Statistical analysis of JTC 2024

Work Package 8
Deliverable 8.4

Document Summary

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Contributors

- CSO-MOH
- WP8 partners

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Introduction

The Transforming Health and Care Systems (THCS) Partnership launched its second Joint Transnational Call (JTC) for Research and Innovation (R&I) proposals, co-funded by the European Commission (EC) in February 2024. In the framework of this JTC, 31 Funding Organisations from 22 Countries, together with the EC, joined forces to fund the best collaborative transnational research projects under the topic of "Innovate to Prevent" for a total initial funding commitment of around € 35 million.

This JTC addressed the need to improve the implementation of personalised prevention strategies in health and care services, also to make them person-centred and better adjusted to people's needs while supporting effective and appropriate use of existing IT and digital-based technologies supporting prevention strategies in health and care services. The ultimate goal was to improve health and care system dimensions such as quality, efficiency, equity, and sustainability. The scope of this call did not include actions focused on primary prevention. Instead, it concentrated on initiatives aimed at developing, implementing, and scaling organizational models that are supported by the integration of existing IT and digital technologies, as well as novel data sources. Specifically, the call focused on:

- Secondary Prevention: Strategies to predict, reduce, delay, and prevent the onset of diseases.
- Tertiary Prevention: Approaches to manage diseases by reducing their progression, enhancing the efficacy of therapies to prevent complications and further damage, while simultaneously alleviating the burden on healthcare systems and improving access to services.
- Quaternary Prevention: Efforts to avoid over-medicalization by protecting patients from unnecessary interventions and promoting ethical alternatives to invasive treatments.

A total of 186 Intent to Applies were submitted, followed by 132 full proposals submitted by the deadline. Out of these projects, 114 were deemed administratively eligible and were further evaluated by 38 appointed external reviewers, who conducted a total of 342 reviews. The total requested funding amounted to approximately € 140 million. The proposals evaluated were further discussed during a Peer Review Panel (PRP) meeting, which took place virtually from September 9th to 11th, 2024. The top 35 proposals on the ranking list from the PRP meeting advanced to the ethics evaluation. The ethics meeting was conducted online on October 8th, 2024.

Finally, on October 30th, 2024, the Call Steering Committee decided on a final funding list, which consisted of 20 excellent proposals selected for funding. 25 out of 31 funding agencies participating in this second JTC are involved in the selected for award projects, for a total call budget expenditure of approximately €25.3 million. Of this amount, € 21.7 M originates from funding organisations receiving the EC top-up. This has resulted in approximately €4.3 million in total EC top-up funding, which has been partially allocated to co-fund the selected for award projects.

This deliverable presents details of the statistical analysis/performance of this second JTC.

Analysis of "Innovate to Prevent" 2024 Call results

Overall figures of the Call

	N. of proposals	No. of countries involved	No. of teams	Budget
Eligible Submitted full proposals	114	22 (33 including collaborators)	734	€ 140.8 million
Selected proposals	20	18 (21 including collaborators)	130	€ 25.3 million

Table 1. Showing overall figures related to the submitted full proposals and selected proposals for award.

With a total of 114 full eligible proposals submitted (as can be viewed in Table 1) and 734 participating research teams, the '*Innovate to Prevent'* JTC 2024 demonstrated a strong interest from the scientific community regarding the aims and research areas tackled by the Call. Notably, among these teams, 81 consist of collaborators who are self-funded partners. The majority of proposals submitted included an average of six partners, and an average of four countries per consortium. The average budget per proposal at full proposal stage was € 1.6 million, with project budgets ranging from € 171,300 to € 4.8 million. The overall requested budget under this second JTC amounted to approximately € 140.8 million, involving 22 participating countries (33 when including collaborators) and 31 funding agencies.

Regarding the allocation of funds, the THCS Call Steering Committee has chosen to fund the top 20 highest-ranked proposals, totalling approximately 25.3 million euros in requested funds (excluding funding from collaborators/self-funded partners). Eighteen participating countries and 25 funding agencies were involved. This selection reflects an overall success rate for the JTC 2024 of 17.5%. The availability of the generated EC top-up funds (approximately 4.3 million euros) played a crucial role in bridging financial gaps and further enhancing the overall success of the JTC 2024.

As shown in Figure 1, full proposals with 5 and 6 partners are the most common, occurring 29 and 25 times, respectively, suggesting a preference for mid-sized consortia. In contrast, proposals with 9 and 10 partners are the least frequent, appearing only 5 and 2 times, respectively, indicating that larger consortia may be less common due to challenges in coordination and/or resource allocation. Additionally, proposals with 4 partners (19 occurrences) and 8-partners (15 occurrences) appear with moderate frequency, while those with 3 and 7 partners show lower but notable frequencies. This distribution confirms a preference for small to mid-sized consortia (Figure 1).

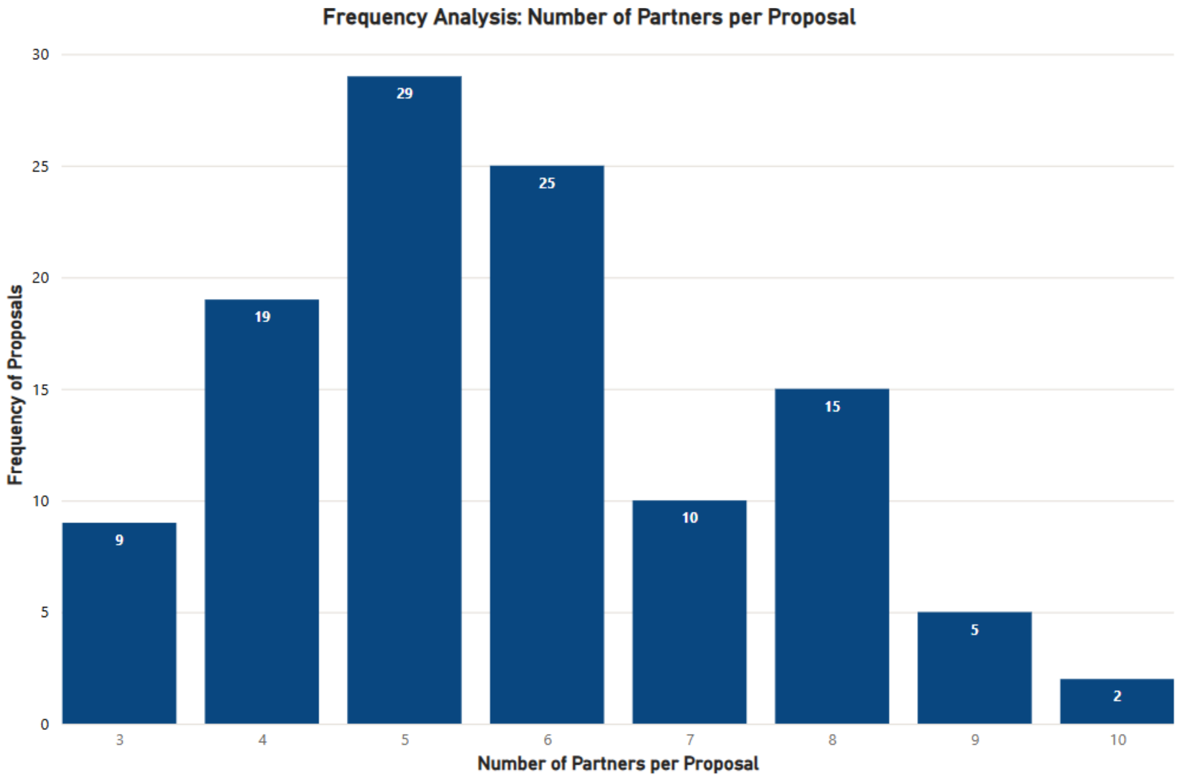

Figure 1. Frequency Analysis of Number of Partners per eligible full proposals under the THCS JTC 2024. A notable exception applies to proposals with more than 9 partners, as outlined in the THCS JTC 2024 Call text: "To facilitate the integration of patient organisations and companies in consortia, they can be added to a consortium as additional partners. Patient organisations and companies can be added as additional partner(s) either on own funds or by applying for funding, if eligible, from the respective funding organisations"

Geographical coverage of submitted and selected for funds proposals

Providing a brief breakdown of the JTC 2024's geographical coverage, it is to be noted that 96.6% of proposals were submitted by research teams from 30 funding organisations' countries participating in the Call, which includes non-EU participants such as Switzerland and Scotland ineligible for additional funding from the EC top-up. The remaining 3.4% originated from European countries, such as Czech Republic, Finland, Germany, and Albania, as well as non-European countries not participating in the Call, such as USA, Australia, Taiwan, Canada, China, Singapore, Uganda, and the United Kingdom.

The majority of eligible full proposals submitted for the JTC 2024 originated from teams from Spain, Italy, Switzerland, Netherlands, Portugal, France, and Romania (Figure 2). In line with the results reported in the following paragraphs, the top-performing teams were primarily from Spain, The Netherlands, France, Portugal, and Switzerland (Figure 3).

Similarly, the majority of eligible full proposals were received by Italy, Spain, Switzerland, Portugal, Netherlands, and Romania (Figure 4). In line with the results reported in the following paragraphs, the top-performing countries were Spain, Portugal, Switzerland, The Netherlands, Italy, Denmark, Romania, and Poland (Figure 5).

