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ANNEX

ANNEX

to the

Commission Implementing Decision

on the financing of the Digital Europe Programme and the adoption of the multiannual work programme for 2025 - 2027

ANNEX
DIGITAL EUROPE

Work Programme 2025 – 2027

INTRODUCTION

This Work Programme (WP) 2025-2027 of the Digital Europe Programme (DIGITAL) is the last one for the duration of the Multiannual Financial Framework 2021-2027. It is focused on accomplishing and on ensuring the sustainability of the actions that have been started and pursued under the previous WPs, such as different data spaces, bringing them from the preparatory to deployment phase.

It also continues to further the EU's goals in digital transformation as defined in the communication 2030 Digital Compass: The European way for the Digital Decade[1] and in the Path to the Digital Decade[2] policy programme.

At the same time, this WP reflects a few new actions and responds to contemporary challenges identified in the political priorities of the new Commission around tech sovereignty, democracy and security, and linked notably to the implementation of the Chips Act, the Artificial Intelligence (AI) Act and the AI Innovation package communication[3] and the objective to make Europe an AI continent thriving on development, integration and adoption of AI thanks to the forthcoming Apply AI Strategy, the EU Digital Identity Wallet, the Cyber Solidarity Act and the Cyber Resilience Act, as well as the Interoperable Europe Act. As the impact of rapidly evolving generative AI technology is reverberating through the technology sector, this WP builds on previous actions in the area of AI and is upgrading existing testing facilities to validate generative AI (GenAI) applications. It is also supporting the development of tools for GenAI applications and its uptake by the businesses and the public administration. Healthcare remains an important area where technologies converge to create advanced applications such as Virtual Human Twins and AI-based solutions for medical imaging or diagnostics, screening, and treatment. Virtual worlds testbeds for industrial applications (such as manufacturing, construction, or industrial design) and societal applications (such as education, cultural heritage or healthcare) would support innovators to test and validate in real-world environments their technologies and solutions. These advancements in AI and generative AI applications are expected to contribute to further digitalisation of other sectors, including sectors key for the green digital transition such as energy and mobility.

The European Digital Innovation Hubs (EDIHs) covered in the European Digital Innovation Hubs Work Programme 2021-2023, will continue to support in the following years the small and medium-sized enterprises (SMEs), mid-caps and public sector in their twin digital-green transitions, also in their effort to harvest the benefits of AI and other advanced technologies. The EDIHs services are now available in all EU Member States (MS) as well as in most associated countries and this WP reinforces the network while maximising the impact of best practices from the field.

In a period of heightened geopolitical tensions, and increasing cybersecurity risks, not least following Russia's war of aggression against Ukraine, the area of cybersecurity is more than ever the bedrock of European digital transformation. This WP aims to strengthen response and reporting to cyber threats and incidents across the EU by creating the EU Cybersecurity Reserve and by supporting the Cyber Resilience Act single reporting platform, while also, developing the next stage of Cybersecurity Skills Academy.

One of the Digital Decade targets is to significantly increase the number of information and communication technology (ICT) specialists in Europe by 2030, while promoting the access of women to this field and increasing the number of ICT graduates. In addition to other actions on Advanced

[1] Europe's Digital Decade: digital targets for 2030

[2] 'Path to the Digital Decade': the EU's plan to achieve a digital Europe by 2030

[3] Commission launches AI innovation package to support Artificial Intelligence startups and SMEs

Digital Skills, including the previously mentioned Cybersecurity Skills Academy and the financing of the next wave of specialised higher education programmes, four new academies will be established in key digital areas (quantum, GenAI/AI factories, semiconductors and virtual worlds) to contribute to the EU's goals of tackling the existing gap in advanced digital skills and increase the digital talent pool. This WP follows consultations with the Member States. It uses as a reference point Annex 1 of Regulation (EU) 2021/694 as amended by Regulation (EU) 2023/1781.

