experts suggests that Erasmus Mundus has had an observable **impact on national HEIs**. This impact is evident in several key areas: the acceleration of internationalisation processes and global visibility, advancements in learning and teaching, interdisciplinarity, intercultural setting, and student employability as well as strengthened connections with the labour market, as outlined in more detail in Chapter 3. Box 18 provides a case study of the institutional transformations initiated by Erasmus Mundus in Austria.

54 For more details, see the European Quality Assurance Register for Higher Education (EQAR) Accredited/evaluated programmes - EQAR, as per data available on 29 March 2024.

55 For more details, see Commission Staff Working Document Accompanying Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on a blueprint for a European degree; Proposal for a Council recommendation on a European quality assurance and recognition system in higher education; and Proposal for a Council recommendation on attractive and sustainable careers in higher education. URL: https://education.ec.europa.eu/sites/default/files/2024-03/commission-swd-blueprint-european-degree-mar24_en.pdf, last accessed on 29 March 2024.

*Box 18. Impact of Erasmus Mundus in Austria***AUSTRIA**

Number of instances of participation of HEIs as coordinator, full partner and associated partner (2004-2023 ongoing) **69**

Level of impact: **institutional**

Since the start of Erasmus Mundus in 2004, there has been close collaboration between the Erasmus+ National Agency and Austrian HEIs wishing to apply for an Erasmus Mundus Joint Master. One common area of support encompasses advice on partner institutions that come from countries where joint degrees are not permitted.

Joint degrees are possible in Austria and since Erasmus Mundus is the only funding scheme supporting joint and double degrees, this Erasmus+ action is of particular relevance to the Austrian higher education sector. The European Approach for Quality Assurance for Joint Programmes was swiftly implemented in Austria after the Bologna Ministerial Conference in Yerevan in 2015. As a result, all types of higher education institutions (public and private universities, universities of applied sciences and teacher training university colleges) followed the recommendation of becoming accredited as in line with the European Approach before (re-) submitting an EM application.

Erasmus Mundus has catalysed several positive transformations in Austria, notably advancing the internationalisation of HEIs and fostering an enriched intercultural environment through the presence of EM students. It has significantly boosted staff enthusiasm for teaching within EM programmes and for collaborating with partner institutions. As a result, the international standing of participating institutions has seen a marked improvement, positioning them more prominently on the global academic stage.

Additionally, the curricula have notably evolved to become more interdisciplinary, giving rise to new academic topics and enhancing overall quality. Many EM programmes collaborate closely with business, integrating specialist field knowledge into curricula, thus, enriching academic courses and significantly boosting EM graduates' employability.

Source: OeAD – Austria's Agency for Education and Internationalisation

Another area of indirect influence is related to the quality of national graduates from EM programmes and their integration into the national labour market. Experts from countries like Croatia, Latvia and Romania highlighted the positive impact on domestic students graduating from EM programmes who make a significant contribution to the **local economy and society upon return to their home countries** through **increased skills and employability**.

In a more direct manner, Erasmus Mundus has influenced **national policy debates and regulatory changes** on topics such as tuition fees for international students (e.g., Finland), language requirements (e.g., Flemish Community of Belgium, France), grant management rules (e.g., Flemish Community of Belgium), quality assurance and accreditation (e.g., Austria, Finland, Germany, the Netherlands).

Several examples of such wider impact analysed in more detail below (Box 19-21) show that while EM practices inspired changes in national scholarships or rules for tuition fees, becoming a benchmark, they have also become a standard to beat. The attractiveness of national courses was defined in comparison with EM study offer, as they both target (and thus compete for) the same pool of top global students.

Further changes have been introduced to the national legislation in countries including Belgium (Flemish and French Communities), Cyprus, Denmark, France, Italy, Portugal, and Spain to address the topic of **joint degrees awarded in the context of Erasmus Mundus**. Such changes include explicit references to Erasmus Mundus/EU programmes and/or offer derogations or more flexibility for participating HEIs. For example, in France, EM is explicitly mentioned as an application domain of degrees delivered within the framework of international partnerships. In Danish law, EM programmes are highlighted with special provisions. The degree can be issued in English and English language designations are allowed (e.g., MA, MSc). Moreover, the diploma can be issued to students who have not been admitted to the Danish university involved. In Spain, apart from the accreditation of selected EM Master's programmes, a dedicated template is provided for these Masters diplomas (European Commission, 2020).

Box 19. Impact of Erasmus Mundus in Finland

FINLAND

Number of instances of participation of HEIs as coordinator, full partner and associated partner (2004-2023 ongoing) **85**

Level of impact: **institutional, national (policy/legal)**

As a pivotal funding mechanism, Erasmus Mundus has significantly heightened Finnish HEIs' interest in joint programmes. From the outset, national authorities have robustly backed their participation in the programme. However, it became apparent that national legislation posed challenges to collaboration in specific areas.

Tuition fees emerged as a particularly complex issue. Initially, Finnish HEIs were precluded from imposing tuition fees, and national laws did not account for scenarios involving Finnish institutions in international joint programmes with countries that did levy tuition fees. This discrepancy caused confusion among higher education institutions, leading to a variety of solutions and practices being adopted.

Despite the legislation concerning tuition fees being revised in 2015 to allow Finnish institutions to engage in joint programmes with countries that charge tuition fees, clear implementation guidelines were lacking. This issue was solved when Finland introduced tuition fees in 2016, providing a practical resolution to the ambiguity surrounding Finnish participation in such international collaborations.

Erasmus Mundus has also, at least indirectly, catalysed another significant shift by enabling Finnish universities and universities of applied sciences to participate in a wider array of international joint programmes. This was made possible following the revision of two government decrees related to University Degrees and Universities of Applied Sciences. Consequently, universities were allowed to collaborate and confer master's degrees within international joint programmes of 60 or 90 ECTS, in addition to the previous standard 120 ECTS. Meanwhile, universities of applied sciences were granted the opportunity to engage in and award degrees for programmes of 120 ECTS, expanding their scope beyond the previous limits of only 60 or 90 ECTS.

Although the primary impact of EM is predominantly at institutional level in Finland, it has also facilitated several legal amendments that have further increased Finnish HEIs' involvement in international joint programmes. These legal changes expanded the framework within which these institutions operate and enhanced their capacity to collaborate on a global scale.

Source: EDUFI – Finnish National Agency for Education

*Box 20. Impact of Erasmus Mundus in Belgium-Flanders***FLEMISH COMMUNITY OF BELGIUM**

Number of instances of participation of HEIs as coordinator, full partner and associated partner for Belgium (2004-2023 ongoing) **191**

Level of impact: **institutional, national/regional (policy/legal/administrative)**

In Belgium, the responsibility for education has been devolved to the various communities since the 1990s. Leveraging this autonomy, the Flemish government implemented significant legislative changes in the same decade, notably facilitating the incorporation of Erasmus Mundus into the educational framework. The willingness to adapt Flemish legislation to align with European initiatives continues to yield benefits today.

A notable manifestation of this adaptability is evident in language regulations. While Flemish higher education typically enforces restrictions on the use of languages other than Dutch, it makes an exception for joint programmes, where such restrictions do not apply. This exemplifies the Flemish government's commitment to fostering international collaboration and enhancing the global orientation of its educational system.

Despite significant advancements in recent years, including the establishment of European universities, these developments necessitated few adjustments from legislators thanks to the flexibility of the system built-in 30 years ago. Consultations with higher education institutions and Flemish representatives of university alliances indicate that they encounter few, if any, legal obstacles in Flanders. This situation contrasts with some other countries and regions, highlighting the relative flexibility and autonomy the Flemish government grants to institutions regarding the set-up of joint degrees. This approach underscores a commitment to fostering innovation and international cooperation in higher education.

In terms of quality assurance, the Flemish government has adopted the application of the European Approach for Quality Assurance of Joint Programmes. For some programmes, including new programmes, evaluation according to this framework is even compulsory. The law mentions explicitly that "Joint programmes, which are organised by a Flemish HEIs together with one or more foreign HEIs and which, upon successful completion, lead to a joint diploma [...] are assessed on the basis of the European Approach for Quality Assurance of Joint Programmes, approved by the ministers of the European Higher Education Area".

Erasmus Mundus also inspired more simplified administration of a Flemish scholarship programme supporting cooperation of Flemish HEIs with the Global South. In 2021 VLIR-UOS, the responsible Flemish agency, was looking for ways to simplify its funding rules under the new Five-Year Programme, encompassing scholarships for PhD candidates, short-term research grants, the International Course Programmes and several Master's programmes. Inspired by the then-newly published EM scholarship guidelines, VLIR-UOS increased the size of a monthly allowance to EUR 1,400 and streamlined some extra costs (e.g. by removing travel and installation grants) to raise the programmes' appeal and to reduce the administrative workload for the students and HEIs involved.

Source: VLUHR QA

*Box 21. Impact of Erasmus Mundus in Germany***GERMANY**

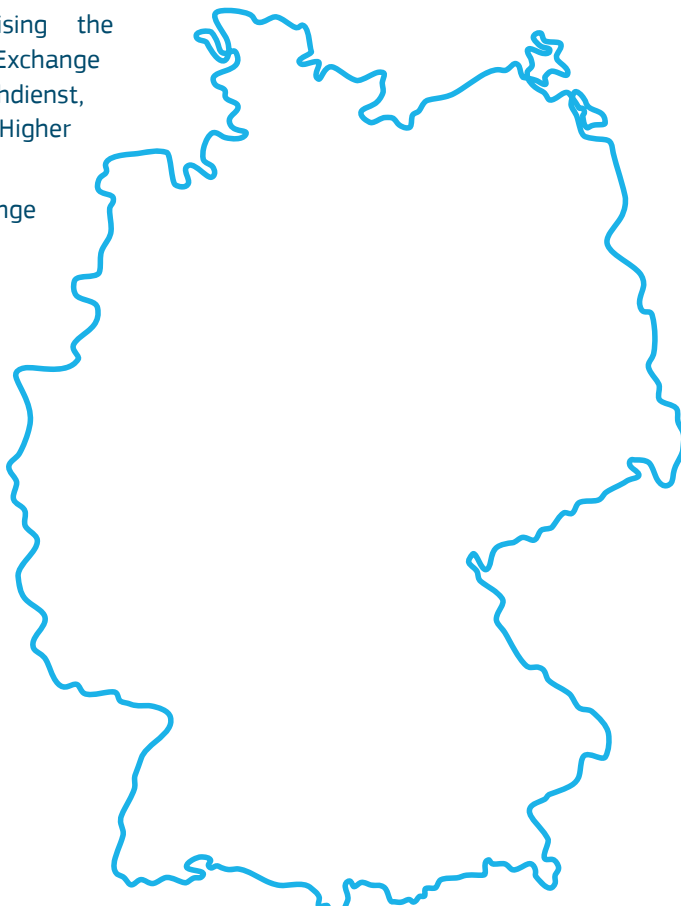
Number of instances of participation of HEIs as coordinator, full partner and associated partner (2004-2023 ongoing) **342**

Level of impact: **institutional, national/legal**

The Specimen decree (Musterrechtsverordnung, MRVO) adopted by the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany (Kultusministerkonferenz, KMK) on 7 December 2017 provides for special regulations applicable for joint degree programmes applying the European Approach for Quality Assurance of Joint Programmes. In 2017, the KMK agreed that, due to insufficient experience with the implementation of joint programmes in the context of accreditation procedures at national level, the European Approach should only be used for programmes leading to a joint degree. An extension to double or multiple degrees is currently being discussed as part of the MRVO amendment procedure.