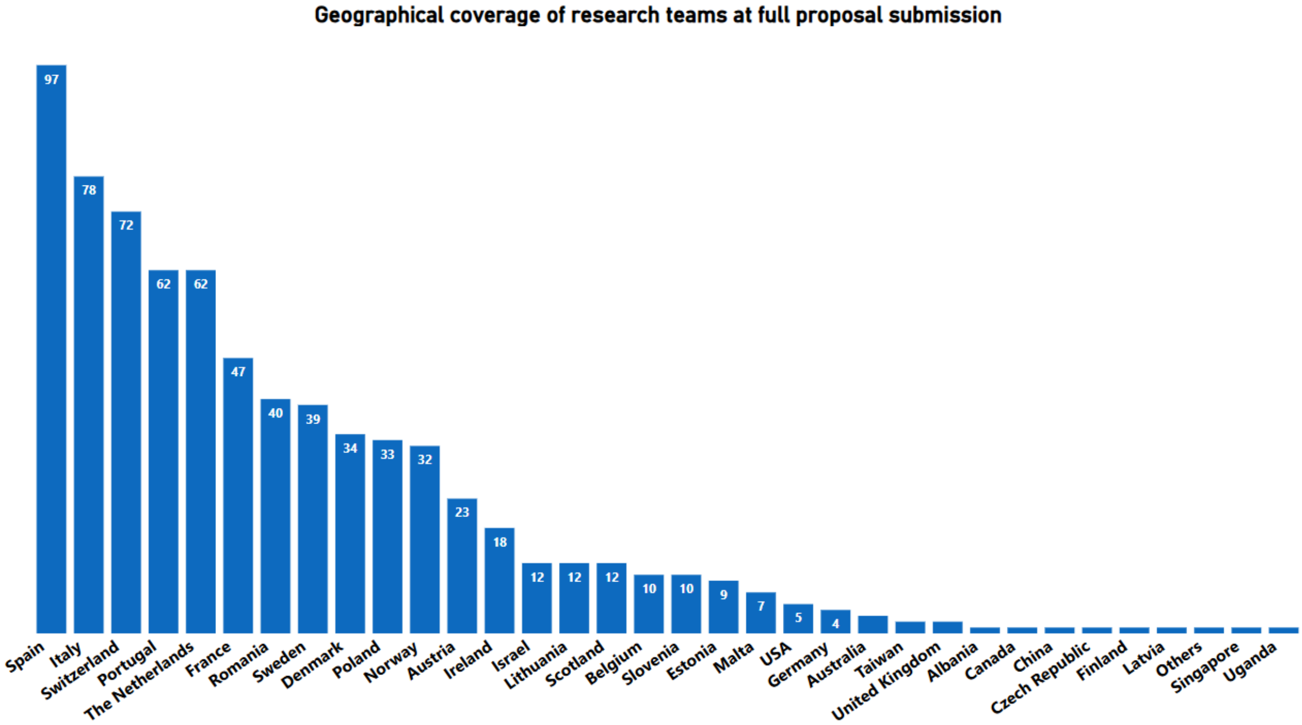

Figure 2. Total number of (research) teams by each country under the THCS JTC 2024 that submitted eligible full proposals (Including Non-Participating Countries). 'Others' represents data from worldwide organizations that operate across multiple countries, making it impossible to classify them under a single nation.

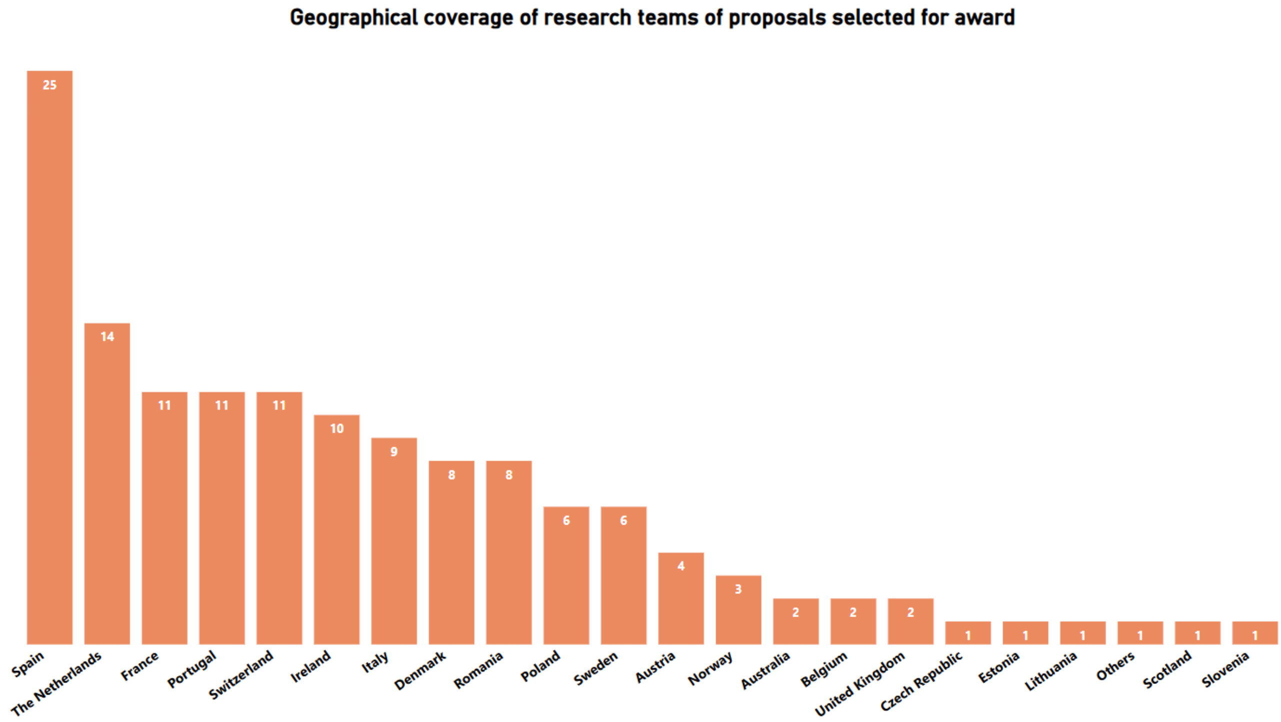

Figure 3. Total number of (research) teams by each country under the THCS JTC 2024 that had proposals selected for award (Including Non-Participating Countries). 'Others' represents data from worldwide organizations that operate across multiple countries, making it impossible to classify them under a single nation.

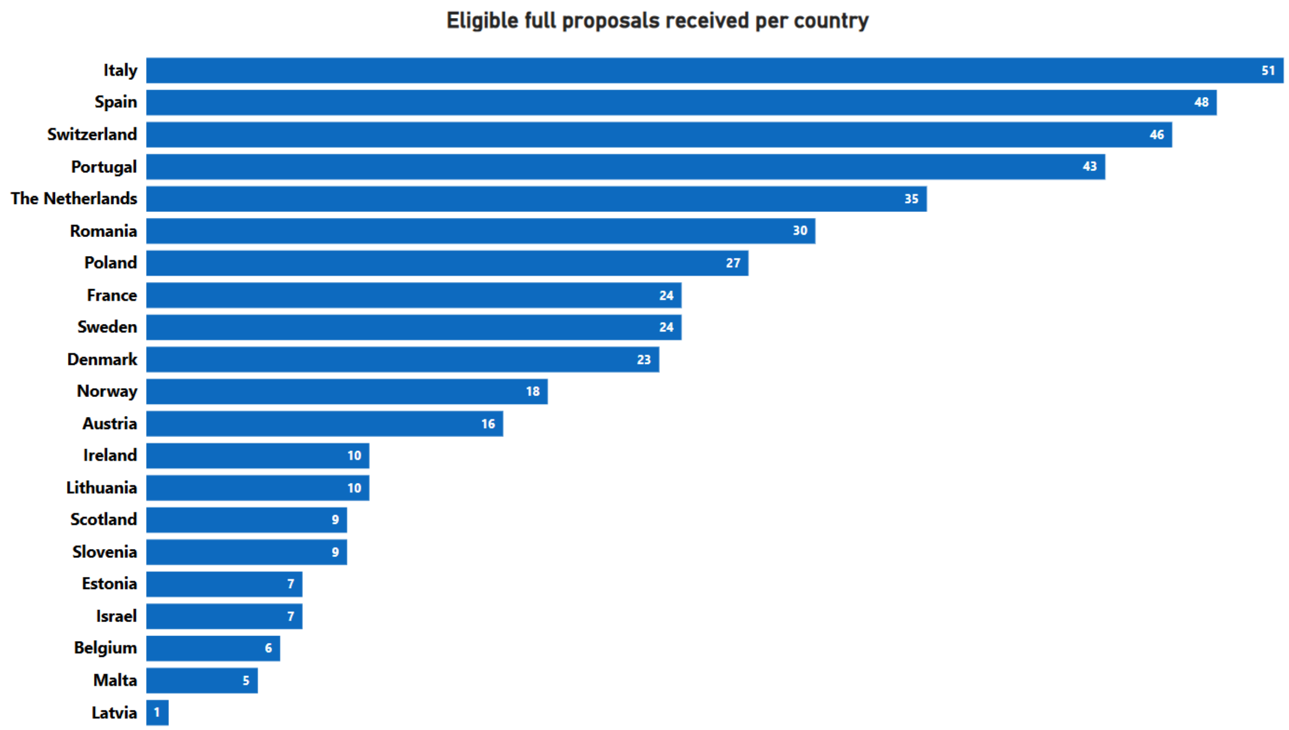

Figure 4. Total number of eligible full proposals received by each country under the THCS JTC2024 (Excluding Non-Participating Countries).