The funding will be available for the EU Member States as well as countries associated to the Digital Europe Programme (unless otherwise specified in the topic description, tender specifications and call for proposals).[4] EEA EFTA countries (Iceland, Liechtenstein and Norway) are fully associated to the Digital Europe Programme and benefit from a status equivalent to that of the Member States. The application of Article 12(5) or Article 12(6) is indicated where appropriate and in consistency with the WP 2021-2022 and WP 2023-2024.

Based on Article 26 of the Digital Europe Regulation, the Digital Europe Programme is undergoing an interim evaluation that will examine its effectiveness, efficiency, coherence, relevance and EU-added value four years after the start of the implementation. Results will inform future actions under the next multiannual financial framework (MFF) period.

OBJECTIVES

The Digital Europe Programme is reinforcing the EU's critical digital capacities by focusing on the areas of AI, cloud and data, cybersecurity, advanced computing, and semiconductors, the deployment of these technologies and their best use for businesses and public administration.

Actions in this WP will support technologies, infrastructures and other capacities and capabilities that are strategically important for Europe's future and, in particular, will achieve the following objectives:

- Support the implementation of AI Factories under the EuroHPC Joint Undertaking (EuroHPC JU) that include the acquisition of AI optimal and energy efficient supercomputers.
- Support the next phase in the evolution of the Destination Earth initiative, which contributes to the tackling of **climate adaptation and disaster risk management challenges,** in line with the EU Adaptation Strategy[5], and provides additional services to more users and ensuring technical interoperability with the integration and deployment of new Digital Twins.
- Ensure the deployment of sectorial **common data spaces** based on the secure and energy-efficient federated **cloud-to-edge infrastructure** that are accessible to businesses and the public sector across the EU, setting the technological cornerstones for the deployment of AI; European data spaces are an indispensable means for the implementation of AI Factories[6].
- Support the implementation of the **Apply AI Strategy** by accelerating and strengthening the **adoption of AI technologies in Europe**, significantly contributing to the deployment of Generative AI applications, AI usage in the health and care sector, virtual worlds test beds and enforcing the world's first comprehensive AI law – the **AI Act.**
- Support to the **European Digital Innovation Hubs** (EDIHs) as a means for the large-scale deployment aimed by the **Apply AI Strategy** via the support of private and public organisations

[4] Countries associated to the DIGITAL Europe programme in January 2025 are Ukraine, Montenegro, North Macedonia, Serbia, Albania, Kosovo, Türkiye, Moldova, and Bosnia and Herzegovina. As of 1 January 2025, Switzerland can also participate in the Programme under transitional arrangements.

[5] EU Adaptation Strategy

[6] Communication on boosting startups and innovation in trustworthy artificial intelligence

all across Europe, including government at national, regional or local level, in their digital transformation.

- Strengthen the preparedness and resilience of the key sectors and response actions across the EU to **cyber threats**. Cybersecurity solutions can improve the resilience and security of critical infrastructures for global communications, including submarine cables.
- Further support the excellence of EU education and training institutions in digital to improve the capacity to nurture and attract talent through specialised **advanced technology academies and education programmes.**
- Continue supporting the development of efficient, high-quality, **interoperable digital public services**, and contributing to the **digital transformation of the public sector.**
- Facilitate the **new EU Digital Identity Wallet architecture** and its European Trust Infrastructure, as well as promote its adoption by the ecosystem participants in all the Member States, with a focus on the promotion of solutions for business applications, thus paving the way towards the implementation of a European Wallet for businesses.
- Support the development of **semiconductor technologies and solutions** for production and commercialization of new semiconductor chips under the InvestEU financial instrument.
- Promote cross-national cooperation and pan-European digital transformation by supporting multi-country projects and the **European Digital Infrastructure Consortia (EDICs)** projects, and facilitate cumulative or combined funding, also by introducing the Strategic Technologies for Europe Platform (STEP) Seal label.

In addition, the EuroHPC Joint Undertaking (EuroHPC JU), the European Cybersecurity Competence Centre (ECCC) and the Chips Joint Undertaking (Chips JU) contribute to the objectives of the Digital Europe Programme through their separate work programmes.