While the MRVO does not explicitly mention the influence of EM Master's programmes on the regulations for the European Approach, its characteristics as agreed by the EHEA Ministers and as implemented in the MRVO (integrated curriculum, integral periods of study abroad, contractually regulated cooperation between the partner universities, coordinated admission and examination system and joint quality assurance) are also reflected in the project funding criteria for EM programmes. When formulating the provisions of the MRVO related to the European Approach, the results of national working groups and consultations with stakeholders were taken into consideration, including stakeholders familiar with Erasmus Mundus, comprising the Accreditation Council, the German Academic Exchange Service (Deutscher Akademischer Austauschdienst, DAAD) and the National Agency for Erasmus+ Higher Education Cooperation within the DAAD.

Source: DAAD - German Academic Exchange Service



5.3 Global impact

Designed as a globally oriented programme, EM has achieved impressive geographic coverage in terms of partners engaged, mobility destinations and scholarship holders, as detailed in Chapter 3 and above.

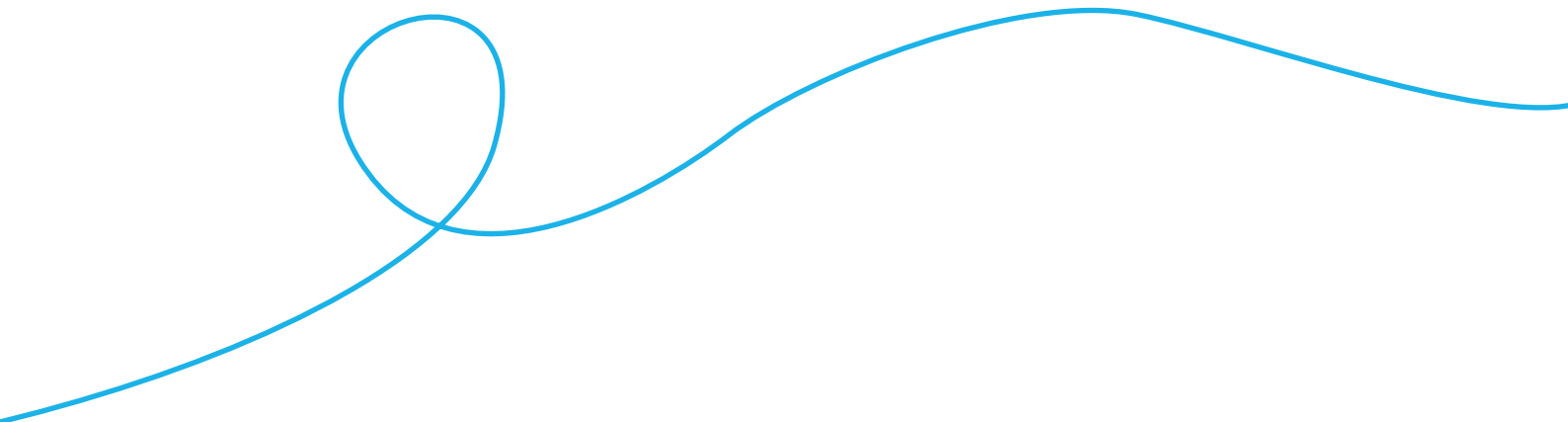
The programme has **gradually opened** the Master's programmes to **collaboration with partners from non-associated countries**. Initially, HEIs from non-associated countries could take part as additional partners to the minimum of three institutional partners from minimum three associated countries. From 2014 onwards, they could be involved in the award of a double, multiple or joint degree. From 2021, they can also apply as coordinators of an EM joint programme. The latter change remains symbolic for the time being, as of the 91 EM Master's programmes funded to date under the current Erasmus+ programme, only one programme is coordinated by an institution from a non-associated country (Israel), excluding programmes coordinated by UK institutions (i.e. 3 projects as coordinators in the current period).

Overall, during these two decades, EM engaged institutions from **108 countries not associated to Erasmus+**, accounting for a total of **2,951 instances** of participation (by HEIs and other types of organisations) in EM Masters (EACEA data). These institutions were involved in **378 EM Master's projects** (i.e. **65%** of all projects funded) since 2004, most often as associated partners (2,471 instances).

Nonetheless, the 2,951 instances also counted **469 instances of full participation** by **HEIs from non-associated countries**, involved in the roles of **coordinator (38)** or **full partner (431)**.

In terms of **regions of origin**, of the 469 instances, 209 were by HEIs in Other European countries and EU neighbouring regions, 96 from Asia, 63 from Latin America and the Caribbean, 50 from North America, 34 from Sub-Saharan Africa and 17 from Oceania.

Top 10 non-associated countries with the highest **full participation** (coordinator and full partner roles) by **HEIs** in EM Master's projects include:

1. United Kingdom – 165 instances (37 as coordinator and 128 as full partner)
 2. United States – 35 instances (full partner)
 3. China – 28 instances (full partner)
 4. India – 24 instances (full partner)
 5. Brazil – 22 instances (full partner)
 6. Japan – 20 instances (full partner)
 7. South Africa – 19 instances (full partner)
 8. Australia – 15 instances (full partner)
 9. Canada – 15 instances (full partner)
 10. Mexico – 14 instances (full partner)
- 

Together, institutions from non-associated countries participating in EM Masters hosted **10,478 student mobility stays** over the two decades (of which 8,283 in the UK and 2,195 in other non-associated countries). Next to the UK, the **non-associated countries hosting the largest number of scholarship holders' mobilities** were the United States (267 mobilities), Japan (222 mobilities), Brazil (178 mobilities), China (165 mobilities), Canada (139 mobilities) and Australia (136 mobilities).

Despite the lack of comprehensive research on EM's global impact, several indications of its wider relevance for international partner institutions and their countries have emerged. This relevance and added value can be indirectly inferred by looking at the number of global talent attracted and retained in Europe (cf. Chapter 4), promotion of **European perspectives** and the "European way of life" and joint tackling of the SDGs with partners across the globe. Expert discussions with representatives of higher education stakeholders and study programmes stressed the **uniqueness of the EM programme worldwide** and its contribution to the global agenda: *"I have worked on the EMJMD as programme leader since 2015 and appreciated the experience. These programmes are not easy to run but are very important. I feel that the full impact will not be felt for decades, but that they are making a tremendous impact in fostering global citizenship."* *"The funding invested in a well-functioning EM programme is well worth the benefits international society obtains from well-educated students who have a global view and can listen to and understand different points of view."*

Another area of impact is related to **Europe's competitiveness and strategic autonomy** in R&I fields supported by knowledge clusters developed under Erasmus Mundus, as showcased in Box 22.

Box 22. Building a world class academic cluster (FUSION-EP)

BUILDING A WORLD CLASS ACADEMIC CLUSTER

European Master of Science in Nuclear Fusion and Engineering Physics (FUSION-EP)

FUSION-EP is a two-year EM Master's programme coordinated by the Aix-Marseille University (AMU) in France. The programme was launched in 2006, under Erasmus Mundus, initially as a collaboration between seven higher education institutions. In its current programme iteration – the third supported by Erasmus Mundus – the collaboration was extended to eight partner institutions.

The financial support obtained by FUSION-EP from the Erasmus+ EMJMD scheme has been instrumental in enhancing the visibility of advancements in research and technology related to future energy sources on a global scale. The overarching ambition of FUSION-EP is to become the top "European Master of Science in Nuclear Fusion and Engineering Physics" worldwide. The programme aims to establish itself as the gold standard for innovation and quality in nuclear fusion education and training. It commits to nurturing the next generation of experts in Nuclear Fusion and Engineering Physics through top-tier European higher education institutions within the FUSION-EP consortium. This approach is poised to preserve and extend Europe's standing in this sector globally. Achieving this level of excellence will not only reinforce Europe's leadership in this critical area but also encourage significant investment from major industrial players in the education and research concerning Nuclear Fusion and Energy.

Source: FUSION-EP

Prior research based on the GIS (Jühlke et al., 2022) indicated that **non-EU graduates are more likely to recommend studying in Europe** and that more countries should cooperate in similar ways to the EU. Attitudes towards the EU were found to be most affected in alumni from (South) East Asia, North America and Oceania, and the Middle East as compared to EU citizens. Many graduates reported having benefited from the knowledge and skills gained during their studies and practice in Europe and used them to improve some aspects of the local economy, education, and governance, modernise services and policy, enhance economic growth, and to improve quality of life. It is also important to remember that Erasmus Mundus has been gradually expanding its global dimension to involve global partners to increase excellence in education in Europe, and equally in partner institutions and countries in a mutually beneficial way.



6. Conclusions and ideas for the way forward

This final chapter **sums-up compelling evidence of the programme's multi-layered impact**, building on the essential aspects of the EM story in the previous chapters: (a) *the historical evolution of Erasmus Mundus*, (b) *trends in the consolidation of EM Master's programmes, institutional participation and country representation*, (c) *programme's institutional impact on three areas*, (d) *programme's impact on students and alumni*, and (e) *system-wide impact*. This chapter also outlines **potential paths** for further reflections on the **programme's future** based on **expert input**.

6.1 Erasmus Mundus' impact in a nutshell

Looking at the achievements of Erasmus Mundus, the programme is unquestionably perceived to have had a very positive impact on all the areas reviewed in this study. Notably, while positive effects are demonstrated along the programme's main objectives, EM's impact goes well beyond, and has affected the institutional, national, and European levels.

6.1.1 Impact along the key objectives

The previous chapters showcase key evidence of the programme's impact on its **two core objectives** (Table 18).

Table 18. Impact on the key objectives of Erasmus Mundus

Core EM objectives	Evidence of impact and broader effects
1. Enhance the quality of higher education in Europe by promoting cooperation with other European institutions and third countries, with a distinctly European added value	The quality enhancement facilitated by Erasmus Mundus is attested by: — The high share (65%) of survey respondents (from both programme and central levels) reporting multiple positive effects triggered by EM in teaching & learning, most notably by enriching teaching skills and abilities related to the EM Master's subject (68% of respondents), interdisciplinary and multidisciplinary methods (67%), and broadening course content to include international perspectives (81%). The impact on teaching and learning and the overall quality of education is particularly evident for academics. — The growing number of EM Master's project iterations (585 to date) accounting for 349 unique Master programmes to date. Increasing institutional participation in EM Master's programmes (involving ca. 600 HEIs as coordinator or full partner, with 9,763 instances of participation from 140 countries) confirms the programme's value for HEIs and the EM brand as a seal of excellence.