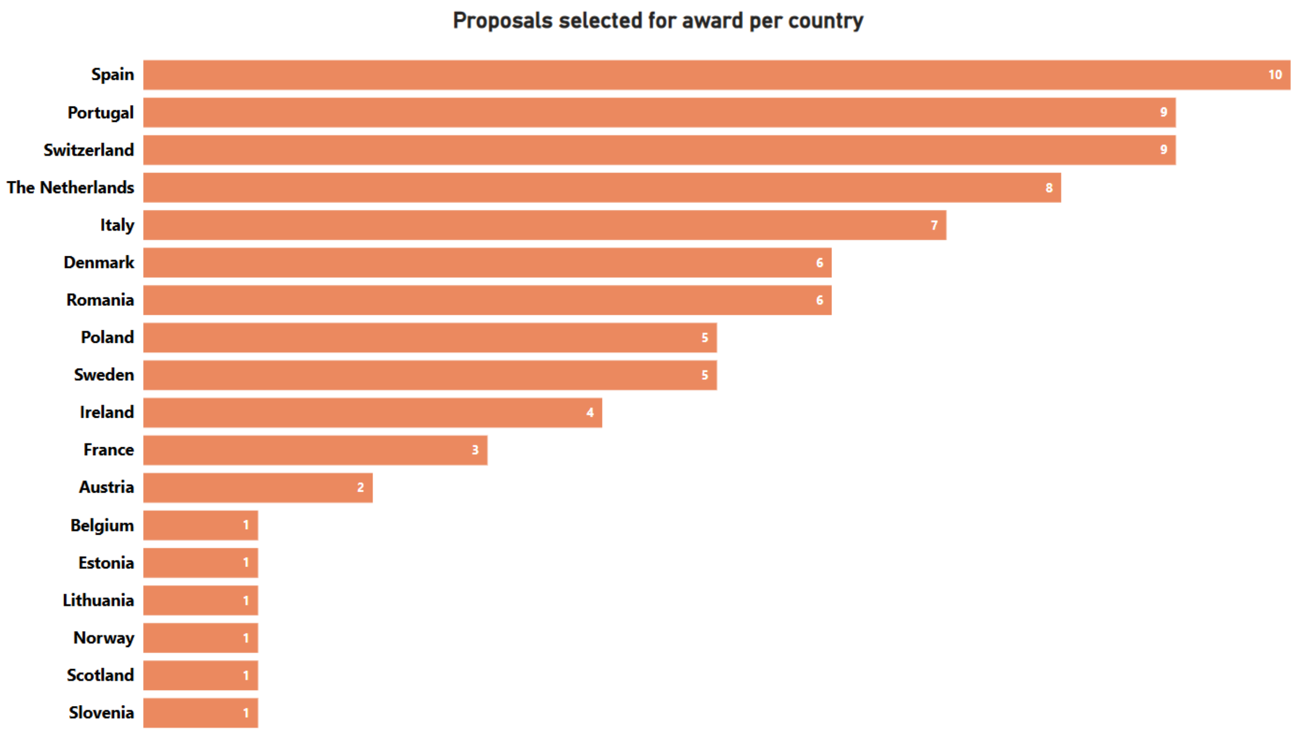

Figure 5. Total number of proposals selected for award by each country under the THCS JTC2024 (Excluding Non-Participating Countries).

Reserved and requested budgets

The announcement of the JTC 2024 included the publication of reserved budgets for participating funding agencies, alongside specific national participation rules. These guidelines encompassed details on eligible costs and funding caps per project per funding agency, potentially influencing applicants' budget requests[1].

Italy, France, Switzerland, Spain, Sweden, and The Netherlands showed up the highest values for the initial reserved budgets (Figures 6 and 7). With respect to the funding agencies, IT MOH (Italy) had the highest value, followed by FR MoH (France), and then ZonMW (The Netherlands) (Figure 9).

Considering the number of eligible full proposals submitted, Switzerland, Italy, France, Spain, The Netherlands, Norway, Denmark, and Poland presented the highest values for requested budgets (Figures 6 and 8). These values are reflected as well per funding agency, with Switzerland (Innosuisse and SNFS), Italy (IT MOH and MUR), France (FR MOH and ANR), Spain (ISCIII, CSCJA, AEI, and IDIVAL), The Netherlands (ZonMW), Norway (RCN), Denmark (IFD), and Poland (NCBR) characterized by the highest value for requested budgets (Figures 8 and 9).

Most of the funding agencies experienced a high oversubscription rate at full proposal submission stage, particularly FCT (Portugal), INNOSUISSE (Switzerland), SG (Scotland), MDT (Slovenia), UEFISCDI (Romania), IFD (Denmark), and LMT (Lithuania).

Regrettably, some funding agencies did not use their reserved budget, due to a lower success rate and/or size of their research community, such as LZP (Latvia), MCST/XM (Malta), RANNIS (Iceland), CSO MOH (Israel), AreSS (Italy), and IDIVAL (Spain).

The following paragraph provided further information on the JTC 2024 success rate.

[1] *The dataset was analysed following the Call Steering Committee's funding decision for the THCS JTC 2024. Any discrepancies in the funding figures may result from the subsequent grant agreement phase between each beneficiary and their respective regional/national funding agency.*

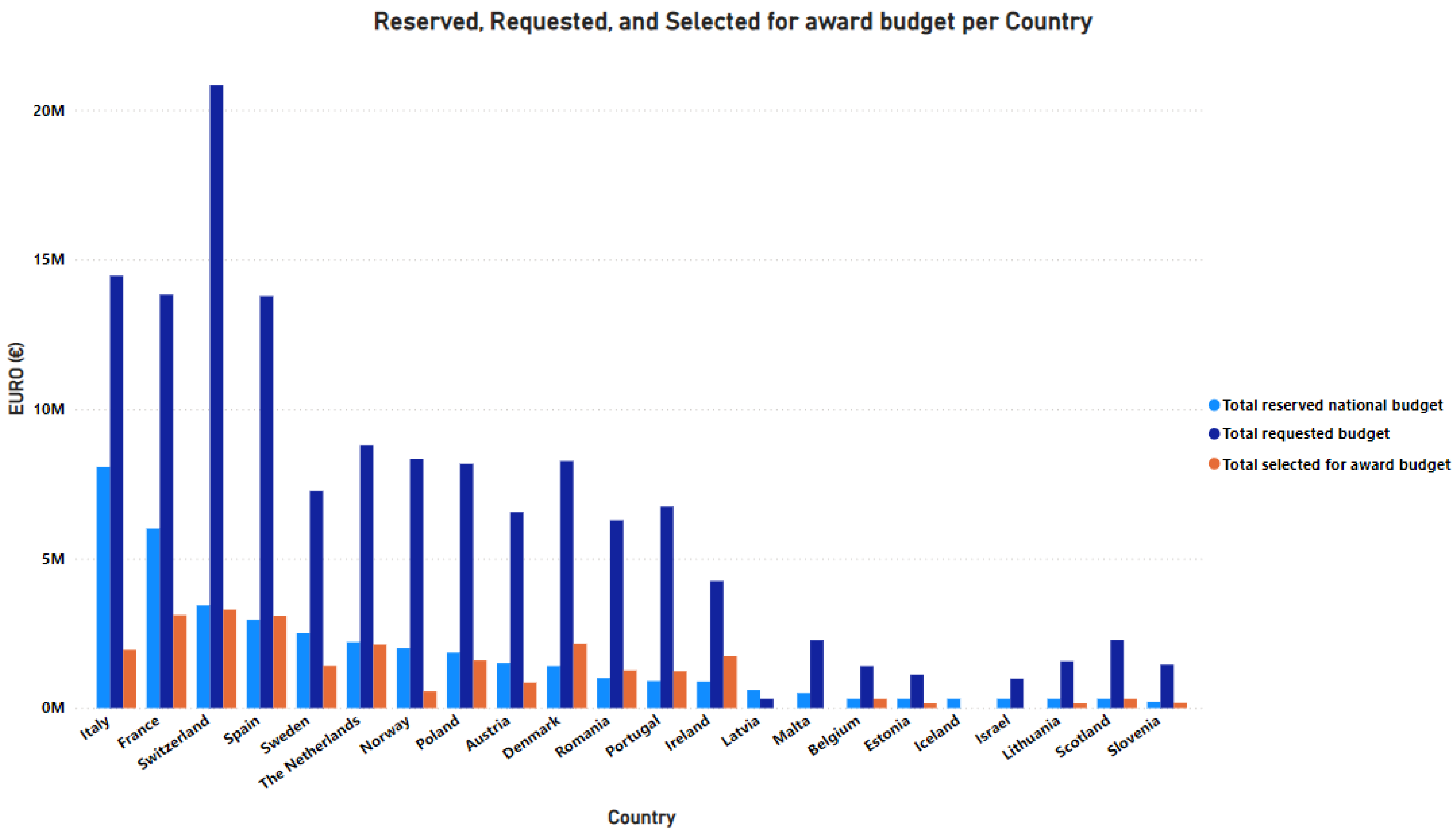

Figure 6. Total initial reserved national budget (light blue), total eligible requested budget at full proposals stage (dark blue), and total eligible selected for award budget (orange) per country participating in the THCS JTC 2024.

