



cecimo
European Association of Manufacturing Technologies

CECIMO GUIDE TO EU FUNDING OPPORTUNITIES

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INTRODUCTION

In the current digital age, research and innovation policy represents an important instrument towards achieving Europe's competitiveness and economic resilience and securing its strategic technological autonomy. In fields like computing power, Europe is determined to harness domestic technology and reduce dependencies in high-tech areas, value and supply chains, as well as vital infrastructures. It is thus not surprising that European digital and technical sovereignty is at the forefront of the EU policy debates.

Given the multiannual financial framework 2021-2027, Europe has a tremendous tool to strengthen the EU's global competitiveness, encourage innovation and enable a resilient, green and digital economy. Keeping these goals in mind, CECIMO reports on EU open calls opportunities, supported by the EU funding programmes, that will consolidate European strategic autonomy in high-level innovation and enable SMEs to spearhead innovative advancements.

The booklet provides an overview of the different funding programmes, namely: Horizon Europe, Digital Europe Programme, European Innovation Council (EIC) and EIC Accelerator, European Institute of Innovation and Technology (EIT) Manufacturing, Erasmus+, as well as a description of the Cascade funding, its relevance for SMEs and the SMART EUREKA Cluster Program on Advanced Manufacturing.

Additionally, the booklet centres around open calls for proposals within key domains such as digitisation, cybersecurity, Artificial Intelligence (AI), Human-Robot collaboration, Additive Manufacturing (AM), sustainability, skills development and Metaverse, among others.

CECIMO introduced this new resource, so you can find all the necessary information about the most relevant funding opportunities for the companies and organisations in our network.

EU FUNDING PROGRAMMES

1 Horizon Europe

The impact of the pandemic and following Russia's military invasion of Ukraine, gave a new impetus to sustainable development, in parallel with the digital and innovation spheres. The Horizon Europe 2021-2027 Multiannual Financial Framework has allocated a budget of €95.5 billion to the ninth funding programme (FP9). In 2021, it replaced Horizon2020 and it is expected to advance Europe's scientific and technological competencies. Horizon Europe is the EU's Research and Innovation programme that focuses on three main pillars: open access to science, tackling global challenges (health, resilience, green and digital transitions) and the pursuit of an innovative Europe through increasing European industrial competitiveness.

The 2023-2024 Work Programme focuses, among others, on the Digital, Industry and Space to speed up the clean energy transition for a greener, more sustainable, more digital, inclusive and resilient Europe. In terms of promoting the industrial sector and emerging technologies, the Work Programme will focus on the development of human-centric, trustworthy, safe and robust AI, Data and Robotics. Moreover, it will support cybersecurity practices, as well as the extraction and processing of raw materials to reduce Europe's strategic dependencies.

For additional information about the application process, please visit the website: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/common/guidance/om_en.pdf.

OPEN CALLS FOR HORIZON EUROPE FUNDING

CALL	OPENING DATE	DEADLINE	OVERVIEW	BUDGET	URL	CASCADE FUNDING
<p>Digital and emerging technologies for competitiveness and fit for the Green Deal</p> <p>HORIZON-CL4-2024-DIGITALEMERGING-01-03</p>	15/11/2023	19/03/2024	Develop robots able to perform a range of different and non-repetitive functional tasks and able to operate in harsh complex and dynamic working environments. This will maintain Europe's scientific excellence, support European industries and ensure sovereignty of key technologies.	30 000 000 €	Funding & tenders (europa.eu)	✗
<p>Digital and emerging technologies for competitiveness and fit for the Green Deal</p> <p>HORIZON-CL4-2024-DIGITAL-EMERGING-01-22</p>	15/11/2023	19/03/2024	Develop software engineering methods and tools that would allow smart fault-prediction and selfrepair by using emerging techniques (AI and digital technologies). This system would support agile modelling, verification and validation, as well as vulnerability assessment and mitigation.	13 500 000 €	Funding & tenders (europa.eu)	✗
<p>Digital and emerging technologies for competitiveness and fit for the Green Deal</p> <p>HORIZON-CL4-2024-DIGITALEMERGING-01-04</p>	15/11/2023	19/03/2024	Create a system using combined robotics, data and AI solutions to address resource optimisation challenges in the green transition and accelerate the circular economy. The project will validate sustainable solutions and boost the uptake of AI, Data and Robotics	60 000 000 €	Funding & tenders (europa.eu)	✓