Core EM objectives	Evidence of impact and broader effects
	— The increasing degree of jointness of EM Masters, covering the integration of selection processes (reported by 95% of programme-level respondents), development of mobility tracks (88%), use of communication platforms (80%), execution of recruitment campaigns (77%), and culminating in an increasing number of programmes overcoming the remaining legal and other obstacles to awarding joint degrees (40% of all programmes, at present). — The exceptional quality of EM Master's scholarship applicants, as reported by institutional respondents, and the importance they play to further enhance the quality of the respective study programmes. — The impressively high level of satisfaction reported by 90% of the surveyed Master's level EM alumni (2012/13, 2017/18, and 2020/2021 cohorts), and linked to their key driver of deepening knowledge in their respective fields through the EM experience and to the excellence of the teaching staff. The high quality of EM study offer fosters positive effects at individual level, in the further development of intercultural competencies (reported by 78% of respondents), followed by significant impact on career (69%), personality (66%), and attitudes towards Europe and the EU (62%). While a significant share of graduates (37%) prefer to stay in their host country after graduation, many more graduates go back to their home country a decade after graduation, pointing to a mutually beneficial impact of Erasmus Mundus on the countries involved.
2. Make higher education in Europe more attractive and visible throughout the world, by enabling highly qualified graduates from all over the world to obtain qualifications and/or acquire experience in the EU	— The high degree of attractiveness for top talented students, especially from outside Europe, is confirmed by the impressive overall number of EM scholarship holders (34,197 from 179 countries of origin, of whom 82% are from countries not associated to Erasmus+), as well as by the significant number of non-scholarship holders (more than 13,000) who choose EM Masters. Appeal is also shown in multiple mobility instances: 111,167 in total in a variety of (primarily European) countries, allowing students to experience a truly European education. — The growing participation of institutions from non-associated countries in EM Master's programmes (increased by a factor of six in the past 20 years) confirms the attractiveness of partnerships with European HEIs, and peer learning in joint programme design and delivery.

6.1.2 Spillover effects at other levels

Beyond this multi-layered impact along the key objectives, EM also triggered multiple other positive developments at institutional, national and European levels (Table 19).

Table 19. Spillover effects at other levels

Spill-over areas	Evidence of impact and broader effects
Institutional level	Although influencing international cooperation and administrative processes of participating Master's programmes and their respective HEIs was <i>not</i> a formal objective from the start, multiple positive effects are reported in these areas: — International cooperation is the most gradual yet most profound area of transformation due to EM (reported by 79% of all respondents), particularly enhancing understanding of the European higher education landscape (76% of programme and 60% of central-level respondents), increasing student mobility offer/numbers (62% of programme and 47% of central-level respondents), bolstering international partnerships and diversifying collaborations to new areas (89% central level respondents). — Positive changes in administrative processes (reported by 59% of all respondents) are most discernible at programme level, with improvements in student services such as orientation (68%), recruitment (67%), admissions (62%), credit recognition (62%), and mobility guidance (59%), i.e. services that potentially boost student satisfaction, and their perceived quality of the EM Master's programmes.
National level	At national level, EM has acted as a catalyst for constructive debates and regulatory reforms on issues such as: — Tuition fees for international students (e.g., Finland); — Language requirements (e.g., Belgium-Flanders, France); — Grant management regulations (e.g., Belgium-Flanders) and — Quality assurance and accreditation practices (e.g., Austria, Finland, Germany, Netherlands, and Spain), enabling positive change not only in EM Master's programmes, but also for other types of collaborative endeavours, and for student mobility.
European level	EM has notably contributed to implementing the Bologna tools, as well as — Spurring the development and testing the implementation of the European Approach for Quality Assurance of Joint Programmes (2015); — Supporting some HEIs' participation in the European Universities Initiative and ensuing alliances, which used their EM networks of partners to further deepen and strengthen cooperation through this new instrument (2018); — Inspiring and shaping the criteria for a European degree, being pivotal in piloting these criteria through the label pilot projects (2023-2024).

6.2 Ideas for the way forward

Given the substantial impact of EM on the core objectives and well beyond, the numerous programme representatives and experts consulted unanimously believe that the **EU's support of and commitment to** this type of bottom-up, innovative, and very attractive action focusing on joint study programmes, **should be continued**. Moreover, the experts suggested that the action can be further enhanced, to build on this extremely solid 20-year foundation and its multiple achievements.

The **experts and programme representatives** outlined some broader considerations and emerging questions, which could serve as a starting point for more systematic reflections and inspiration on the paths forward for Erasmus Mundus. These **ideas** are grouped around its **core design elements**:

1. The European and the global dimension,
2. The unique focus on the Master cycle,
3. The approach to certification,
4. The in-built mobility windows, and
5. The overall funding model.

6.2.1 The European and global dimensions

In its present design, EM strikes a solid balance between the European and global dimensions, in both the institutional collaboration and scholarship provision (and related mobility flows). This **balanced approach between the global and the European dimension is one of the flagship features** of Erasmus Mundus since its 2004 launch.

The programme maintains a strong focus on **intra-European collaboration** for the development of joint Master's programmes. It has also **gradually opened** this joint endeavour to **collaboration with partners from non-associated countries**. The overall share of institutions (including universities, research organisations and private companies) from non-associated countries involved in EM Master's programmes has more than doubled in these two decades, although most of these institutions serve as associated partners in these project consortia.⁵⁶

The strong European focus on the delivery of EM Master's programmes is balanced by the **global focus of the EM scholarship scheme**, which still primarily targets high achievers from non-associated countries to Erasmus+, despite the opening of participation to students from associated countries. The share of scholarship holders from non-associated countries to date was 82%, whereas scholarship holders from countries associated to Erasmus+ accounted for 18% of all EM scholarship holders at Master's level.

This duality has maintained the programme at the **crossroads of key objectives, balancing the intra-European and the global dimension of cooperation** in higher education. Currently, EM Master's programmes already play a key role in the *European Strategy for Universities* next to the European Universities alliances. Notably, they drive "EU's global leadership" and act as "lighthouses of our European way of life" and "European values" (European Commission, 2022), embodying an educational diplomacy aim. They also support the *Global Gateway Strategy*, helping "to boost smart, clean and secure links in digital, energy and transport sectors and to strengthen health, education and research systems across the world."

⁵⁶ Further changes in the programme rules have removed all limitations on the participation of European and non-European students who can study in all countries (including their own), provided they respect the minimum mobility requirements. This shift enhances the attractiveness of these destinations within Erasmus Mundus and provides greater balance.

Looking into the future, there are different options for **further striking a balance between the European and the global dimension** of the programme. These options could be combined, to further strengthen the balance and the European as well as global attractiveness of the programme, or used unilaterally, to strengthen one or the other dimension (Table 20).

Table 20. Potential paths for European and global dimensions

1. Boosting EM's global dimension through (a) deeper, institutionalised cooperation with international partners and/or (b) stronger international mobility component and/or (c) higher participation of international students

This scenario would require (further) incentivising HEIs from non-associated countries to engage as full partners or coordinators in a deeper and more institutionalised way. This could be achieved by (further) promoting Erasmus Mundus and individual Master's programmes to global partners and highlighting the benefits of such mutually beneficial cooperation.

This path could also involve some additional requirements or incentives for physical or blended student mobility engaging partner institutions from the non-associated countries.

Building on the programme's success in global student recruitment, the overall number of scholarships could be increased to achieve a critical mass of EM students at European HEIs.

To support this scenario, further connections *with* and demarcation *from* other Erasmus+ actions supporting the international dimension would need to be considered. Notably, these are the international credit mobility (KA171), the international dimension of KA131 mobilities (a possibility to use up to 20% of mobilities to non-associated countries), and the Capacity Building in Higher Education action, as well as the emerging efforts of some European Universities alliances to strengthen their global partnerships.

This path could however be limited by funds available as well as growing concerns over the potential risks of cooperation in research and innovation and increasingly in higher education and the EU's openness to cooperation with some third countries, particularly when it comes to technologically sensitive areas⁵⁷.

2. Strengthening the programme's intra-European dimension by (a) further incentivising jointness and deep institutional cooperation with strong connections to other related Erasmus+ sub-actions and/or (b) increasing the number of EM scholarship holders and students from countries associated to Erasmus+

Erasmus Mundus and other Erasmus+ actions, such as the European Universities Initiative, and intra-European mobility schemes (KA131) are highly complementary and mutually reinforcing. Further synergies between these actions could be achieved by making use of mobility funds more flexible, in order to support the participation of other students than EM scholarship holders. Such flexibility would be especially needed in a multilateral context, as highlighted by experts from institutions engaged in both EM Master's programmes and European Universities alliances.

This path would require pursuing a balanced approach maintaining the diversity of participation formats where institutions have sufficient resources for partnerships under the different specific actions.

This scenario could also involve offering additional scholarships or related incentives for engaging more EU/EEA students who could benefit from the exclusive academic experience offered by EM Master's programmes.

⁵⁷ According to the Global Approach to Research and Innovation (2021), the Council conclusions on principles and values for international cooperation in research and innovation (2022), and the most recent Council recommendation on enhancing research security (2024).

6.2.2 The exclusive focus on the Master's cycle

Another EM's key feature is its **primary focus on the Master's cycle** although the programme funded joint Doctorates in 2009-2013, which were then transferred to the MSCA in 2014. This move was welcomed by some Master's level representatives and regretted by others.

Given the programme's global attractiveness ambition, the **focus on the Master's level seems suitable**, as this has been proven to be the main *entry point* for international students into European higher education, and the reason why the largest share of English-taught programmes have been developed at Masters' level in Europe (Wächter & Maiworm, 2015).

Asked about the future, the experts and programme representatives imagine different paths, whose implications need to be carefully considered (Table 21).

Table 21. Potential paths for the Master's cycle focus

Expansion to Bachelor and PhD levels

One recurrent suggestion from the expert consultations was the **potential expansion of EM to both Bachelor and PhD levels** although experts' views differ on this topic. Experts typically involved in other forms of strategic cooperation (e.g., European Universities alliances) argue for a holistic approach to joint programmes, covering all three levels, which could boost institutional change and increase the programme's ambition. Opponents of this view are largely concerned by Bachelor's level students not yet having the level of maturity and readiness required to embark on such an ambitious international student journey, with two mobility stays abroad. They also worry about the much higher cost of extending the programme to the Bachelor level given the longer duration of such studies, which might negatively affect the funding available for the Master's level and potentially lead to even higher competition at the application stage.

Piloting and experimentation

An **in-between approach** would be **to test the expansion to Bachelor's or PhD levels using a pilot approach**, with a few selected projects, to assess preparedness, pros and cons, and cost-benefit feasibility of the wider roll-out of such projects.

Experts also provided feedback on the programme length, and the permitted variations that currently range between 60, 90 and 120 ECTS programmes. While this approach seems to respond to the needs of a wide diversity of programmes and disciplines, more standardisation to the 120 ECTS option was suggested. Some experts view the 120 ECTS option as the most realistic route, considering mobility and jointness requirements. Beyond structural aspects, the cost implications of this change are worth consideration, especially when combined with the above suggested expansion to additional qualification levels.