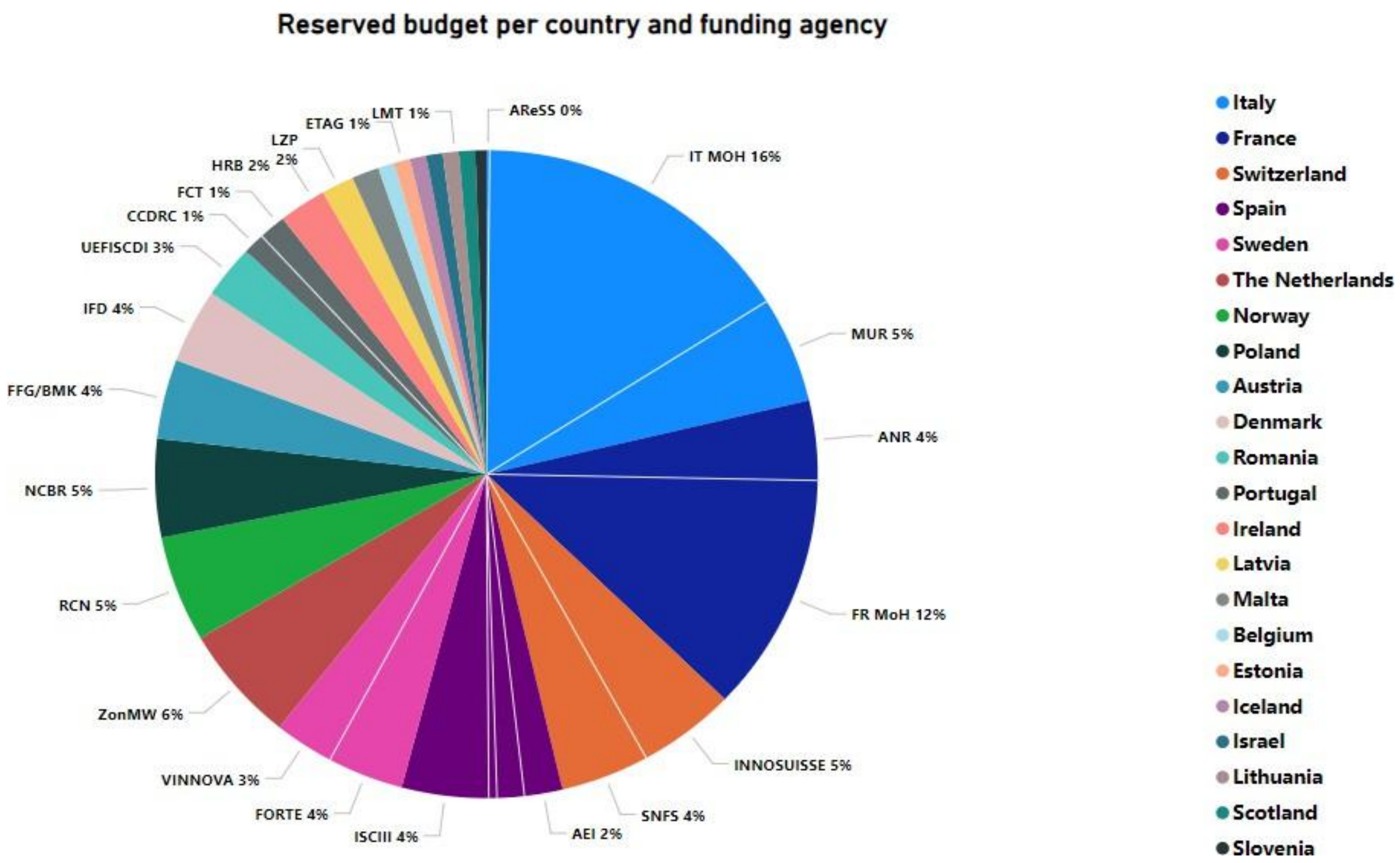

Figure 7. Distribution (%) of the initial reserved budget amongst participating countries and funding agencies under the THCS JTC 2024.

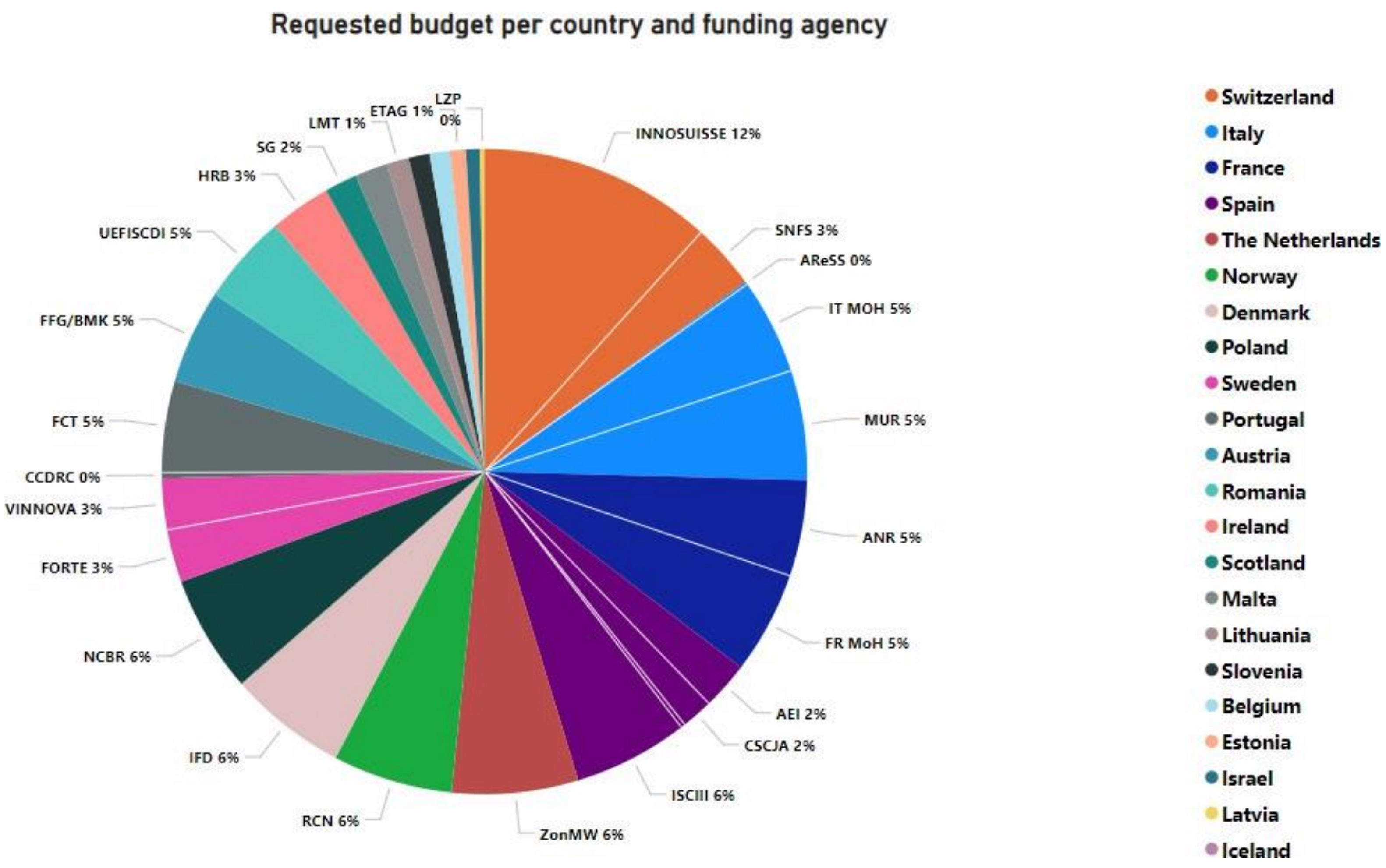

Figure 8. Distribution (%) of the requested budget at full proposals stage amongst participating countries and funding agencies under the THCS JTC 2024.

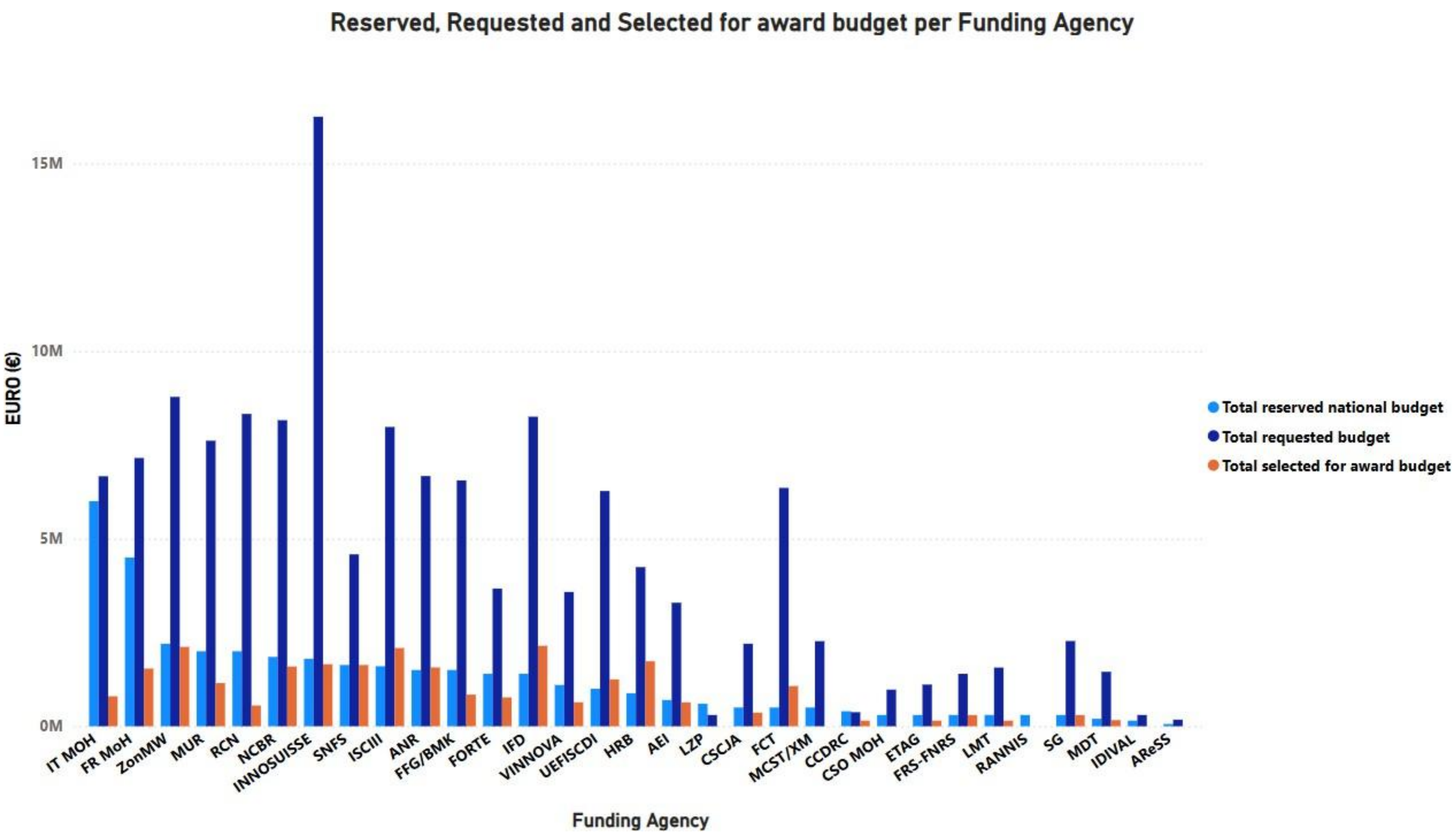

Figure 9. Total initial reserved national budget (light blue), total eligible requested budget at full proposals stage (dark blue), and total eligible selected for award budget (orange) per funding agency participating in the THCS JTC 2024.