THIRD COUNTRY PARTICIPATION

According to Article 18 of the Regulation (EU) 2021/694, participation in the actions is open to entities established in **eligible** third countries, i.e., only EEA EFTA countries and third countries having signed an association agreement to the Digital Europe Programme, in accordance with the association agreement they have signed at the time of signature of the grant agreement, even though the text of the actions described in this WP only refers to the Member States.

The conditions for **international cooperation** with third countries, international organisations and bodies established in third countries, are specified in Article 11 of the Regulation (EU) 2021/694. Cooperation and association agreements may be subject to adequate security, intellectual property (IP) protection and reciprocity guarantees.

The objectives of the Digital Europe Programme can only be achieved by taking into account duly justified security interests of the Union, notably in the area of cybersecurity or protection of data against unauthorised disclosure. This would also cover, inter alia, the security of supply chains, critical infrastructures, public order and the protection of the Union's critical technology to prevent the leakage of sensitive emerging technologies, as well as other dual-use items, to destinations of concern that operate civil-military fusion strategies.

Art. 12 of the Regulation (EU) 2021/694 establishes **security restrictions and relevant criteria for the application of such restrictions** as regards the participation of non-EU entities, i.e. entities not established in the EU, or established in the EU but not controlled by a Member State or national from of a Member State, and international cooperation.

The concern is that sensitive European data that can relate to security interests of the Union could potentially end up in the hands of third- country authorities (national intelligence and security agencies in particular) even without the knowledge of the individuals, businesses or public administrations in the EU to which the data relate and without them being able to intervene to restrict access to the data on security grounds or to exercise their fundamental rights (e.g., right to respect for private life, right to data protection, right to an effective legal remedy). This may be due to the application of national surveillance legislation of third countries and their jurisdiction over the service providers established in a specific third country that provide their services in the Union, and where such jurisdiction may also extend to their subsidiaries established in the Union. While data access requests could also be directed to EU-controlled companies established in the Union but falling under the relevant foreign jurisdiction, e.g., when they also have an establishment in the foreign jurisdiction, those companies that have their headquarters in the relevant foreign jurisdiction may be subject to a conflict of interest and conflict of jurisdictions (e.g. if the law of the country of establishment of the headquarters requires EU-based subsidiary to engage in transfer or processing data in a manner inconsistent with the EU law). This problem does not arise for companies whose headquarters are in the EU territory. There is also a heightened risk of uncontrolled access to data by foreign intelligence and security agencies, thus exposing the Union to security risks.

For these reasons, and in consistency with the WP for 2021-2022, WP for 2023-2024, the Economic Security Strategy adopted on 20 June 2023[7] and the Communication on the implementation of the EU Toolbox on 5G cybersecurity[8], a set of topics in this WP will be subject to security restrictions. Some topics in Section 2 on artificial intelligence will be subject to the provisions of Article 12(6) of the Regulation (EU) 2021/694. Topics in Section 3 on cybersecurity will be subject to the provisions of Article 12(5) of the Regulation (EU) 2021/694 due to the serious concerns for the risks posed by certain suppliers of mobile network communication equipment to the security of the Union. Specific conditions for the association or partial association of third countries to the Programme are laid down in Article 10 of the Regulation (EU) 2021/694[9]. In addition, in line with Article 136(2) of Regulation (EU, Euratom) 2024/2509, this WP sets out additional eligibility conditions for those actions that concern strategic assets and interests of the Union, as described in Appendix 4 of this Work Programme.

Funding for actions which do not comply with the security requirements referred to in Article 12 of the Regulation (EU) 2021/694 or other specific security requirements applicable to a given action, including specifically those requirements based on Article 136 Regulation (EU, Euratom) 2024/2509, may be suspended, terminated, or reduced at any time, in accordance with Regulation (EU, Euratom) 2024/2509.

Given the Digital Europe Programme participation rules (Article 18 and Article 12), objectives and purpose of the actions (Articles 4 to 8 and Annex 1) and the importance of its results and infrastructures, the use of and access to the results and critical infrastructures developed under the Digital Europe Programme is intended for eligible country entities.

[7] Joint Communication to The European Parliament, The European Council and The Council on "European Economic Security Strategy"

[8] Communication from the Commission: Implementation of the 5G cybersecurity Toolbox

[9] EEA EFTA countries are fully associated to the Digital Europe Programme and benefit from a status equivalent to that of the Member States.