<p>A human-centred and ethical development of digital and industrial technologies</p> <p>HORIZON-CL4-2024-HUMAN-01-06</p>	<p>15/11/2023</p>	<p>19/03/2024</p>	<p>Contribute to enhanced robustness, performance and reliability of AI systems or to improve accountability, transparency and autonomy of AI systems. The scope of the project is to advance AI algorithms that can perform safely, reliably and predict when operational circumstances are no longer valid.</p>	<p>30 000 000 €</p>	<p><u>Funding & tenders</u> (europa.eu)</p>	<p>×</p>
<p>A human-centred and ethical development of digital and industrial technologies</p> <p>HORIZON-CL4-2024-HUMAN-01-07</p>	<p>15/11/2023</p>	<p>19/03/2024</p>	<p>Develop two proposals: either a collaborative AI system focusing on human-robot collaboration or a collaborative AI system focusing on collaborative decision-making by integrating automatic reasoning systems and simulations.</p>	<p>20 000 000 €</p>	<p><u>Funding & tenders</u> (europa.eu)</p>	<p>×</p>
<p>Tools and technologies for a healthy society (Single stage - 2024)</p> <p>HORIZON-HLTH-2024-TOOL-11-02</p>	<p>26/10/2023</p>	<p>11/04/2024</p>	<p>The topic supports regenerative medicine through the use of 3D bio-printing for a healthy society. Specifically the aim is to overcome challenges in tissue engineering (fabrication of tissues and organs), drug testing and other biomedical applications through bio-printing strategy, improved existing equipment and technologies.</p>	<p>25 000 000 €</p>	<p><u>Funding & tenders</u> (europa.eu)</p>	<p>×</p>

<p>Resilient Value Chains 2024</p> <p>HORIZON-CL4-2024-RESILIENCE-01-41</p>	<p>15/11/2023</p>	<p>13/03/2024</p>	<p>To create a sustainable and digital Europe; Increase resilience of SMEs, by fostering their technological and social innovation to support their transition to more sustainable business models and more resource-efficient and circular processes and infrastructures; and Increase competitive sustainability of SME</p>	<p>10 000 000 €</p>	<p><u>Funding & tenders</u> (europa.eu)</p>	<p>✓</p>
<p>Next generation of scientific instrumentation, tools, methods, and advanced digital solutions for RIs (2024)</p> <p>HORIZON-INFRA-2024-TECH-01-04</p>	<p>06/12/2023</p>	<p>12/03/2024</p>	<p>The aim of this topic is to deliver digital twin solutions which advance the state-of-art of European RIs and show transformative potential in RI operations through AR/VR. Therefore, it should develop digital twin solutions for RIs that take advantage of AR/VR technologies, include technology validation and prototyping activities and include relevant training for the operation and use of these new solutions</p>	<p>24 000 000 €</p>	<p><u>Funding & tenders</u> (europa.eu)</p>	<p>✗</p>

2 European Innovation Council (EIC)

The European Innovation Council, with a budget of €10.1 billion (2021-2027), is already playing a leading role in the European innovation ecosystem, given it is the third pillar of the Horizon Europe Programme. Notably, the EIC has set out the Work Programme 2024 worth over €1.2 billion for funding opportunities in strategic technologies and scaling up companies. The EIC is more than a funding programme as it supports SMEs and high-risk projects through a combination of business acceleration services, programme managers and substantial funding for future growth and deep tech innovations. Moreover, the EIC cooperates with the EIT to reinforce the European Innovation Ecosystem. Particularly the EIC underpins breakthrough technologies and game-changing innovations through three funding schemes: the EIC Pathfinder: for advanced research on breakthrough or game-changing technologies; the EIC Transition for validating technologies and developing business plans for specific applications; and the EIC Accelerator for SMEs (and in some cases small mid-caps up to 500 employees) to develop breakthrough innovations with high risk and high impact.