Success rate per country and funding agency

The research teams from Spain 62%, Portugal 57%, Switzerland 46%, France 45%, Ireland 41%, and Sweden 39% applying to the JTC 2024 had a particularly high success rate (calculated as ratio of eligible funding initially requested to total requested funded amounts for select of award projects) (Figure 10).

The teams selected for funding through the JTC 2024 came from 18 different countries and 25 different funding agencies. IFD (Denmark), ZonMW (The Netherlands), ISCIII (Spain), HRB (Ireland), INNOSUISSE (Switzerland), SNFS (Switzerland), NCBR (Poland), ANR (France), and FR MoH (France) presented the highest values of budget selected for award (Figure 11).

Unfortunately, despite the oversubscription rate of Israel, Malta, and Latvia none of the 20 proposals selected for funding included a research team from these funding countries. Similarly, for Spain (IDIVAL), Iceland (RANNIS), and Italy (AreSS), either a low number or zero proposals were submitted, excluding teams from these countries or funding agencies from participation in the selected for award projects.

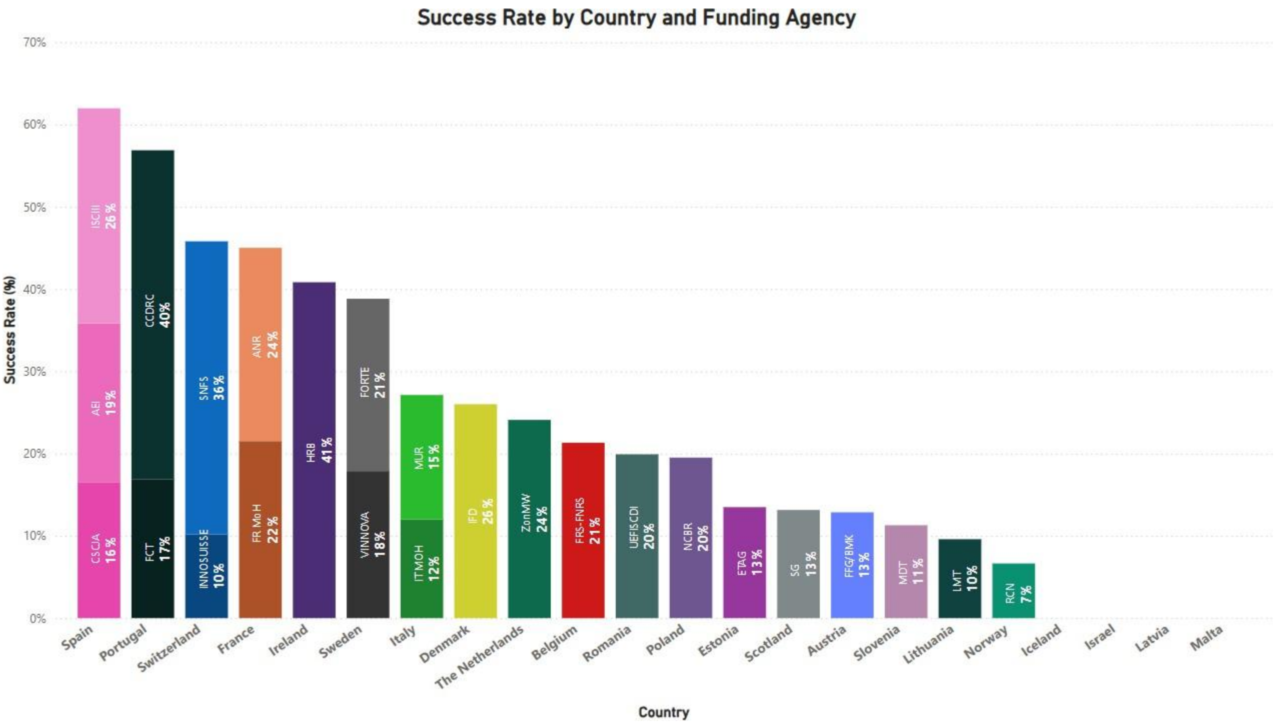

Figure 10. Distribution (%) of success rate (i.e., ratio of eligible funding initially requested to total requested funded amounts for select of award projects) per country and funding agency participating in the THCS JTC 2024.

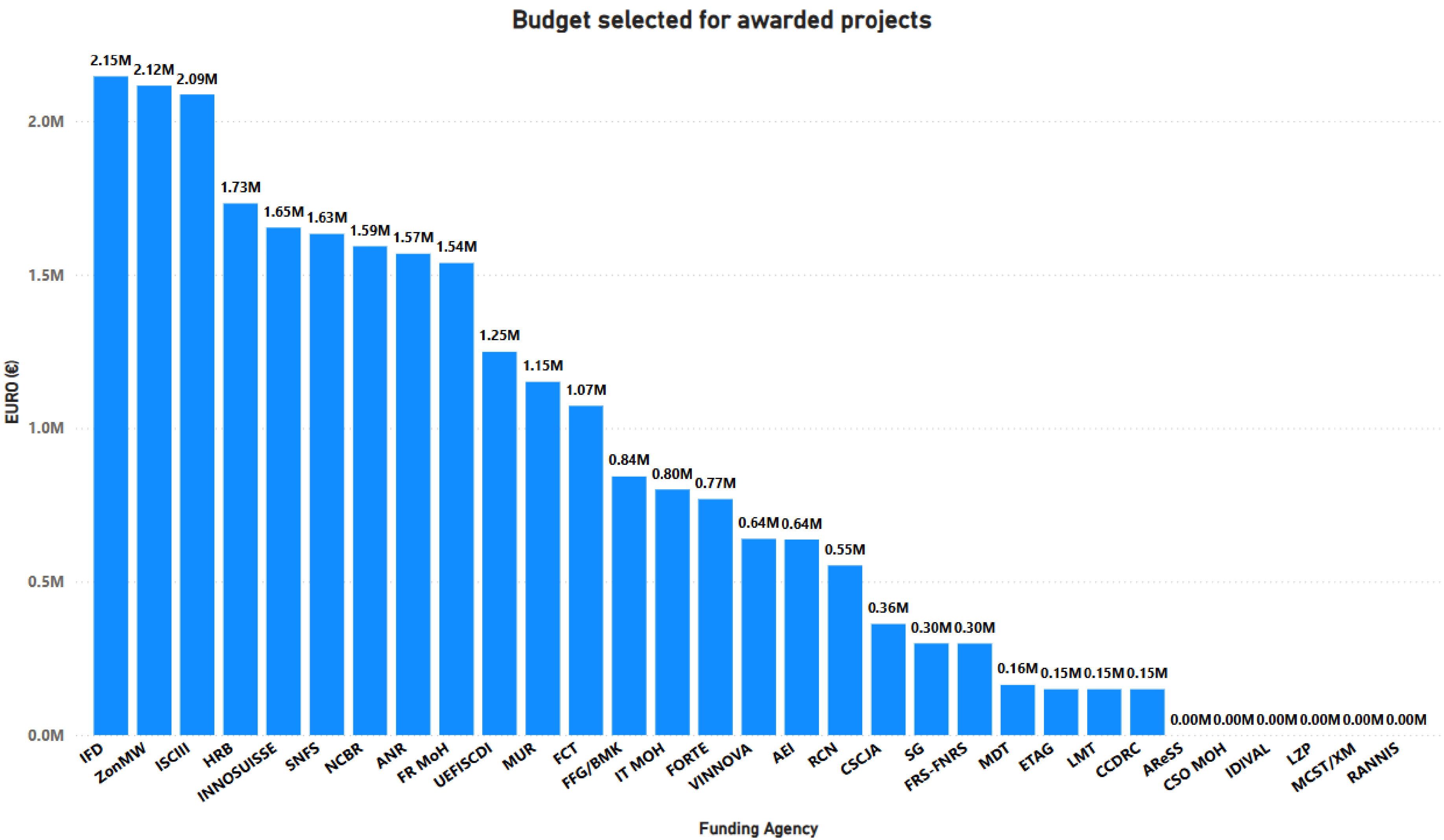

Figure 11. Overall amount of budget selected for awarded projects per funding agency participating in the THCS JTC 2024.

Project coordinators geographical distribution

At the full proposal stage, the project coordinators represented 19 countries participating in the JTC 2024, whereas the coordinators of the selected for award proposals represented 11 countries participating in the Call. At the full proposals' submission stage, Spain, Italy, The Netherlands, France, Sweden, and Switzerland presented the highest numbers of project coordinators. Whereas project coordinators from Spain, The Netherlands, France, Ireland, and Switzerland were the most successful (Figure 12).