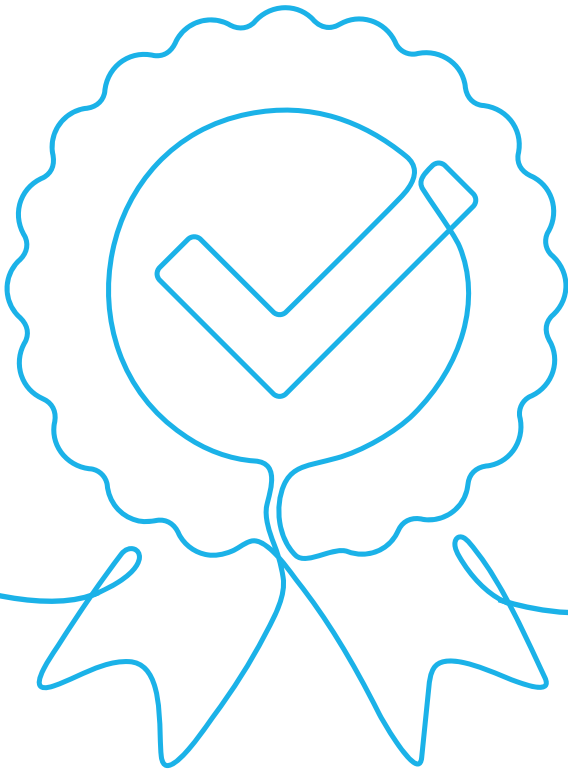
6.2.3 Certification approach

In the two recent programme periods, EM served as a **testbed for issuing joint degrees**, which is seen as the true embodiment of EM Masters’ jointness, and supported by the European Approach to Quality Assurance of Joint Programmes, partly inspired by EM.

Given the current **pathways towards the European degree** (European Commission, 2024a), which build on the **EM experience, and the fact that EM is already an established global brand for excellence in joint programmes** (40% of which issue a joint degree at present, despite remaining obstacles), the experts suggested one specific development (Table 22).

Table 22. Potential path for the certification approach

Articulating a clear policy and funding vision and approach to the links between the EM programme and its brand, and the preparatory European label certificate and European degree
The experts and programme representatives consulted recommended that clear connections need to be established given the possible coexistence of joint degrees featuring the EM brand, on the one hand, and preparatory European label certificates and European degrees, on the other. This would ensure that institutions, students and employers can use both frameworks in a clear and transparent way, and would prevent any further administrative burden linked to the possible need to complying with both for programme coordinators and partners. Those consulted also requested clarification of funding implications of the European degree/label and of any connections to the EM funding.



6.2.4 The in-built mobility windows

The current requirement of a minimum of two physical mobility periods in countries different from the student's country of residence, which are fully integrated and recognised in the curriculum, is another defining feature and expression of jointness of EM Master's programmes. This gives the EM experience a true added value in comparison to other forms of mobility supported under Erasmus+, which are less integrated in the curriculum, and thus exposed to recurrent recognition challenges. EM Master's programmes are also correlated with increased graduate employability (cf. Chapter 5).

Nevertheless, some experts mention difficulties for local students, who find it too demanding to include two additional stays on top of their home institution studies, over such a compact period. In some disciplines this seems to challenge local student participation in EM Master's programmes despite general support for the model as it stands. Looking to the **future**, the experts agree on one possible route (Table 23).

Table 23. Potential path for the in-built mobility windows

Mainstreaming the inclusion of digital learning components in the **highly integrated curricula of EM Master's programmes** in the form of the already existing *virtual exchanges*, *Collaborative Online International Learning (COIL⁵⁸)* or *blended learning opportunities* (like BIPs).

This could be a means to ease the mobility requirements for (e.g. local) students, and/or to incorporate additional international learning experiences at a third or fourth degree-issuing partner institution, without the heavier cost of physical mobility.

Looking into the approaches and results of related projects that addressed this topic in a joint programme context could be particularly useful.⁵⁹ It will also be necessary to explore the funding implications for the Master's programmes in terms of potential infrastructure needs, staff training, and student scholarship provisions, although virtual components are already possible up to 50% of the content of each Master.

Any future developments in the mobility arrangements in EM Master's programmes should take **broader student mobility trends** into account. These are diverging as follows: a) with a reconfirmation of students' interest in physical mobility, especially after COVID-19, b) with an emerging preference for shorter stays abroad, often linked to personal circumstances or barriers (e.g., need to work while studying, family care obligations, mental health and wellbeing), and c) increased interest in blended formats, which are currently tested through the rising number of BIPs in the Erasmus+ programme.

6.2.5 The overall funding model

The EM programme stands out for its current, **integrated funding model**. Through the simplified funding mechanism introduced in the current programme period (2021-2027), financing is based on only **three types of unit costs**: institutional costs, individual needs support, and scholarships. This simplification was introduced to ease the administrative complexity of grant management for coordinators and partners alike. While the students find the scholarship offer very attractive (Chapter 5), most EM study programmes still largely depend on the EM's support despite having diversified the funding sources for EM Master's programmes in recent years (Chapter 3).

⁵⁸ See definition <https://online.suny.edu/introtocoil/suny-coil-what-is/>

⁵⁹ Two such projects are GO-DIJIP: Integrating digital collaborative environments into joint programmes and JPROV: Joint Programmes: Embedding Virtual Exchange.

When thinking about the potential future of the funding model, experts commend considering the importance of both attractive scholarships for high-quality students and **institutional support**, which seems directly linked to the continuity of the EM Master's programmes (Table 24).

Table 24. Potential paths for the overall funding model

1. Strengthening and streamlining the current integrated funding approach, which was already welcomed by the sector. Further strengthening would need to consider the funding aspects of the other potential adaptations in the programme's architecture mentioned above (e.g., related to the level of study or the approach to in-built mobility windows), and be done in a coordinated logic with other actions under Erasmus+ or successor programmes.

- Important principles to continue to follow would be further increasing the user-friendliness of the programme for HEIs (including from non-associated countries to the programme) and for scholarship holders, allowing for as much flexibility as possible in implementation. The latter would be particularly necessary in a volatile external environment, where the initial plans – of both HEIs and scholarship holders – might be affected by unforeseen developments (e.g., health emergencies, geopolitical tensions).

2. Introducing a model that dissociates institutional funding from the scholarship component and integrates (1) EM criteria with those of a European degree (label) and (2) the scholarship scheme with other existing student mobility funding schemes to boost their curricular integration and jointness

The two components could cover:

- A A **scheme for baseline operating funding for highly integrated joint programmes** (at Master's, and possibly other levels) that meet a European degree (label) criteria. This could cover both the programmes delivered to date by EM consortia, but also, through a fair mechanism, by other types of partnerships, including European Universities alliances. Programmes could apply for this funding through a light-weight procedure, aligned with the labelling procedure for a European degree (label). AND
- B. A **more encompassing scholarship scheme** for both European students and top students from non-associated countries. This scheme could be built on greater alignment between the current EM scholarships and mobility grants offered through the international opening of KA131 and KA171. It would be essential to maintain extensive funding possibilities for bilateral mobilities taking place outside multilateral consortia and support for physical mobility as the core of the funding model.

3. Exploring more strategic use of the Erasmus Charter for Higher Education (ECHE) for institutional transformation, under which HEIs would be given more autonomy and the possibility to implement cooperation initiatives in the framework of ECHE, aligned with both the EHEA and EEA objectives.

This may require the revision of the EU Financial Regulation coupled with robust **multiannual planning and funding**, potentially framed by (but not limited to) a set of cooperation modalities (mobility, joint programmes, innovation and research) and sound quality-driven criteria. EM, as the core mechanism for funding joint programmes, should be at the heart of this new cooperation mechanism, and fully integrated into the charter, to ensure the programme's centrality to the cooperation strategies of participating HEIs.

6.3 Final considerations

Looking back at the first 20 years of EM, it is obvious that **multiple achievements** are to be celebrated. They constitute **the solid foundation** for any **future Erasmus Mundus scenarios**. Although the expert considerations outlined above tend to diverge on several topics, they provide initial guidance on the (sometimes conflicting) expectations within the EM community, and should be supported with further future thinking and future building.

The results of this study, on the multi-layered impact of EM, come at an **important stage in the development of the EEA** which has high ambitions for transnational cooperation to materialise by 2025. They also feed into the results of the mid-term evaluation of Erasmus+ (2021-2027) foreseen for the end of 2024. The latter will formally mark the start of preparations for the next generation of EU programmes in education and training, with reflections on the future of other flagship initiatives under Erasmus+, notably the ongoing Investment Pathway for the European Universities Initiative.

The further development pathways for the EM programme are clearly dependent not only on the sector's needs and views, but also on the political vision for EM and for its future position among other actions and in the implementation of EU-level vision and ambitions. Feasibility will also largely depend on budgetary realities, and on the ability to secure member states' support for higher education as a strategic field. Over its 20 years to date, Erasmus Mundus has clearly demonstrated its significant added value by strengthening the quality of education, international collaboration and professionalisation of services and administrative practices at higher education institutions in Europe. Its multiple positive effects go well beyond the field of higher education, largely benefitting alumni and employers both in Europe and its partner countries around the world, as attested by the compelling evidence and testimonials in this study.



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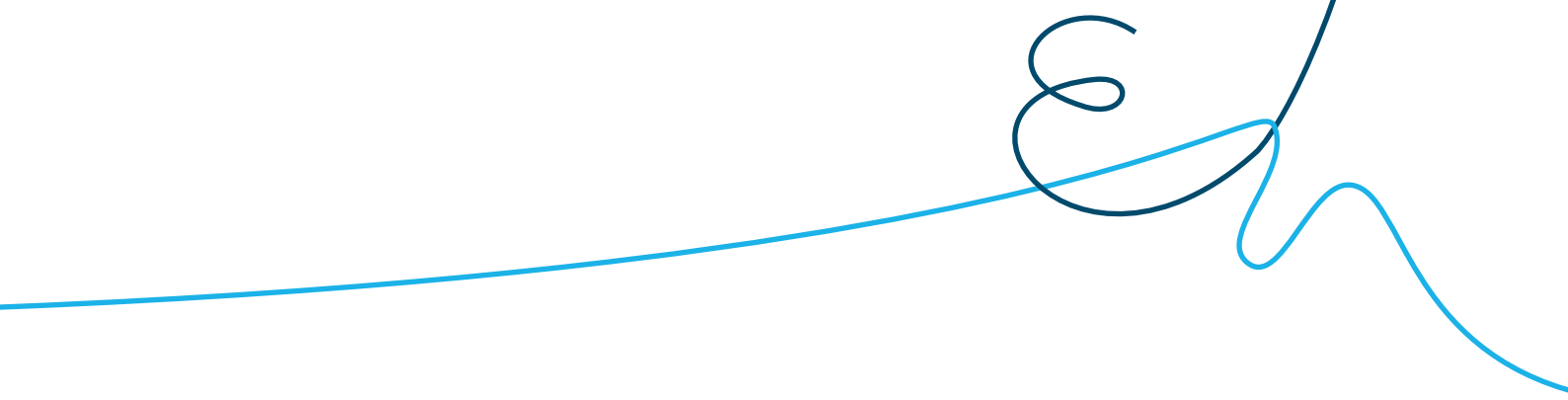
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Annex 1. List of abbreviations