SECURITY APPRAISAL

As outlined in Articles 12(1) to 12(4) of Regulation (EU) 2021/694, actions carried out under the Digital Europe Programme must comply with applicable security rules, in particular in relation to the **protection of the classified information against unauthorised disclosure**.

All proposals and tenders to be submitted by applicants include a security self-assessment that identifies any security issues and details how those issues are to be addressed in order to comply with Union and national law[10]. Where appropriate, the Commission or the body entrusted with the implementation of the Programme carries out a security review of the proposals selected for funding that raise potential security issues. In addition, the Commission or the body entrusted with the implementation of the Programme may additionally carry out security checks during the projects' lifetime.

INDICATIVE BUDGET

The Digital Europe Programme's remaining budget for 2025-2027 is EUR 3.2 billion covering six Specific Objectives (SOs). This budget is contributing EUR 820.2 million to the **EuroHPC Joint Undertaking**, EUR 367.2 million to the **European Cybersecurity Competence Centre**, and EUR 713.6 to the **Chips Joint Undertaking**[11]. The remaining EUR 1305.9 million covers the **main DIGITAL Work Programme**, including the network of **European Digital Innovation Hubs**, that was previously described in a separate programme[12].

Table 1: Indicative overall budget of the Digital Europe Programme for 2025-2027 (in EUR million)

Total Digital Europe budget[13]	**2025**	**2026**	**2027**	**TOTAL**
Digital Europe WP, incl. EDIH (SO1, 2, 3, 4, 5, 6)[14]	435.6	422.3	448.0	**1305.9**
EuroHPC JU (part of SO1)	201.6	288.0	330.6	**820.2**
European Cybersecurity Competence Centre (part of SO3)	120.7	126.1	120.4	**367.2**
Chips JU (part of SO6)	356.2	175.9	181.5	**713.6**
TOTAL	**1114.1**	**1012.3**	**1080.5**	**3206.9**

Synergies and complementarities of the activities in the various work programmes will be ensured.

[10] For more details, please see the Guidance on how to handle security-sensitive projects and the Guidance on Classification of information in Digital Europe projects

[11] Regulation (EU) 2023/1781 of the European Parliament and of the Council of 13 September 2023 establishing a framework of measures for strengthening Europe's semiconductor ecosystem and amending Regulation (EU) 2021/694 (Chips Act)

[12] DIGITAL Europe - EDIH Work Programme 2021-2023

[13] The amounts are provisional, based on the EU budget financial programming and indicative amounts for EEA-EFTA contributions. The Digital Europe WP includes indicative amounts for third country credits contributions (for the Association Agreements that have entered into force before December 2024).

[14] SO stands for *Specific Objective* as defined in Regulation (EU) 2021/694 establishing the Digital Europe Programme (Specific Objective 1- High Performance Computing, Specific Objective 2 – Artificial Intelligence, Specific Objective 3 – Cybersecurity and Trust, Specific Objective 4 – Advanced Digital Skills, Specific Objective 5 – Deployment and Best Use of Digital Capacities and Interoperability) as amended by Regulation 2023/1781, (Specific Objective 6 – Semiconductors).

Under this WP, investments are focused in areas where the programme can achieve maximum impact, building on the experience of the previous WPs and on the achievements of previously funded actions. These areas are:

AI and AI Testing and Experimentation Facilities (TEFs), Data Spaces, Digital Innovation Hubs (with focus on those centred on AI), Destination Earth (powered by the use of AI foundation models), EU Digital Identity Wallet, and digital skills. In addition, this WP will further stimulate and finance additional European Digital Infrastructure Consortia.

Generative AI is a cross-cutting priority, with many of the Digital Europe big-ticket items supporting its development and deployment in Europe, across all specific objectives. Non-exhaustive examples are included in the list below and further details are provided in WP Chapter 2 – Artificial Intelligence.