EIC Accelerator

The [EIC Accelerator](#), worth €1.137 billion, creates new markets or disrupts the already existing ones with the focus on scaling up high-impact innovations and welcomes applications from start-ups and SMEs notably with female CEOs. The ideas that are being examined for funding should be cutting-edge, centring around scientific and/or technological breakthroughs (deep technology). The risks and time frame impede to attract more funding for such technologies, and thus, the EIC Accelerator enables a complete investment in pioneering innovation and bolsters the later stages of technology development as well the scale-up in a shorter timeframe. To that end, the technology component of the innovation must have been tested and validated in a laboratory and other relevant environments (e.g. at least Technology Readiness Level 5). Therefore, the applications can be submitted either through:

- EIC **Accelerator Open**, which has no predefined thematic priorities and is open to proposals in any field of technology, with a budget in 2024 of €375 million.
- EIC **Accelerator Challenges**, which focuses on challenges related to human centric generative AI made in Europe; virtual worlds and augmented interaction in high impact applications; and smart edge/emerging quantum technology components with a budget in 2024 of €300 millions.

The EIC Accelerator is a 3-step process. It starts with a short application, which can be submitted at any time via the online platform. It continues with the full application, which has its deadline dates on 13th of March 2024 and 3rd of October 2024. Lastly, it finishes with the face-to-face interview.

- **For additional information about the application process and the open calls, please visit the [EIC Accelerator Guide for Applicants](#).**

CALL	OPENING DATE	DEADLINE	OVERVIEW	BUDGET	URL	CASCADE FUNDING
<p>EIC Accelerator 2024 - Short application</p> <p>HORIZON-EIC-2024-ACCELERATOR-01</p>	03/01/2024	24/12/2024	<p>EIC Accelerator focuses in particular on innovations building on scientific discovery or technological breakthroughs ('deep tech'). The technology component of your innovation must therefore have been tested and validated in a laboratory and other relevant environment (e.g., at least Technology Readiness Level 5). Applicants can submit proposal through EIC Accelerator Open (open to proposals in any field of technology) and EIC Accelerator Challenges (in predefined areas of emerging and strategic technologies).</p>	675 000 000 €	<p>Funding & tenders (europa.eu)</p>	<p>×</p>

4 Digital Europe Programme - DIGITAL

Another funding programme, the [Digital Europe Programme \(DIGITAL\)](#), which is being executed through four multiannual work programs, has also called for project proposals within the EU framework, allocating a total budget of €7.59 billion for the period 2021-2027. Its primary focus lies on propelling the digital transformation of small and medium-sized enterprises (SMEs), industries, and public administrations.

The COVID-19 pandemic underscored the significance of technology and exposed Europe's reliance on external sources. As a result, the Digital Europe Programme assumes a pivotal role in advocating for the adoption of advanced digital technologies such as artificial intelligence (AI), cutting-edge computing, cybersecurity, and robust data infrastructure. These technologies are specifically targeted at critical sectors such as energy, environment, manufacturing, agriculture, education, and healthcare. The overarching objective is to facilitate the dual transition encompassing both digital innovation and environmental sustainability.

Moreover, the Digital Europe Programme actively addresses the need for upskilling and reskilling the workforce to adapt to these advanced technologies. It extends support to industries, small and medium-sized enterprises (SMEs), and public administrations through an enhanced network of European Digital Innovation Hubs (EDIH). Notably, the second Work Programme of the Digital Europe Programme for the period 2023-2024, endowed with a budget of €909.5 million, is geared towards bridging the gap between the skills possessed by the workforce and the demands of the market. A key emphasis of this program is to attract a higher number of skilled technicians and graduates, particularly in the realm of semiconductor production.

From a strategic perspective, this program aligns seamlessly with the vision outlined by the EU Commission for the Digital Decade. Consequently, it is anticipated to play a pivotal role in achieving the digital aspirations set for the year 2030 and streamlining the widespread adoption of digital technologies.

The new funding calls will focus on the uptake of innovative AI and cybersecurity solutions notably from SMEs and auditing of cybersecurity preparedness. Along the lines, Programmes' objectives will drive the modernisation of the European industrial base, and the implementation of AI will complement human activity rather than threaten it.

For additional information about the application process, please visit the [website](#) and download the “DIGITAL Europe Work Programme 2023-2024” file.