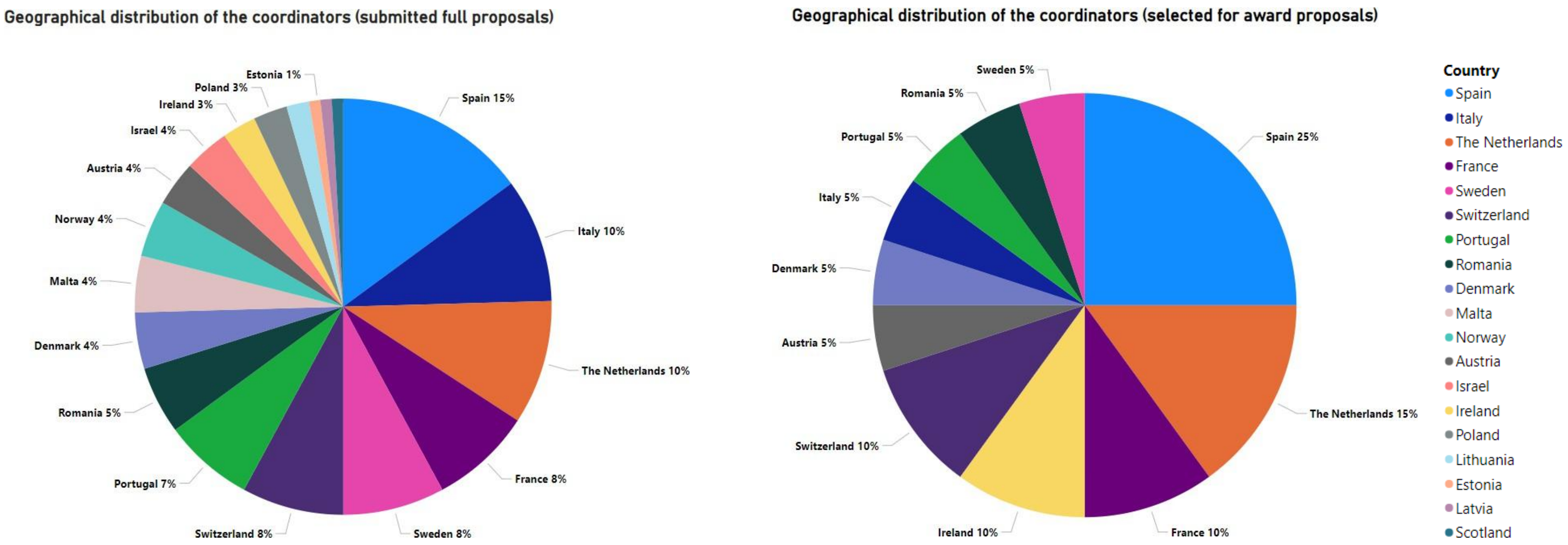

Figure 12. Total amount and geographical distribution (%) of the coordinators of the eligible full proposals (left) and selected for award proposals (right) under the THCS JTC 2024.

Type of partners

Both the full proposals submitted and those selected for funding are predominantly led by teams from academia, followed by healthcare and/or social welfare service providers. Small and medium enterprises (SMEs) accounted for approximately one-third of the submissions compared to academia, while the participation of large companies was minimal. Additionally, non-profit private partners contributed 5% of the submitted proposals, with a smaller proportion (2% of selected proposals) ultimately receiving funding. With regards to Patient organisations, although they accounted for only 3% of the submitted proposals, they represented 7% of the proposals selected for funding (Figure 13).

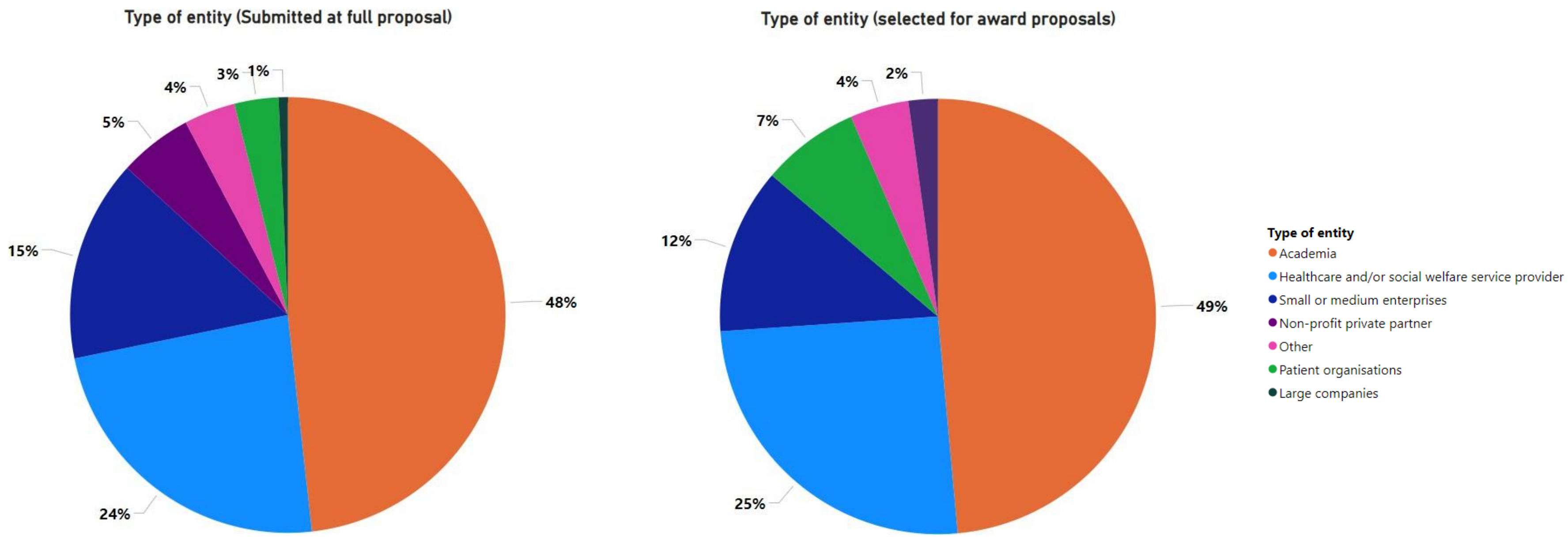

Figure 13. Total number and distribution (%) of partner types that submitted eligible full proposals (left) and those selected for award (right) under the THCS JTC 2024.

Gender distribution

The gender distribution data shows an imbalance, especially in coordinator roles, where more males than females were selected for funding. While males also outnumber females as partners, the gap is less pronounced. Interestingly, the collaborator role achieved an equal gender distribution at the selection stage, despite a slightly higher number of females submitting full proposals (Figure 14).

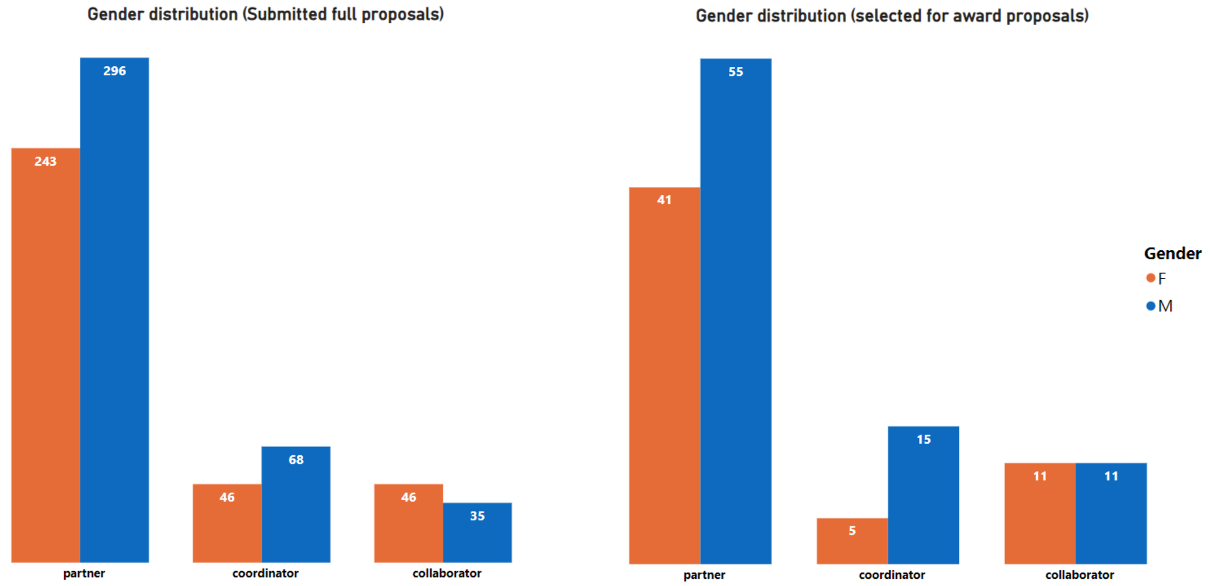

Figure 14. Total amount (female and male) and gender distribution (%) of proposals coordinators, partners, and collaborators (self-funded partners) at full proposal submission stage (left) and at selection for award stage (right) under the THCS JTC 2024.

Prevention Strategies Distribution

As previously mentioned, the JTC 2024 covered three Prevention Strategies: (1) Secondary Prevention; (2) Tertiary Prevention; and (3) Quaternary Prevention. Figure 15 shows that secondary and tertiary prevention dominated both submitted and selected for award proposals, while quaternary prevention was the least common. Interestingly, Tertiary prevention had the highest representation among selected for award proposals, despite secondary prevention being the most prevalent among submitted full proposals (Figure 15).