Horizontal topics (funded under several SOs)

- **European Digital Infrastructure Consortium**: **EUR 25 million** to match further commitments the Member States are willing to make for existing or new EDICs. EDICs like ALT-EDIC and CitiVERSE play an important role in supporting the development and deployment of European generative AI solutions, EUROPEUM-EDIC will significantly contribute to decentralized digital infrastructures in Europe.

- In addition to the horizontal EDIC topic mentioned above, this WP is funding **thematic multi-country projects**, in agri-food, the Cybersecurity Skills Academy and on innovative and connected public administrations, for a total of **EUR 22 million**. Their descriptions and budgets are included in their respective thematic chapters below.

The AI Continent with the Apply AI Strategy includes data and cloud, the Destination Earth initiative, and Digital Innovation Hubs (SO2 and other SOs)

- **Artificial Intelligence activities for the implementation of the Apply AI Strategy**: **EUR 104 million** to support integrating Generative AI into sectoral TEFs, to strengthen the uptake of Generative AI applications in the public sector, to sustain the use of AI in health (including AI-based solutions in medical imaging, AI-based image screening in medical centres, and the further validation and uptake of Virtual Human Twins), and to support the development of virtual worlds test beds.
- **Data Spaces and Cloud for the AI Factories**: **EUR 200.6 million** for their technical evolution and infrastructure integration, including support to the Simpl open software suite for data interoperability and cloud interoperability and for the Agri-Food multi-country project. The **Common European Data Spaces** are a key data resource for the AI Factories stakeholders to train and improve their models.

- **Destination Earth (DestinE): EUR 128 million** for the completion of DestinE's main components' development heading for the fulfilment of its main objective (full Digital Twin of the Earth) in 2030. **The AI foundation model** for the Earth system will enable European AI innovators to train their models on the wealth of DestinE digital twin generated and federated data, ERA5, Copernicus and other Earth observation data, and to develop downstream applications for a spectrum of policy concerns in key impact sectors such as urban development, renewable energy management or agriculture planning in relation to climate resilience, preparedness, and climate risk assessment.

- **European Digital Innovation Hubs**: **EUR 273 million** for the continuation of the operations of the network and support for the Digital Transformation Accelerator (DTA). More than 136 of the 151 **Digital Innovation Hubs** provide AI and generative AI support services.

Cybersecurity (SO3, other than the ECCC)

- **Cybersecurity**: **EUR 45.6 million** for the creation of an EU Cybersecurity Reserve (as per the Cyber Solidarity Act[15]) and the development and operation of a Cyber Resilience Act single reporting platform which would allow manufacturers to securely report cyber vulnerabilities.

Digital Skills (SO4)

- **Skills and training: EUR 125 million** for new digital skills academies in quantum, AI, virtual worlds, and chips, for excellence in education and training programmes and initiatives in key sectors and specific target groups (e.g. Digital skills in health, Destination Earth, Women in digital). Several of the SO4 actions focus on strengthening the EU's AI talent pool, and the **new digital skills academy on AI** would cover latest advancements, including generative AI.

Deployment and Interoperability (SO5)

- **Deployment of public services**: **EUR 147 million** for the EU Digital Identity Wallet architecture and its European Trust Infrastructure, the Once-Only Technical System, eProcurement and eInvoice platforms, TESTA network and communications services, supporting the interoperability of European Electronic Health Record systems, and for the European Cybersecurity Support Centre for hospitals and healthcare providers.

- **Digitisation of Justice**: **EUR 33.3 million** for establishing a collaboration platform to support the functioning of joint investigation teams and for support in the area of judicial cooperation and maintenance of core platforms.

- **Confidence in the digital transformation: EUR 70.3 million,** for Safer Internet actions, comprising the Better Internet for Kids (BIK) strategy and 25 Safer Internet Centres (SICs), and for the European Digital Media Observatory (EDMO), the European network of fact-checkers and the European Democracy Shield.

- **Interoperability**: **EUR 77 million** for support to the implementation of the Interoperable Europe Act and public administrations' collaboration projects on interoperability and digital government (GovTech, MCP on connected and innovative public administrations).

Semiconductors (SO6, other than the Chips JU)

- **Chips Fund: EUR 61.7 million** for the Chips Innovation Fund in 2025 and 2026, in line with what was announced in the Chips Act.