ACP	African, Caribbean and Pacific Group of States
AI	Artificial Intelligence
AMEUP	Croatia's Agency for Mobility and EU Programme
ANPCDEFP	Romania's National Agency for Community Programmes in the Field of Education and Vocational Training
BIPs	Blended Intensive Programmes
COIL	Collaborative Online International Learning
DAAD	German Academic Exchange Service
DCI	Development Cooperation Instrument
DG EAC	Directorate-General Education, Youth, Sport and Culture of the European Commission
DS	Diploma Supplement
DZS	Czech National Agency for International Education and Research
EACEA	European Education and Culture Executive Agency
EAQAJP	European Approach for Quality Assurance of Joint Programmes
ECIU	European Consortium of Innovative Universities
ECHE	Erasmus Charter for Higher Education
ECTS	European Credit Transfer and Accumulation System
ECW	External Cooperation Window
EDUFI	Finnish National Agency for Education
EDF	European Development Fund
EEA	European Economic Area
EFTA	European Free Trade Association
EHEA	European Higher Education Area
EM	Erasmus Mundus
EMA	Erasmus Mundus Students and Alumni Association
EMACT	Erasmus Mundus Association for Consortia Cooperation
EMDM	Erasmus Mundus Design Measures
EMJM	Erasmus Mundus Joint Master (2021-2024)
EMJMD	Erasmus Mundus Joint Master Degrees (2014-2020)
EMMCs	Erasmus Mundus Masters' Courses (2009-2012)
EMSI	Erasmus Mundus Support Initiative
ENPI	European Neighbourhood and Partnership Instrument
EPQR	Erasmus Plus Quality Review
EQAR	European Quality Assurance Register for Higher Education
EQF	European Qualifications Framework
ESG	European Standards and Guidelines for quality assurance in the European Higher Education Area
ET2010	Education and Training framework 2010
ET2020	Education and Training framework 2020

ESU	European Students' Union
EU	European Union
EUA	European University Association
EUR	The Euro currency
EURASHE	European Association of Institutions in Higher Education
FRSE	Polish Foundation for the Development of the Education System
FYP	Five-Year-Programme
GDPR	General Data Protection Regulation
GIS	Erasmus Mundus Graduate Impact Survey
HEI	Higher education institution
HK-dir	Norwegian Directorate for Higher Education and Skills
ICI	Industrialised Countries Instrument
ICM	International Credit Mobility
ICP	International Course Programmes
HIS	Institute for Advanced Studies
IPA	Instrument for Pre-Accession Assistance
IUEP	Inter-University Exchange Project
JD	Joint Degree
JED	Joint European Degree
JP	Joint Programme
KA1	Erasmus+ Key Action 1: Learning mobility of individuals
KA2	Erasmus+ Key Action 2: Cooperation for innovation and exchange of good practice
KA3	Erasmus+ Key Action 3: Support for policy reform
LLP	Lifelong Learning Programme
MEXT	Japanese Ministry of Education, Culture, Sports, Science and Technology
MFF	Multiannual Financial Framework
MSCA	Marie Skłodowska-Curie Actions
NA	National Agency for Erasmus+
NQF	National Qualifications Framework
NVAO	Accreditation Organisation of the Netherlands and Flanders
OeAD	Austria's Agency for Education and Internationalisation
R&I	Research and innovation
RO	Research organisation
SEPIE	Spanish Service for the Internationalisation of Education
SDGs	United Nations' Sustainable Development Goals
UHR	The Swedish Council for Higher Education
US	United States of America
VLUHR QA	Flemish Higher Education Council Quality Assurance
YERUN	Young European Research Universities Network

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Annex 3. Regional grouping of countries

ASIA		EUROPE		LATIN AMERICA AND THE CARIBBEAN	
AE	United Arab Emirates	AT	Austria	AG	Antigua and Barbuda
AF	Afghanistan	BE	Belgium	AR	Argentina
BD	Bangladesh	BG	Bulgaria	BB	Barbados
BH	Bahrain	CY	Cyprus	BO	Bolivia
BN	Brunei Darussalam	CZ	Czechia	BR	Brazil
BT	Bhutan	DE	Germany	BS	Bahamas
CN	China	DK	Denmark	BZ	Belize
HK	Hong Kong	EE	Estonia	CL	Chile
ID	Indonesia	ES	Spain	CO	Colombia
IN	India	FI	Finland	CR	Costa Rica
IQ	Iraq	FR	France	CU	Cuba
IR	Iran	GR	Greece	DO	Dominican Republic
JP	Japan	HR	Croatia	EC	Ecuador
KG	Kyrgyzstan	HU	Hungary	GD	Grenada
KH	Cambodia	IE	Ireland	GT	Guatemala
KR	South Korea	IS	Iceland	GY	Guyana
KW	Kuwait	IT	Italy	HN	Honduras
KZ	Kazakhstan	LT	Lithuania	HT	Haiti
LA	Laos	LU	Luxembourg	JM	Jamaica
LK	Sri Lanka	LV	Latvia	LC	St. Lucia
MM	Myanmar	MK	North Macedonia	MX	Mexico
MN	Mongolia	MT	Malta	NI	Nicaragua
MO	Macao	NL	Netherlands	PA	Panama
MV	Maldives	NO	Norway	PE	Peru
MY	Malaysia	PL	Poland	PR	Puerto Rico
NP	Nepal	PT	Portugal	PY	Paraguay
OM	Oman	RO	Romania	SV	El Salvador
PH	Philippines	RS	Serbia	TT	Trinidad & Tobago
PK	Pakistan	SE	Sweden	UY	Uruguay
QA	Qatar	SI	Slovenia	VC	St Vincent and the Grenadines
SA	Saudi Arabia	SK	Slovakia	VE	Venezuela
SG	Singapore	TR	Türkiye		
TH	Thailand				
TJ	Tajikistan				
TM	Turkmenistan				
TW	Taiwan				
UZ	Uzbekistan				
VN	Vietnam				
YE	Yemen				
				NORTH AMERICA	
				CA	Canada
				US	United States

OCEANIA	
AU	Australia
FJ	Fiji
NZ	New Zealand
PF	French Polynesia
PG	Papua New Guinea
PW	Palau
TL	Timor-Leste
VU	Vanuatu
WS	Samoa

OTHER EUROPEAN COUNTRIES AND EU NEIGHBOURING REGIONS	
AL	Albania
AM	Armenia
AZ	Azerbaijan
BA	Bosnia and Herzegovina
BY	Belarus
CH	Switzerland
EG	Egypt
GE	Georgia
IL	Israel
JO	Jordan
LB	Lebanon
LY	Libya
MA	Morocco
MD	Moldova
ME	Montenegro
PS	Palestine
RU	Russian Federation
SY	Syria
TN	Tunisia
UA	Ukraine
UK	United Kingdom
XK	Kosovo * UN resolution

SUB-SAHARAN AFRICA	
AO	Angola
BF	Burkina Faso
BI	Burundi
BJ	Benin
BW	Botswana
CD	Democratic Republic of Congo
CF	Central African Republic
CG	Republic of the Congo
CI	Ivory Coast
CM	Cameroon
CV	Cape Verde
DZ	Algeria
ER	Eritrea
ET	Ethiopia
GA	Gabon
GH	Ghana
GM	Gambia
GW	Guinea Bissau
KE	Kenya
KM	Comoros
LR	Liberia
LS	Lesotho
MG	Madagascar
ML	Mali
MR	Mauritania
MU	Mauritius
MW	Malawi
MZ	Mozambique
NA	Namibia
NE	Niger
NG	Nigeria
RW	Rwanda
SC	Seychelles
SD	Sudan

SL	Sierra Leone
SN	Senegal
SO	Somalia
SS	Sudan South
SZ	Swaziland
TD	Chad
TG	Togo
TZ	Tanzania
UG	Uganda
ZA	South Africa
ZM	Zambia
ZW	Zimbabwe

Annex 4. Additional methodological notes

The methodological approach for this study was designed in line with its original objectives (see Introduction). Based on a mixed method strategy, several datasets were used for this study:

1. EACEA historical dataset
2. Two survey datasets containing quantitative data at central/faculty and programme level
3. Qualitative dataset derived from a series of workshops, interviews and expert consultations
4. Secondary student and alumni dataset based on prior evidence projects

EACEA dataset

A comprehensive historical **dataset** made available by EACEA provided detailed information on **institutional participation** in the EM programme, **selected Master projects**, and **EM scholarship holders** and their mobility flows/instances over the period 2004-2024 (cf. Introduction). For analytical purposes, the 20-year data timespan was divided into the **four programme periods: 2004-2008, 2009-2013, 2014-2020, 2021-2027** (up to the year 2024, the year of publication of this analysis) to facilitate comparative analysis of the evolution of Erasmus Mundus across all four programme periods.

The **institutional information** available covered aspects such as project number, year of selection, type of applicant, name and acronym of the EM Master programme, partner institutions, countries of the partners, role in the programme, etc. The **scholarship holders' section** of the dataset contained the following information: the student's country of origin and institution; their nationality, gender, and the name and acronym of the EM Master's programme in which the student was enrolled; the start and end date of their mobility stays; host institutions and countries.

The figures presented for the current programme period (2021-2027) are partial, covering only the partnerships, scholarships granted, and mobility instances funded under projects selected in the 2021-2023 calls that will be performed by the end of 2024. This means the overview provided in the study only considers less than half of the current programme period, and the numbers up to 2027 will continue to rise. This latter element is key for assessing the participation trends over time.

Surveys

In consultation with EACEA and DG EAC, **two survey instruments** were designed, validated with experts, and implemented in May-July 2023 to gather primary data. The two surveys were organised into four separate tracks addressing four distinct target audiences (Table 25).