CALL	OPENING DATE	DEADLINE	OVERVIEW	BUDGET	URL	CASCADE FUNDING
<p>Deployment Actions in the area of Cybersecurity</p> <p>DIGITAL-ECCC-2024-DEPLOY-CYBER-06</p>	16/01/2024	26/03/2024	<p>The call will support European SMEs, with a focus on micro and small enterprises, to strengthen their cybersecurity capacities and to support the implementation of the proposed Regulation on the Cyber Resilience Act (CRA)</p>	22 000 000 €	<p>Funding & tenders (europa.eu)</p>	✓

5 European Innovation and Technology (EIT) Manufacturing

EIT Manufacturing stands for the European Innovation and Technology that connects key manufacturers in Europe with a focus on innovation to bolster global competitiveness and sustainability in terms of manufacturing. The purpose of this innovation community is to bring new technologies to the market, protect the EU's strategic interests and develop innovation capabilities for European States that still lag behind in terms of industry modernisation.

Along with that, EIT Manufacturing also stresses the need for digital platforms, which constitute a strong backbone for AI and hence, would create high-value manufacturing in value networks across Europe. Every year, the application process for open calls is split into two rounds, meaning that missing the deadline for the first call round will be impossible to proceed to the second call round. Nevertheless, we recommend you regularly check on the EIT Manufacturing website for potential new calls in order to stay updated and familiarise yourselves better with the funding opportunities.

For the moment, there are no relevant EIT Manufacturing open calls.

6 Erasmus +

Erasmus+ is the EU's primary funding program, supporting significant projects in inclusive digital education, youth learning mobility, and the adaptation of education and training systems to address the dual challenge of digital and environmental transitions. Emphasising inclusivity, the program aims to inspire more individuals and organisations to acquire digital and green skills, as well as knowledge in Science, Technology, Engineering, and Mathematics (STEM), while also engage in international projects for a broader cooperation. To that end, the Erasmus+ Programme implements:

- Key Action 1 (KA1) – Learning mobility;
- **Key Action 2 (KA2) – Cooperation among organisations and institutions;**
- Key Action 3 (KA3) – Support to policy development and cooperation;
- Jean Monnet Actions.

For the period of 2021 to 2027, Erasmus+ has a substantial budget of €26.2 billion dedicated to advancing education and skills development. Given that 2023 marked the European Year of Skills, Erasmus+ remains committed to driving innovation and skills competencies in the coming years. Addressing the skills gap is a priority, involving the identification of market-relevant skills and the development of training programs. Active cooperation between Higher Education (HE), Vocational Education and Training (VET) systems, and enterprises, as part of KA2, contributes to diverse collaboration, enhanced competencies, and the recognition/validation of qualifications through certifications. Click here for a full overview of [Erasmus+ 2024 Annual Work Programme](#).

For additional information about the application process, please click on [Part C - Information for Applicants](#).

CALL	OPENING DATE	DEADLINE	OVERVIEW	BUDGET	URL	CASCADE FUNDING
Centres of Vocational Excellence ERASMUS-EDU-2024-PEX-COVE	05/12/202	07/05/2024	The call aims to establish collaborative networks of Centres of Vocational Excellence at national and international levels, which will collaborate with educational institutions, training centres as well as industries/companies (SMEs). This will ensure development of high quality skills and competences leading to quality employment and career-long opportunities	56 000 000 €	Funding & tenders (europa.eu)	×
Capacity building in the field of Vocational Education and Training (VET) ERASMUS-EDU-2024-CB-VET	30/11/2023	29/02/2024	Lump-sum grant project call that focuses on cooperation between various stakeholders on VET management and innovation. The call intends to engage VET with providers with private sector enterprises and associations to explore employment opportunities and jointly develop solutions.	25 250 170 €	Funding & tenders (europa.eu)	×
Alliances for Education and Enterprises ERASMUS-EDU-2024-PI-ALL-INNO-EDU-ENTERP	05/12/2023	07/03/2024	Lump-sum grant project call Lot 1: Alliances for Education and Enterprises that aims to boost innovation through cooperation and flow of knowledge among higher education, VET and enterprises. The call will be focused on talent and skills development (digital and green competencies) as well as deep tech technologies.	62 000 000 €	Funding & tenders (europa.eu)	×

<p>Alliances for Sectoral Cooperation on Skills (implementing the 'Blueprint')</p> <p>ERASMUS-EDU-2024-PI-ALL-INNO-BLUEPRINT</p>	<p>05/12/202</p>	<p>07/03/2024</p>	<p>Lump-sum grant project call Lot 2: Alliances for Sectoral Cooperation on Skills (implementing the 'Blueprint') that aims to boost innovation through cooperation and flow of knowledge among higher education, VET and enterprises. The call will be focused on talent and skills development (digital and green competencies)</p>	<p>62 000 000 €</p>	<p><u>Funding & tenders</u> (europa.eu).</p>	<p>×</p>
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7 Cascade Funding