In addition, the following are also foreseen to be supported:

- **The necessary support actions: EUR 24 million** for call evaluations and reviews, workshops, dissemination activities, specific technical and economic expertise outside the Commission, studies and any other support measures, including in support of the Digital Markets Act (DMA).

[15] Published in the Official Journal on 15.01.2025.

Table 2: Budget allocation for big-ticket items in the Work Programme 2025-2027 (in EUR million)

BIG-TICKET ITEMS		
WP CHAPTER	**TOPIC**	**BUDGET ALLOCATION**
HIGH-PERFORMANCE COMPUTING FOR THE AI FACTORIES	Mainly covered by the EuroHPC Joint Undertaking. SO1 is also partly financing the Destination Earth Initiative (see The AI Continent below).	
AI CONTINENT	**Data for the AI Factories** Common European data spaces, Agri-Food MCP and Simpl	200.6
	Apply AI Strategy implementation GenAI actions, AI in health (AI solutions in medical imaging, AI-based image screening, Virtual Human Twins), Virtual worlds test beds	104
	Apply AI Strategy deployment European Digital Innovation Hubs (also covered from SO5 and SO4)	273
	Destination Earth (also covered from SO1)	128
CYBER	EU Cybersecurity Reserve and Cyber Resilience Act reporting platform	45.6
SKILLS	Digital skills academies in quantum, AI, virtual worlds, and chips, excellence in education and training and other actions on advanced digital skills	125
DEPLOYMENT	EU Digital Identity Wallet, Once Only Technical System, e-procurement, e-invoice, TESTA, European Electronic Health Record, European Cybersecurity Support Centre for hospitals and healthcare providers	147
	e-Justice and confidence in the digital transformation (also covered from SO2)	103.6
	Interoperability	77
	European Digital Infrastructure Consortia (also covered from SO2)	25
CHIPS	Chips Fund	61.7
HORIZONTAL	Programme support actions, including DMA	24

Actions in this WP will be implemented mostly under direct management by the European Commission and an Executive Agency. The exceptions to this are the Investment Platform for Strategic Digital Technologies and Chips Fund (see Section 7) which will be implemented by the European Investment Fund in indirect management; the Destination Earth Initiative (see Section 1) which will be implemented in indirect management by the European Space Agency (ESA), the European Centre for Medium-Range Weather Forecasts (ECMWF) and the European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT), the Cybersecurity incident response and preparedness support that will be entrusted for implementation to the European Union Agency for Cybersecurity (ENISA) (Section 3), and the joint investigation team collaboration platform (see 5.2.5.4) to be implemented by

the European Union Agency for the Operational Management of Large-Scale IT Systems in the Area of Freedom, Security and Justice (eu-LISA).

Table 3: Breakdown of global expenditure per year, budget line and type of action

Year	Budget line	Amounts to be implemented in direct management (in EUR)		Amounts to be implemented in indirect management (in EUR)	Total available budget per year (in EUR)[16]
		Calls for proposals – grants	Calls for tenders – procurement		
2025	Specific Objective 1 (02 04 02 10)	0	0	18,491,601	18,491,601
	Specific Objective 2 (02 04 03)	184.500.00	28,050,000	0	186,462,694
	Specific Objective 3 (02 04 01 10 02)	0	0	16,063,333	16,074,300
	Specific Objective 4 (02 04 04)	48.500.000	7,000,000	0	55.640.337
	Specific Objective 5 – Deployment (02 04 05 01)	77.000.000	34,160,000	10,100,000	99,959,360
	Specific Objective 5 – Interoperability (02 04 05 02)	0	28,000,000	0	28,099,263
	Specific Objective 6- Semiconductors Chips Fund Invest EU (02 04 06 10)	0	0	30,837,000	30,837,000
2026	Specific Objective 1 (02 04 02 10)	0	0	17.233.378	17.233.378
	Specific Objective 2 (02 04 03)	97.000.000	64,400,000	0	171.449.770
	Specific Objective 3 (02 04 01 10 02)	0	0	16,063,333	16,074,300
	Specific Objective 4 (02 04 04)	55.000.000	8,000,000	0	55.533.902
	Specific Objective 5 – Deployment (02 04 05 01)	42.750.000	54,550,000	3,100,000	102.053.753

[16] The potential imbalance will be resolved by the use of third country credits.