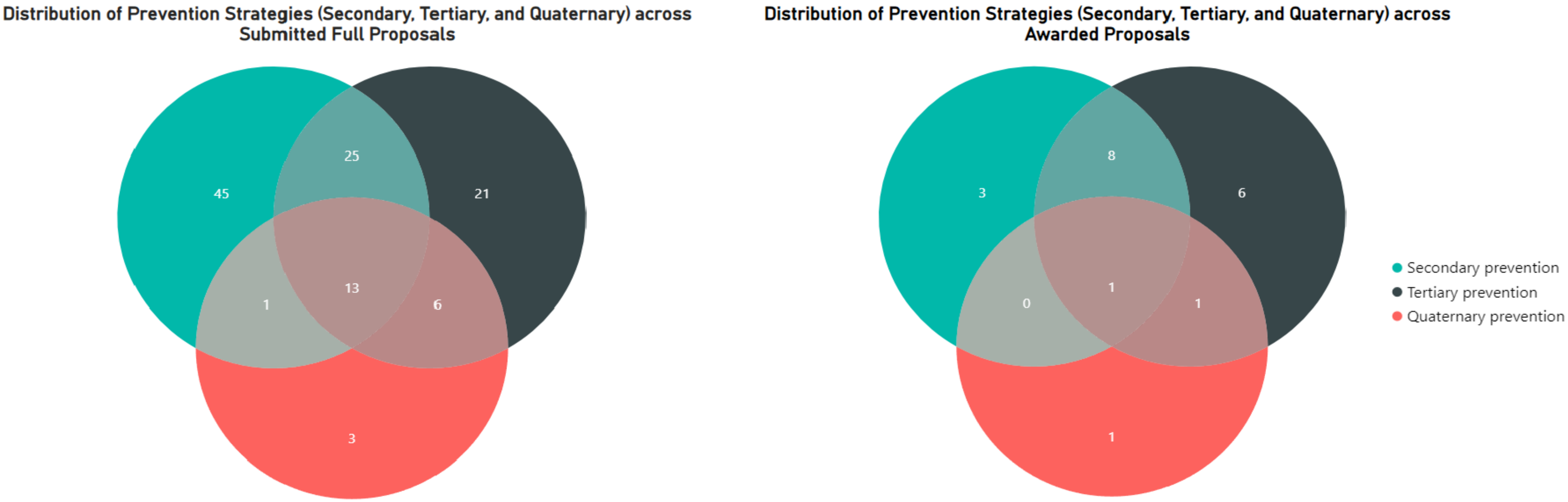

Figure 15. Distribution of Prevention Strategies in the submitted eligible full proposals (left) and selected for award proposals (right) under the THCS JTC 2024. (One proposal can address several Prevention Strategies)

Research Areas and Types

The JTC 2024 focused on three primary research domains: Health Technology Research, Public Health Research, and Health Economics Research. Figure 16 shows that majority of proposals favoured Health Technology Research and Public Health Research, both at submission and selection for award stage, while Health Economics Research was the least common. There was no awarded standalone proposal that focused on Health Economics Research (Figure 16).

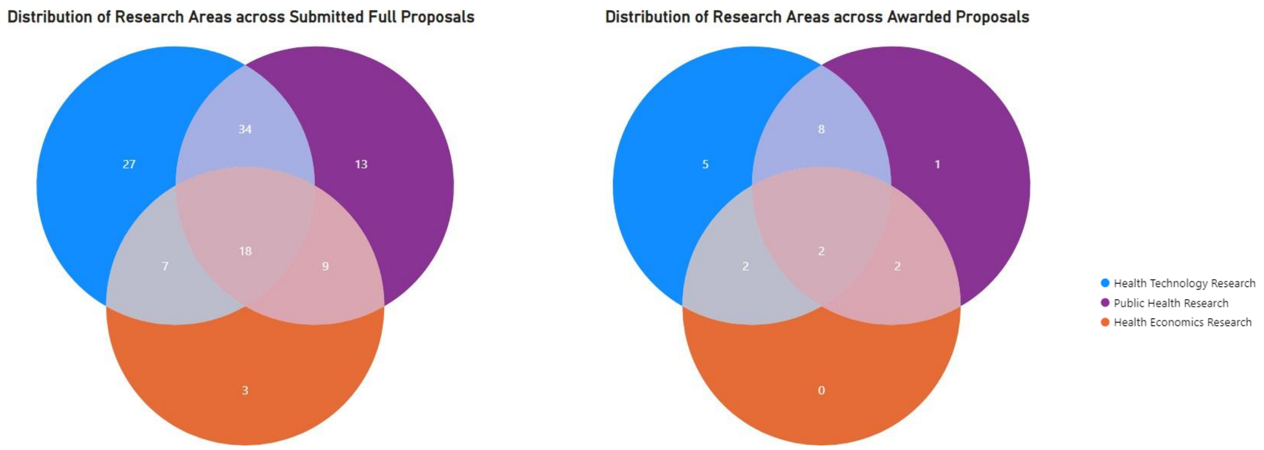

Figure 16. Distribution of submitted eligible full proposals (left) and selected for award proposals (right) as per the research areas selected under the THCS JTC 2024. (One proposal can address several research areas)

Finally, the JTC 2024 focused on six research types: Basic Research, Translational Research, Applied Research, Implementation Research, Demonstrator Projects-proof of concept, and Demonstrator Projects-validation of concept. The analysis revealed that the majority of eligible full proposals concentrated on Implementation Research and Basic Research, followed by Applied Research for both submitted and selected for award proposals. Translational Research, Demonstrator Projects Proof of Concept and Demonstrator Projects Validation of Concept were the least prominent for both submitted and selected for award proposals. It can be observed that Translational Research was the least represented in both submitted and selected for award proposals, with only one selected for award proposal (Figure 17).

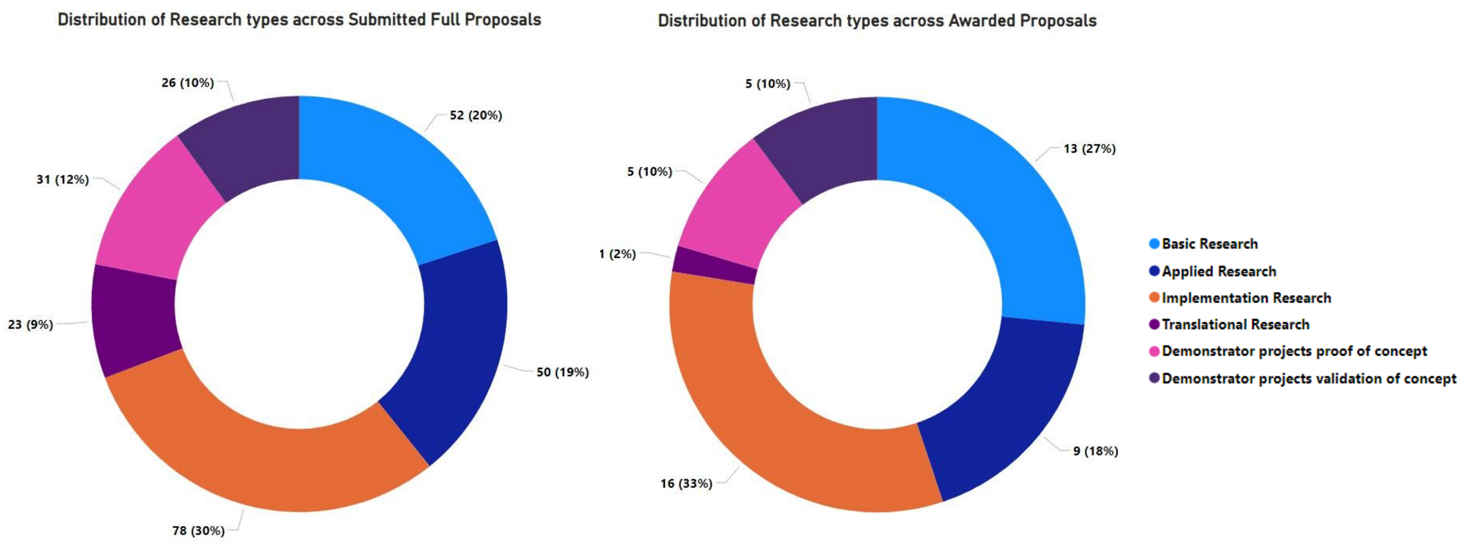

Figure 17. Total number and distribution (%) of submitted eligible full proposals (left) and selected for award proposals (right) according to the research types selected under the THCS JTC 2024. One proposal can address several research types.

Correlation between Project Duration and Total Costs (€)

The analysis of project duration and funds for both submitted and selected for award proposals reveal distinct patterns. For submitted proposals, there is a weak positive correlation, with longer projects generally incurring higher costs. However, costs vary significantly, particularly for projects lasting 30–36 months, where costs range widely. Outliers could be also identified, including high-cost projects with typical durations and low-cost projects with extended timelines, suggesting that factors beyond duration play a role in determining the projects' total costs (Figure 18).

For select for award proposals, the correlation between duration and cost is more consistent, with a narrower range of total costs clustered for projects lasting 30–36 months. A notable outlier exceeding €3.5M highlights some variability, but overall, selected for award proposals align more closely with predictable funding patterns, possibly due to stricter evaluation criteria (Figure 19).