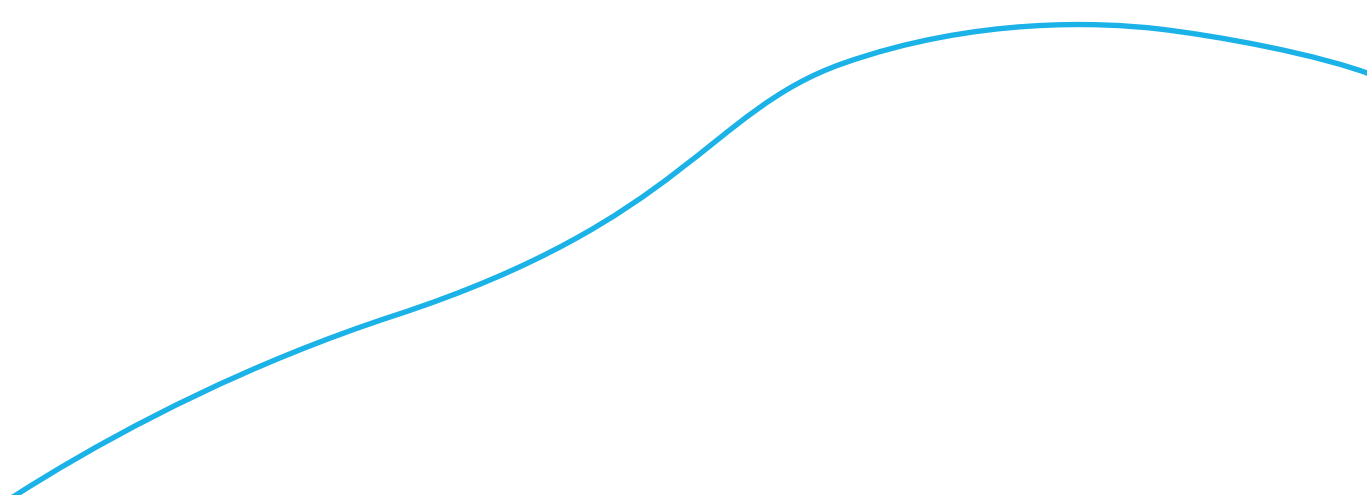
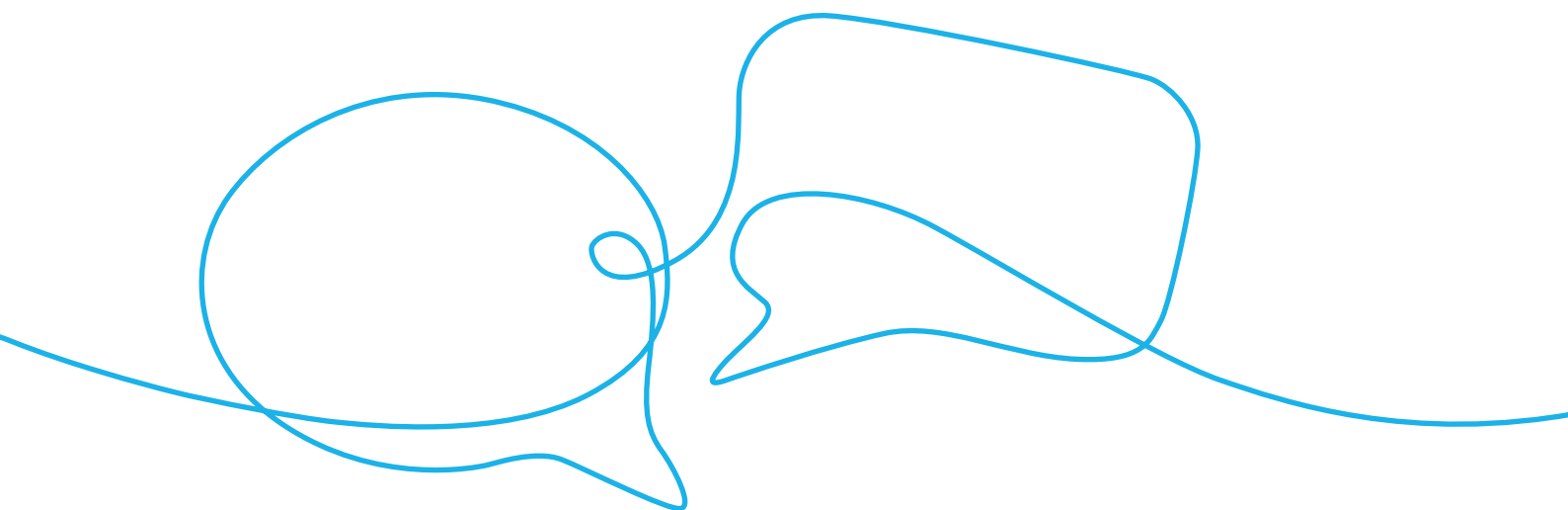


Table 25. Survey tracks and target audiences

Survey	Track	Target audience
Central and faculty level	Track 1 (37 questions): central level leadership and staff involved in the strategic steering, design, delivery, support or coordination of EM Master programmes at their institution with a comprehensive overview of the institution's participation in EM	Vice-Rectors International, Vice-Rectors Education, Heads of International Relations Office, Heads of Quality Assurance Office, Institutional Erasmus+ Coordinators, Institutional Erasmus Mundus Coordinators, and Institutional Partnership Coordinators and their equivalents
	Track 2 (40 questions): faculty level academic and administrative staff involved in the steering, design and delivery of individual EM Master's programme(s) with a comprehensive overview of their faculty's participation in EM	Deans, Vice-Deans for Internationalisation, Faculty Erasmus+ Coordinators, and Faculty Partnership Coordinators and their equivalents
Programme level	Track 3 (41 questions): academic and administrative staff engaged with active EM Master's programme(s)	EM Master's programme coordinators, academic coordinators, administrative coordinators, other academic staff teaching in the programme, and other administrative staff providing support to students or academics in the EM Master's programme
	Track 4 (39 questions): academic and administrative staff involved in last completed EM Master's programme(s)	

Respondents profile

The survey sample spanned a total of **33 countries**, with the top five countries of respondents (France, Germany, Italy, the Netherlands, and Spain) comprising 40% of the entire sample (Figure 40). This distribution prompted an examination for potential country bias, which was found to be partly significant (cf. Chapter 3, section 3.1). Additionally, non-European, non-associated countries (including the UK) represented a mere 7% of the sample, indicating a relatively limited foundation from which to draw conclusive statements about the impact of Erasmus Mundus on HEIs from third countries.



Total respondents per country (n=256; 33 countries)

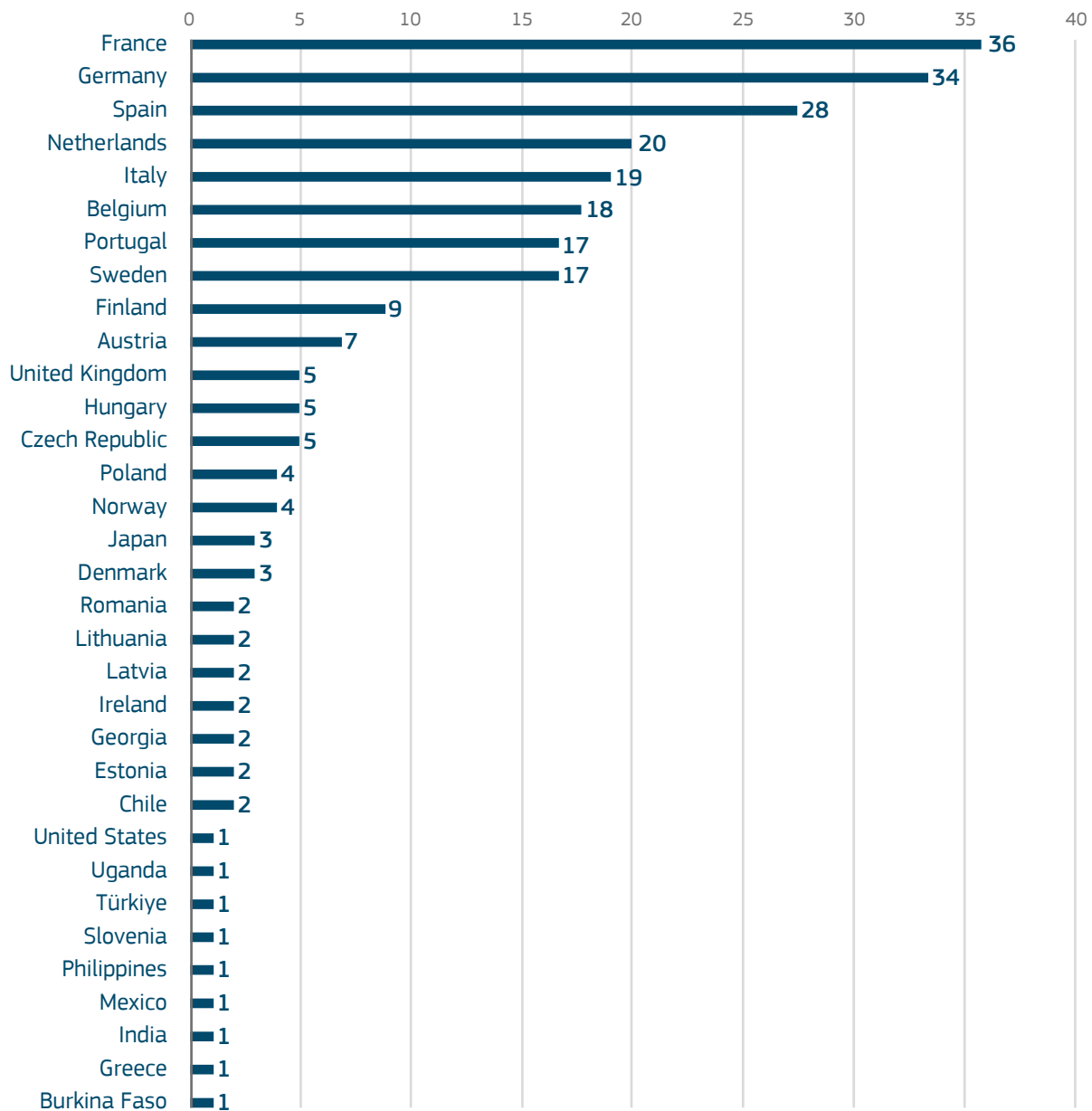


Figure 40. Respondents per country

The sample included a notable representation of respondents from **comprehensive universities** (71% at the level of the combined dataset; 73%, 74% and 62% at programme, faculty and central levels, respectively) (Figure 41), requiring additional analysis of the impact on different areas by type of HEI, which was found to be partly significant (cf. Chapter 3, section 3.1).

Respondents by type of HEI per level of analysis

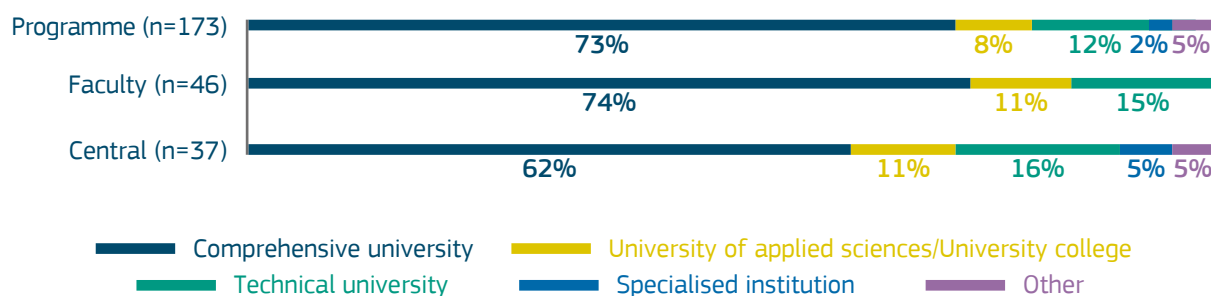


Figure 41. Respondents by type of HEI per level of analysis

The sample revealed a significant representation of respondents from **large HEIs** that enrolled more than 25,000 students in the academic year 2020/21. Such overrepresentation could be observed at all levels of analysis (programme, central and faculty), prompting an evaluation of the relationship between the size of HEIs and institutional impact reported under the three areas (Figure 42). The influence of this dimension on response patterns was found to be partly significant (cf. Chapter 3, section 3.1).

Respondents by size of HEI (full-time students in 2021/22) per level of analysis

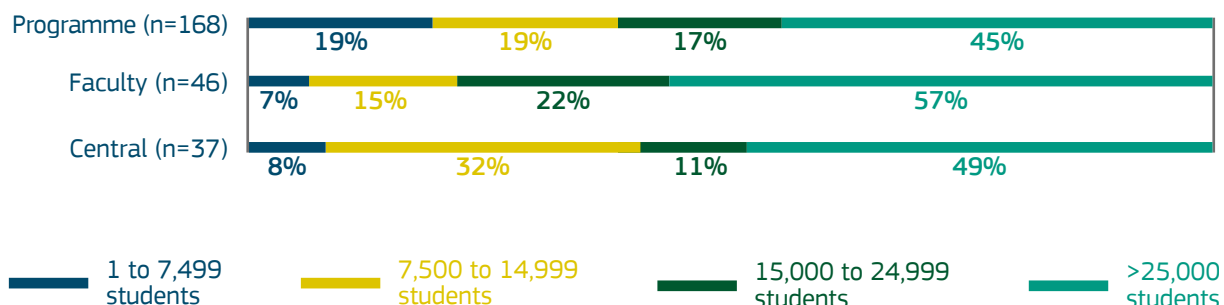


Figure 42. Respondents by size of HEI (full-time students in 2021/22)

Additionally, the study noted a predominant participation of respondents from **highly experienced institutions** with more than twelve years of engagement with EM. This trend was established at all levels of analysis (i.e., central, faculty, and programme) and, thus, required additional analysis looking at impact variations based on the level of experience and familiarity with the EM programme (Figure 43), which was found to be partly significant (cf. Chapter 3, section 3.1). Representatives from “newcomer” institutions (one to six years’ experience) were more represented at faculty level (33%).