	Specific Objective 5 – Interoperability (02 04 05 02)	10,000,000	18,850,000	0	29.143.426
	Specific Objective 6- Semiconductors Chips Fund Invest EU (02 04 06 10)	0	0	30,837,000	30,837,000
2027	Specific Objective 1 (02 04 02 10)	0	0	10.646.218	10.646.218
	Specific Objective 2 (02 04 03)	90,000,000	29,050,000	81.628.803	220.720.749
	Specific Objective 3 (02 04 01 10 02)	0	0	13,513,333	13,542,583
	Specific Objective 4 (02 04 04)	61,000,000	1,000,000	0	66.400.256
	Specific Objective 5 – Deployment (02 04 05 01)	41,000,000	53,500,000	3,100,000	106.916.675
	Specific Objective 5 – Interoperability (02 04 05 02)	0	29,500,000	0	29.766.922
	Specific Objective 6- Semiconductors Chips Fund Invest EU (02 04 06 10)	0	0	0	0

LINKS TO OTHER PROGRAMMES AND CO-INVESTMENT + STEP

Investments under the Digital Europe Programme are complementary to investments under a number of EU funding instruments, either managed directly or under shared management with the Member States and/or regions.

These include, for example investments, into key digital technologies, including quantum technologies, as part of the second pillar (Global Challenges and European Industrial Competitiveness) of Horizon Europe. Connecting Europe Facility (CEF2) digital investments focus on delivering safe, secure, and sustainable high-performance infrastructure, in particular, Gigabit and 5G networks across the EU. Creative Europe programme investments contribute to the recovery of culture and media, reinforcing their efforts to become more inclusive, more digital. Digital investments under the EU4Health programme will aim to reinforce health data, digital tools and services, enhance access to healthcare and support its digital transformation. The Justice Programme offers funding opportunities in the e-justice field supporting transnational projects and projects with clear EU dimension that improve the effectiveness of justice systems and improve access to justice. The Technical Support Instrument (TSI) assists EU Member States' public administrations in their digital transformation by providing on-demand tailor-made technical expertise when planning for and implementing structural digital reforms in areas such as digital skills, interoperability, digital-ready legislation, AI and e-Justice.

The European Defence Fund (EDF) fosters the competitiveness and innovation capacity of the EU defence technological and industrial base by supporting collaborative research and development actions, including digital transformation.

At the Member State level, investments are envisaged in the area of digital with the support of Cohesion policy funding, in particular the European Regional Development Fund (ERDF) and the European Social Fund Plus (ESF+). These aim to address the digital divide both socially and geographically, e.g. by supporting the digitalisation of firms, by improving access to e-government, e-health, e-services and digital skills at all levels, so that no one in any EU region, be it rural, urban or outermost, is left behind. Complementarity is also expected between the Digital Europe Programme and the Common Agricultural Policy (CAP). Investments into digitalisation in agriculture and rural areas under National CAP Strategic Plans will contribute horizontally to all CAP objectives and aim to, among others, modernise the agricultural sector, increase sustainability and economic performance, and enhance quality of life in rural areas, including knowledge and innovation, and investment in broadband infrastructures. Member States' Recovery and Resilience plans should address the challenges identified in the relevant country-specific recommendations (CSRs) or in other relevant documents adopted by the Commission under the European Semester, as well as support the green and digital transitions. Private capital is foreseen to be leveraged for investments into digital infrastructures, technologies, and skills under InvestEU as well. The Digital Europe Programme complements this mix by funding strategic deployment in support of the EU digital targets for 2030, bringing digital technology to businesses, citizens and public administrations.

Most actions foreseen in the Digital Europe Programme require co-investments from the public and/or private sectors. The modes of these co-investments are described in the relevant parts of the various work programmes.