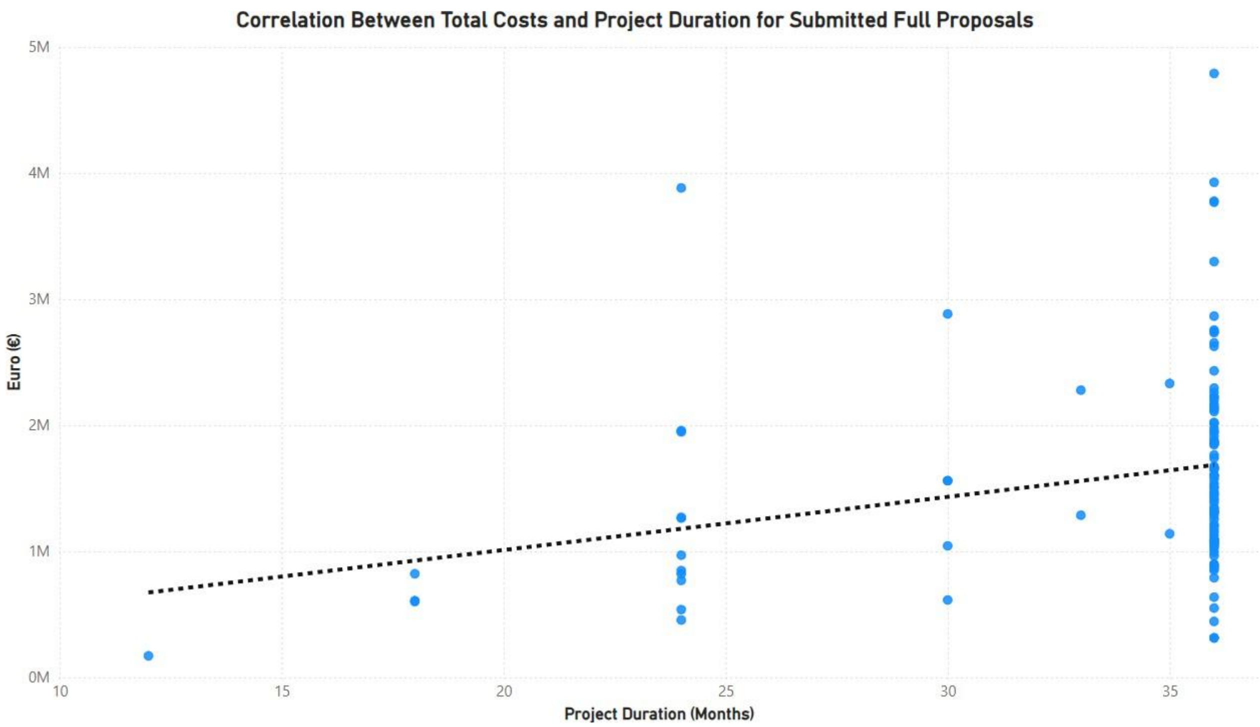

Figure 18. Correlation Between Total Costs and Project Duration for Submitted Full Proposals under the THCS JTC 2024.

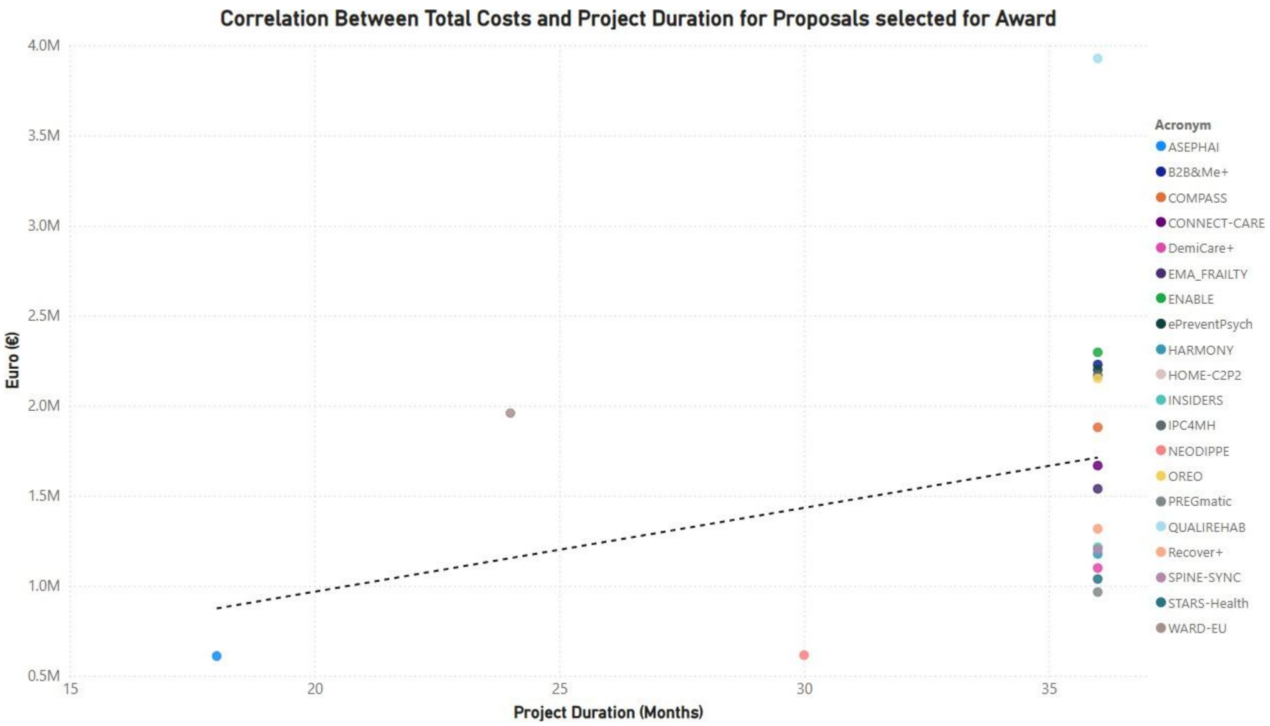

Figure 19. Correlation Between Total Costs and Project Duration for Selected for Award Proposals under the THCS JTC 2024

Funding Agencies acronyms JTC 2024

Country	Funding organisations (ACRONYM)
Austria	- Österreichische Forschungsförderungsgesellschaft (FFG)
Belgium	- FONDS DE LA RECHERCHE SCIENTIFIQUE- FNRS (F.R.S.-FNRS)
Denmark	- Innovationsfonden (IFD)
Estonia	- SIHTASUTUS EESTI TEADUSAGENTUUR (ETAG)
France	- AGENCE NATIONALE DE LA RECHERCHE (ANR) - MINISTERE DE LA SANTE ET DE LA PREVENTION (FR MOH)
Iceland	- RANNSOKNAMIDSTOD ISLANDS (RANNIS)
Ireland	- Health Research Board (HRB)
Israel	- MINISTRY OF HEALTH (CSO MOH)
Italy	- MINISTERO DELLA SALUTE (IT MOH) - MINISTERO DELL'UNIVERSITA E DELLA RICERCA (MUR) - AGENZIA REGIONALE STRATEGICA PER LA SALUTE ED IL SOCIALE (ARESS)
Latvia	- LATVIJAS ZINATNES PADOME (LZP)
Lithuania	- LIETUVOS MOKSLO TARYBA (LMT)
Malta	- MALTA COUNCIL FOR SCIENCE AND TECHNOLOGY/XJENZA MALTA (MCST/XM)
Norway	- NORGES FORSKNINGSRAD (RCN)
Poland	- NARODOWE CENTRUM BADAN I ROZWOJU (NCBR)
Portugal	- FUNDACAO PARA A CIENCIA E A TECNOLOGIA (FCT) - COMISSÃO DE COORDENACAO E DESENVOLVIMENTO REGIONAL DO CENTRO (CCDRC)
Romania	- Executive Agency for Higher Education, Research, Development and Innovation Funding (UEFISCDI)
Scotland	- SCOTTISH GOVERNMENT Technology Enabled Care and Digital Healthcare Innovation (SG)
Slovenia	- Ministry of Digital Transformation (MDT)
Spain	- INSTITUTO DE SALUD CARLOS III (ISCIII) - CONSEJERÍA DE SALUD Y CONSUMO DE LA JUNTA DE ANDALUCÍA (CSCJA) - FUNDACION INSTITUTO DE INVESTIGACION MARQUES DE VALDECILLA (IDIVAL) - AGENCIA ESTATAL DE INVESTIGACIÓN (AEI)
Sweden	- FORSKINGSRADET FOR HALSA ARBETSLIVOCH VALFARD (FORTE) - VERKET FOR INNOVATIONSSYSTEM (VINNOVA)
Switzerland	- SCHWEIZERISCHE AGENTUR FUR INNOVATIONSFORDERUNG (INNOSUISSE) - SCHWEIZERISCHER NATIONALFONDS ZUR FÖRDERUNG DER WISSENSCHAFTLICHEN FORSCHUNG (SNSF)
The Netherlands	- ZORG ONDERZOEK NEDERLAND ZON (ZonMw)

Projects selected for award JTC 2024

Acronym	Title
ASEPHAI	Developing a pathway to integrate a personalised Far-UVC disinfection system, as a tertiary preventative measure against worsening of patients' health in ICUs
B2B&Me+	A multi-country, European implementation project to reduce adverse birth outcomes, improve maternal and child health and reduce non-communicable disease risk
COMPASS	CrOss-cultural Model for Postdischarge Assistance and Sustainable digital Solutions in cardiac rehabilitation, through multidimensional validation approach
CONNECT-CARE	Inclusive Healthcare Access and Personalized Health Management for Children and Adolescents
DemiCare+	Preventing depression of informal caregivers of people with dementia
EMA_FRAILTY	Ecological monitoring for the assessment of frailty in older people
ENABLE	EvaluatioN of motor cApacities and telerehaBilitation in chiLdren with neuromotor disordErs
ePreventPsych	New Digital Strategies for Prevention of Psychosis and its Consequences
HARMONY	Data Enabled, Shared Fluid Management Platform In Haemodialysis
HOME-C2P2	Supporting children with complex chronic conditions or palliative needs at home: Clinical Command Center to coordinate efforts with primary healthcare
INSIDERS	INvolving underserved Screening Invitees in DEcision-making and Research on cancer Screening
IPC4MH	Immersive Prevention Centers for Mental Health
NEODIPPE	New Evidences On DIabetes Prevention and Patient Empowerment
OREO	Advancing personalized prevention strategies for chronic obstructive pulmonary disease and associated comorbidities that utilize existing IT technologies and novel AI based tools
PREG-Matic	PREGmatic: The right Pregnancy Care at the right place
QUALIREHAB	Early hybrid rehabilitation in children and young adults with chronic disease: the QUALIREHAB program
Recover+	Recover+. Digital rehabilitation and health education for osteoporosis and osteoarthritis
SPINE-SYNC	Multi-stakeholder platform for scoliosis education, communication, professional collaboration and health literacy
STARS-Health	STARS EU, the strategic alliance for regional transition Europe, integrates a health care team system around patients with lower health literacy and digital literacy
WARD-EU	Wireless Assessment of Respiratory and Circulatory Distress – Europe