Respondents by institution's level of experience with Erasmus Mundus per level of analysis

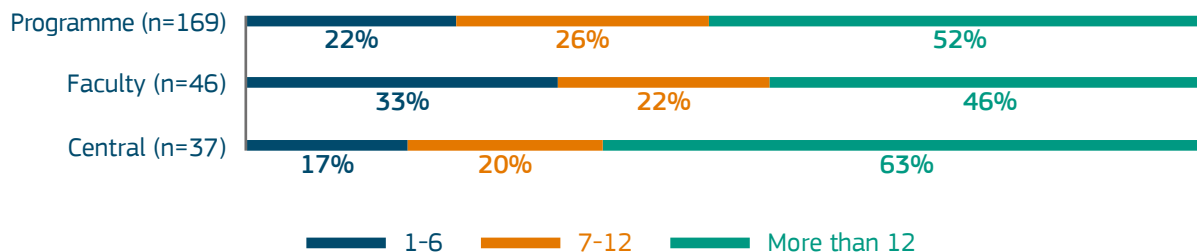


Figure 43. Respondents by institution's level of experience with EM per level of analysis

Top 5 main job titles or roles of central and faculty-level respondents include local coordinators of EM Master's programmes (13%), faculty internationalisation coordinators (8%), EM programme academic staff (8%), faculty Erasmus+ coordinators (8%) and partnership coordinators/advisors (8%) accounting for nearly half of the survey sample (Figure 44). Most programme-level respondents (63% in total) represented EM academic or administrative coordinators while other survey respondents said they were members of academic or administrative staff involved in the EM Master's programmes (Figure 45). Such great variety in the respondents' roles supporting Erasmus Mundus ensured both the comprehensive nature and breadth of the feedback obtained.



Respondents by main job title (central and faculty level; n=83)

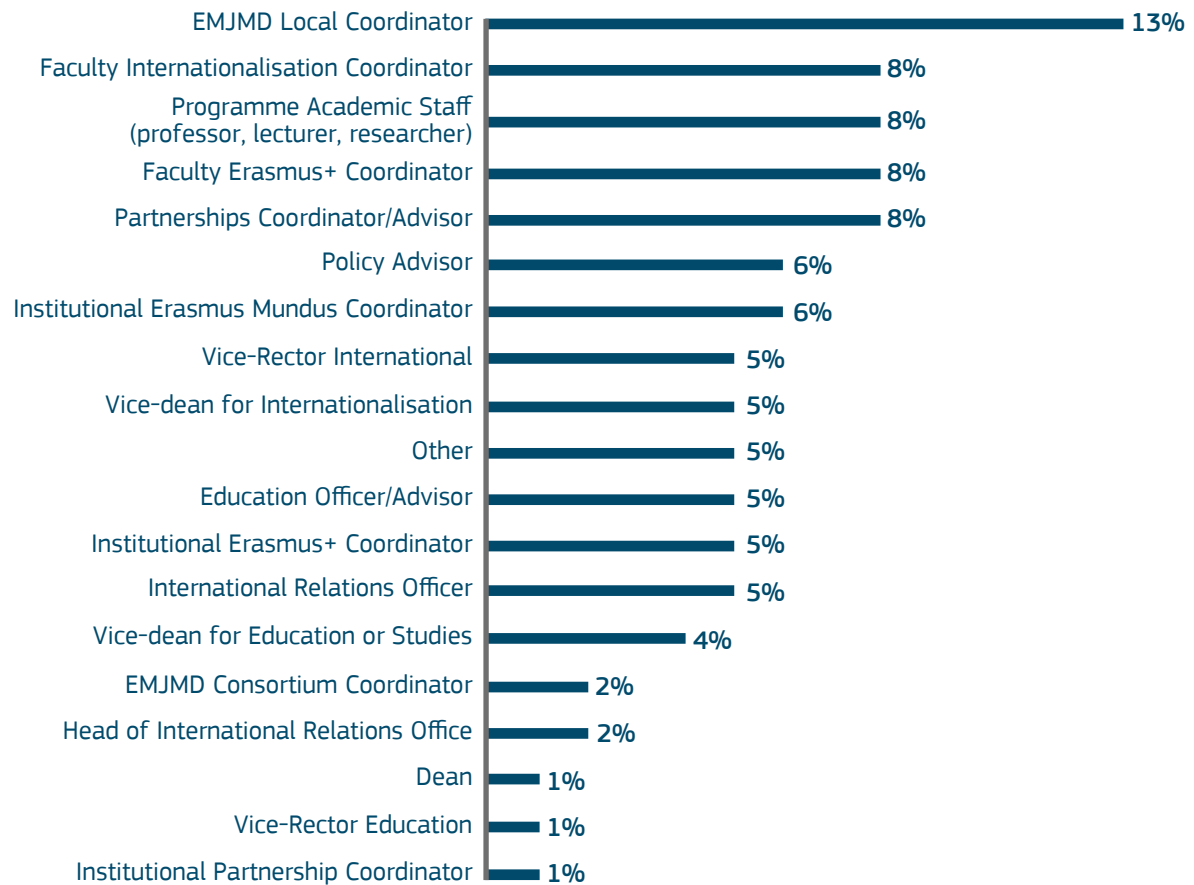


Figure 44. Respondents by main job title (central and faculty level)

Respondents by role in the EM programme (programme-level perspective; n=224, multiple choice)

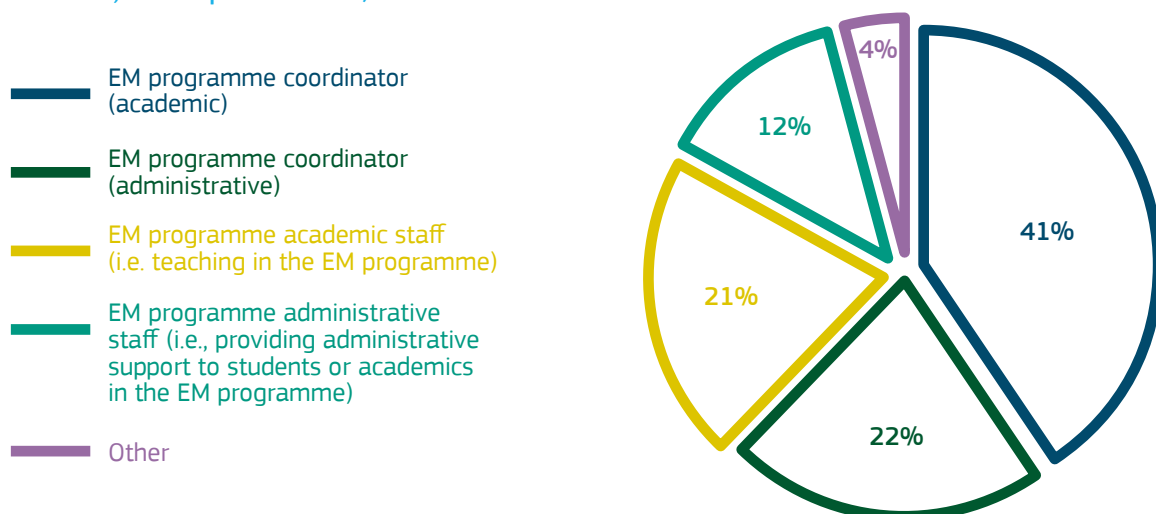


Figure 45. Respondents by role in the EM Master's programme (programme-level perspective)

The status of the departments represented by the programme-level respondents was another important differentiator. In particular, the study observed a **high prevalence of EM Master's coordinators** (Figure 46), which led to a thorough investigation of the relationship between the coordinator/partner status and the reported impact (cf. Chapter 3, section 3.1).

Programme-level respondents by their department's role in EM Master programme (n=173)

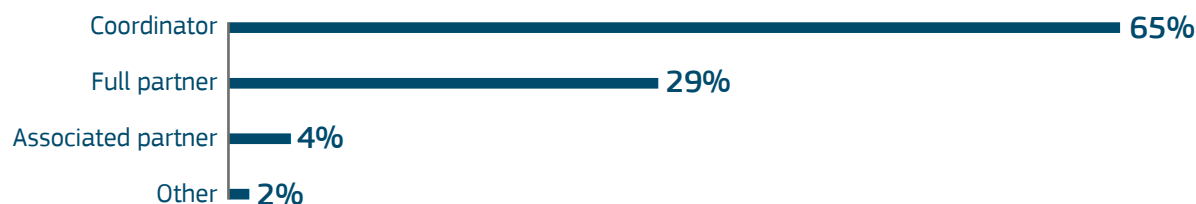


Figure 46. Programme-level respondents by their department's role in EM Master(s)

All 16 study fields included in the Erasmus Mundus 2023 catalogue⁶⁰ were represented in the programme-level survey sample, ensuring its overall variation at the level of various disciplines. As the number of study fields in the Erasmus Mundus 2024 catalogue was reduced to eight, the obtained responses were recoded according to the new list. **Top study fields** with highest levels of representation included **Social Sciences and Humanities** (31%), **Information Science and Engineering** (24%), **Life Sciences** (9%) and **Chemistry** (9%) (Figure 47).

Additional analyses were conducted to investigate the reported impact differentiation across various fields of study, particularly regarding two overrepresented fields: Social Sciences and Humanities, and Information Science and Engineering. This differentiation was found to be partly significant (cf. Chapter 3, section 3.1).

60 The Erasmus Mundus 2023 catalogue mentioned 16 study fields: Art, Chemistry, Economic Sciences, Education, Environmental and Geosciences, History, Information Science and Engineering, Information Technology, Law, Life Sciences, Literature, Mathematics, Physics, Political Science, Psychology, Social Sciences and Humanities. URL: www.eacea.ec.europa.eu/scholarships/erasmus-mundus-catalogue_en?gad_source=1&gclid=CjwKCAiA8sauBhB3EiwAruTRJnaJvyg96ZYRymKA9UewTkCG3JVgcQnd1q5jqP3tpDlcVCsP_MmNohoCoAYQAvD_BwE, last accessed on 18 February 2024.