Cascade funding, also known as Financial Support to Third Parties (FSTP), is a mechanism used by the European Commission to allocate subsidies to SMEs and start-ups to motivate them to deploy innovative digital solutions. The difference between the Cascade funding and the other funding programs lies in the simplified administrative process with SMEs, meaning that some projects already financed by the EU can issue open calls for smaller projects in the uptake of digital innovation since participating in a European project means dealing with a large amount of bureaucracy and is not a straightforward process especially for small companies with limited budget. Put differently, Cascade funding refers to grants that are administered and paid by the beneficiaries of the European project that supports them and thus, project leaders or coordinators are responsible for financing decisions, rather than the European Commission.

These open calls tend to be more competitive, with the European focus on specific innovative technologies that will encourage the development of entirely new knowledge-based industries. Most of Cascade's funding address digital fields such as Industry 4.0 (Information and Communication Technologies for the industry), Big Data, Internet of Things (IoT), Robotics and Innovation through value chains. To that end, this mechanism increasingly contributes to knowledge transfer and exploitation, take-up of technologies, building and scaling up innovative ecosystems.

For the moment, there are no relevant cascade funding open calls.

OPENING
DATE

BUDGET

URL

CASCADE
FUNDING

8 SMART EUREKA Cluster Program

SMART stands as a flexible and industry-oriented program within the EUREKA Cluster focusing on Advanced Manufacturing. Its primary goal is to cultivate cooperative, global, and market-oriented initiatives in Research, Development, and Innovation (R&D&I). Supported by CECIMO's member associations AFM and AGORIA, from Spain and Belgium respectively, SMART endeavours to enhance the competitiveness, expansion, and attractiveness of the European discrete manufacturing industries. This objective is realised through the promotion of R&D&I activities within an inclusive community that encompasses large industries, SMEs, associations, Research and Technology Organizations (RTOs), and academia.

The program identifies six key technology areas crucial for advancing the competitiveness of the European manufacturing industry. These domains, as outlined in the SMART Technology Roadmap, are:

- Advanced Manufacturing Processes
- Intelligent & Adaptive Manufacturing Systems
- Person-Machine Collaboration
- Sustainable Manufacturing
- Digital, Virtual & Efficient Companies
- Customer-Based manufacturing

Nevertheless, SMART itself does not provide funding for projects; instead, it supports innovative project proposals by assisting in the development of a finalised project proposal and identifying national funding opportunities. Subsequently, national applications for funding should be submitted after obtaining SMART labeling, or earlier depending on national procedures. Given the variation in submission deadlines across countries, each project partner or consortium's national contact person should proactively engage with the relevant public authority's contact person well in advance. This approach ensures awareness of the deadline, information requirements, and any necessary forms for submission.

For additional information on national funding and countries, please consult [SMART webpage](#).

CONCLUSION

Over the last two decades, the impact of emerging technologies and digitisation have been the primary drivers of worldwide competition. Living in an era of information and geostrategic rivalry, technology has created new sources of power, thus emphasizing the importance of investing in innovation, research and technology. EU funding programmes can be seen as a vital puzzle piece when it comes to strengthening the EU's innovation autonomy and resilience.

The new investment vehicle, the EIC Accelerator concentrates on emerging technologies and on deep-tech solutions to diminish European dependence on raw materials. Within Horizon Europe Cluster 4 (Digital, Industry, Space), the focus on twin transitions, digitized and resilient industry, digital and emerging technologies, and human-centered industrial innovation is a concerted push to enhance European competitiveness and autonomy in the global manufacturing landscape. Consequently, participation in new EU calls related to AI, data, robotics, cybersecurity, Metaverse and skills development stands as a mutually advantageous opportunity. This engagement not only strengthens the EU's technological competitiveness but also empowers SMEs to lead the way in pioneering innovation.

CECIMO IN ONE PAGE

CECIMO represents
1500

industrial
enterprises in
Europe (EU + UK +
EFTA + Türkiye)

Over **80%**
of which are
SMEs

CECIMO covers
97% of the total
machine tool production
in Europe and about
33% worldwide

CECIMO accounts for more than
150.000
employees

15
national associations of
machine tool builders