Respondents by study fields covered in their EM Master's programme(s) (n=173)

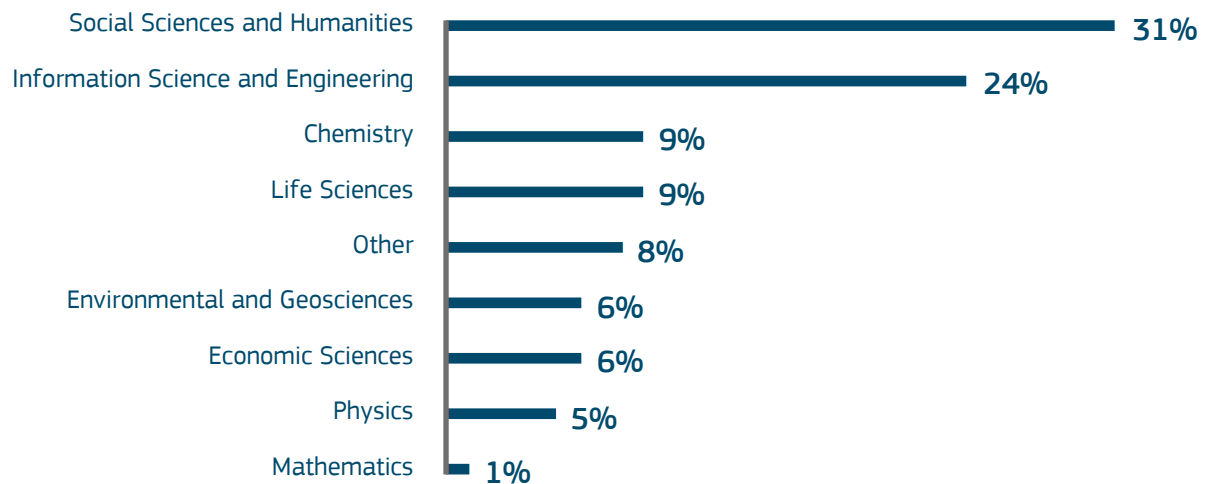


Figure 47. Respondents by study fields covered under their EM Master's programme(s)

Expert workshops and interviews

To corroborate the quantitative results and gather additional qualitative insights, **five workshops** were held alongside a series of **interviews** and **individual consultations**. These sessions involved experts and higher education stakeholders from a variety of backgrounds, representing National Agencies for Erasmus+, university networks and associations, Quality Assurance agencies, student unions and alumni associations, EM Master's programmes and networks, HEIs, and former DG EAC and the EACEA employees/experts (Table 26).

Table 26. Participants in workshops and interviews

Level	Organisations represented	Total number of participants
European	Physical workshop: 7 stakeholder organisations: EMA, ESN, YERUN, Coimbra Group, ECIU, EMACT, NVAO Interviews: EMA, former Heads of Unit from DG EAC with responsibilities over Erasmus Mundus and the EACEA	10
National	Online workshop: 15 National Agencies for Erasmus+: AMEUP (Croatia), ANPCDEFP (Romania), DAAD (Germany), DZS (Czechia), EDUFI (Finland), Foundation Tempus (Serbia), HK-dir (Norway), FRSE (Poland), Nuffic (The Netherlands), OeAD (Austria), TPF (Hungary), SEPIE (Spain), UHR (Sweden), Erasmus+ Portugal, Erasmus+ Latvia	25
Institutional	Online workshop: Representatives of higher education institutions with central-level responsibilities over Erasmus Mundus	14
Programme	Two online workshops: EM Master programme representatives in different roles	125
Total		174

The qualitative data obtained was used to design and conduct a series of **mini case studies** validated with the experts and included in the study to showcase the impact at different levels (i.e., national, institutional), as well as to support **interviews** and **mini-Delphi discussions** on the future trajectory of the Erasmus Mundus action.

Primary data collection and analysis was compiled according to the principle of anonymity in line with the EU General Data Protection Regulation (GDPR). All quotes cited in the study were anonymised and edited to correct grammatical errors. Consent to publication was obtained for the non-anonymised feedback featured in the study.



Secondary student and alumni dataset

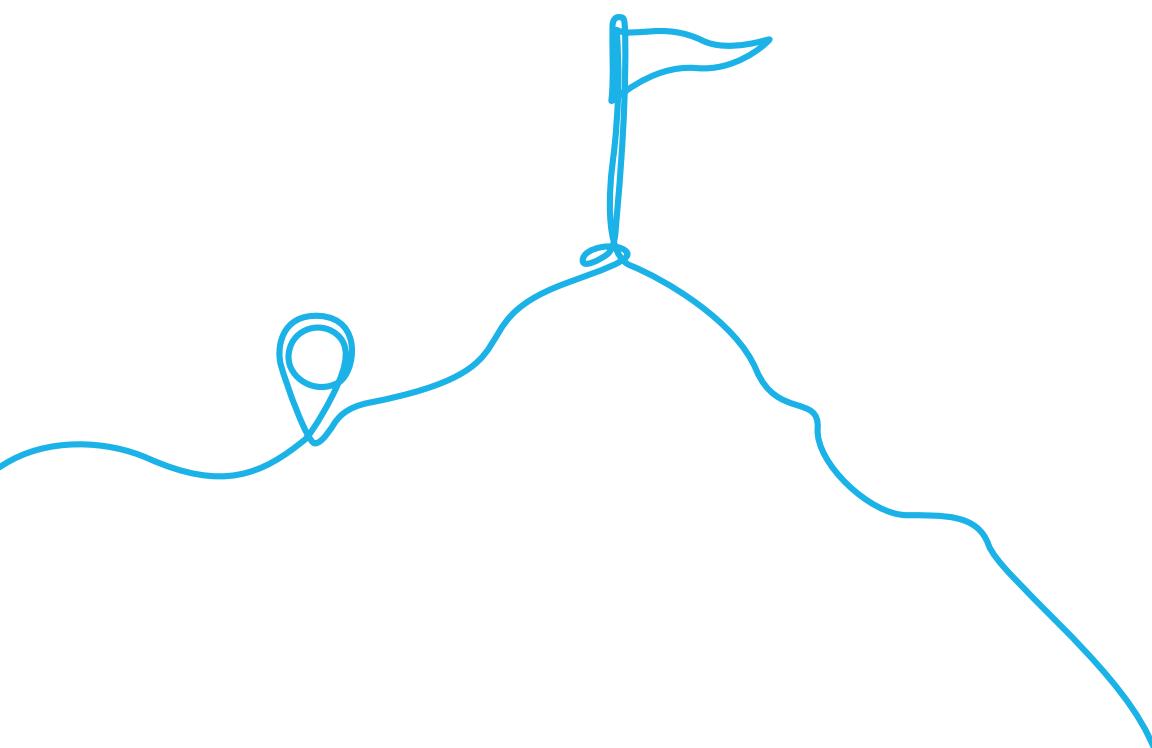
Two additional subsets of secondary data/evidence were used to describe the impact of EM on students and alumni. The **first dataset** was created in the framework of the **REDEEM2 project**, carried out between September 2018 and December 2022 in the framework of the Erasmus+ Strategic Partnerships action. In 2020, REDEEM2 partners interviewed **180 graduates from various joint programmes** in science and technology to evaluate students' level of satisfaction with their studies and professional experience after graduation. The REDEEM2 data compares EM graduates to a control group of students enrolled in other types of joint programmes, to show whether both sets of respondents have similar responses on key areas related to motivation, satisfaction and overall impact.

The **second dataset** consists of two editions of the **Erasmus Mundus Joint Master Graduate Impact Survey (GIS)**. The first referenced edition, based on a survey done in 2020/21 was published in 2022 (Jühlke et al., 2022). The second referenced edition, based on a survey implemented in 2022/23 was published in 2024 (Jühlke et al., 2024 forthcoming). The reports are part of a series performed by the Institute for Advanced Studies (IHS), in collaboration with the Erasmus Mundus Association (EMA) since 2007 for DG EAC. The reports evaluate the situation of EM alumni at different stages after obtaining an EM degree. To enable longitudinal (retrospective) comparisons, alumni of three graduation cohorts are surveyed: a recent cohort of graduates, as well as alumni who concluded their joint Master programmes about 5 and 10 years prior. To achieve a sufficient number of responses for reliable, robust results, for each of these cohorts, graduates of two adjacent years were invited to reply to the survey.

The 2022 report was addressed to three graduation cohorts 2010/11, 2015/16 and 2019/20. In total, 2,056 full responses were received. The 2024 report was addressed to the 2012/13, 2017/18 and 2021/22 cohorts, with all alumni (18,597) invited to respond. In total, 3,396 full responses were received which were weighted for gender, region of origin, study field and cohort.

The reports cover key pillars such as graduates' **motivation** for enrolling in an EM Master's programme, their level of **satisfaction, stay rates, acquired competences and career development**, as well as softer, transversal and intercultural skills, which can be illustrative of an individual impact on student's professional and personal development. The GIS offers a longitudinal comparative perspective of students and graduates from different regions and across various academic disciplines.

In addition to these datasets, a wealth of studies, analyses, evaluations, and policy and programme-related documents were reviewed, as part of desk research and used to reconstruct the history of the programme, as well as to interpret the main findings (cf. Bibliography).



Annex 5. Budgetary evolution of Erasmus Mundus

Table 27. Erasmus Mundus Budget 2004–2008

2004-2008	EM1 (Masters) & EM2 (Scholarships)	EM3 Promotion (including EM4EA & EM4EATN)	ECW External Cooperation Window partnerships	TOTAL per year EUR
2004				
2005				122,000,000
2006				
2007	73,363,200	5,340,964	35,905,825	114,609,989
2008	86,326,700	9,001,644	99,431,650	194,759,994
TOTAL per action	159,344,900	14,342,607	135,337,475	431,369,982⁶¹

Table 28. Erasmus Mundus Budget 2009–2013

2009-2013	EM1.1 Masters (EMMC)	EM1.2 Doctorates (EMJD)	EM2 Scholarships	EM3 Promotion	ECW External Cooperation Window partnerships	TOTAL per year EUR
2009	1,650,000	650,000	77,276,600	446,010	158,763,500	238,786,110
	EMA1.1 – Masters (EMMC) & Scholarships (EMMCMOB)	EMA1.2 – Doctorates (EMJD) & Scholarships (EMJDMOB)	EMA21 Partnerships	EMA22 Partnerships	EM3 – Promotion	Total
2010	86,165,289	17,171,400	97,026,975	7,458,150	2,858,842	210,680,656
2011	77,684,293	28,770,200	109,749,175	6,293,900	2,477,772	224,975,340
2012	83,197,583	39,550,217	165,848,375	998,925	2,805,844	292,400,944
2013	81,930,017	47,934,600	185,449,775	6,419,900	28,314,495	324,565,742
2014-2017 ⁶²	170,054,398	78,560,900	72,523,650	5,199,600	0	326,338,548
TOTAL per action	500,681,580	212,637,317	707,874,550	26,816,485	169,737,407	1,617,747,339

61 All amounts in EUR.

62 The totals include the calls organized for EMMCMOB scholarships and EMJDMOB scholarships in 2014-2017, for projects selected in 2009-2013, and the call for EMA21 and EMA22 partnerships in 2014.

Table 29. Erasmus Mundus Budget 2014–2020

2014–2020	Master's (EMJMDs)
2014	21,240,349
2015	51,506,400
2016	72,970,030
2017	114,699,440
2018	153,115,540
2019	183,165,800
2020	187,341,585
TOTAL per action	784,039,144

Table 30. Erasmus Mundus Budget 2021–2023

Year	Erasmus Mundus Joint Masters (EMJMs)	Erasmus Mundus Design Measures (EMDMs)	TOTAL per year EUR
2021	122,534,400	2,520,000	125,054,400
2022	136,476,600	3,720,000	140,196,600
2023	162,971,400	3,480,000	166,451,400
2024	150,100,000	3,000,000	153,100,000
TOTAL per action	572,082,400	12,720,000	584,802,400

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