As far as possible funding support from other EU instruments to actions in this WP is concerned, transferred, alternating or cumulative funding may be considered, provided that such funding is in line with the fund-specific regulations of the funding instruments in question, and in line with the objectives of the relevant programmes. Relevant provisions of Regulation (EU, Euratom) 2024/2509 need to be respected[17], and in no circumstances the same costs shall be financed twice by the EU budget (prohibition of double funding). Funding from cohesion policy programmes and from national budgets can fall under EU State aid rules when all cumulative conditions of Article 107(1) TFEU are met, which also include that the supported activities are of an economic nature. In such cases, the funding must be compatible with EU State aid rules.

Member States may request the transfer of up to 5% of their resources under shared management to the Digital Europe Programme for following years. The transferred resources must be used for the benefit of the Member State concerned. They aim at boosting projects in priority areas through smart specialisations, at fortifying participation of beneficiaries with low participation and success rate in DIGITAL, and at preserving administrative capacity at national/regional/local level in the selection and, especially, the implementation and follow-up of the projects to be carried out by the Commission under DIGITAL rules, no longer by the Member State.

An alternating/sequenced funding occurs when each instrument finances a different part of the operation/action, or finances successive parts. It requires a split of an operation/action in two different parts. Coordination is required to avoid double funding, ensuring separation of parts/activities. Expenditure used for a reimbursement request for one instrument shall not be

[17] In particular Article (194) Principle of non-cumulative award and prohibition of double funding.

declared for support from another Fund or Union instrument. Activities financed under separate instruments have to be clearly differentiated.

Cumulative funding[18] means that an action receives support from more than one fund, programme or instrument. In these cases, however, the rules of each of the funding instrument apply respectively, increasing complexity of application process, project implementation as well as reporting obligations. Upfront co-ordination is required to avoid double funding by coordinating the funding rates which in combination cannot go over 100% of the eligible costs and should respect fund-specific requirements. A number of steps starting from preparation, through linking of actions, grant signatures all the way to reporting and payments need to be followed. The Commission Notice on Synergies between Horizon Europe and the ERDF programmes[19] elaborates on new opportunities to maximise synergies between the directly managed Horizon Europe and the European Regional Development Fund under shared management, including on cumulative funding. An example on how such cumulative funding between a directly managed programme and funds under shared management can be applied to Digital Europe Programme and cohesion policy funds is outlined in the Annex 2 of the Communication. Member States shall ensure the effective and efficient functioning of such synergies, through a consistent and harmonised approach of all involved authorities and close coordination between all public actors is needed.

The below table 4 outlines the applicable funding rates for the actions under this work programme, according to the type of actions used, see Appendix 2. However, support from multiple funding sources is in all cases subject to decisions of the authorities managing the funding instruments and further fund specific requirements may apply.

Table 4: List of topics with Digital Europe funding rate

Area	**Topics in the WP**	**Digital Europe Funding rate for the topic[20]**	**Member States' maximum funding contribution (subject to state aid rules – see Appendix 6)**	**Maximum public funding rate where beneficiaries carry out economic activities**	**Maximum public funding rate where beneficiaries carry out non-economic activities[21]**
AI/Cloud-to-edge	Reference deployments of European cloud-edge services	50%	25%, 35% for SMEs	75%, 85% for SMEs	100%
	Support to the secretariat for the Alliance on Processor and Semiconductor Tech	100%	n/a*	n/a*	

[18] Included here, as the DIGITAL regulation Art. 23 refers to the possibility to combine funding.
[19] Synergies between Horizon Europe and ERDF programmes (2022)
[20] Table 4 includes the DIGITAL funding rates for the topics covered by the DIGITAL WP 25-27. Appendix 2 provides general information on types of actions to be implemented through DIGITAL grants.
[21] For the interpretation of the notion of "non-economic activities" please see Commission Notice on the notion of State aid as referred to in Article 107(1) of the Treaty on the Functioning of the European Union, C/2016/2946, OJ C 262, 19.7.2016

Data for AI Factories	Data Space for Tourism	50%	25%, 35% for SMEs	75%, 85% for SMEs	
	Data Space for Skills	50%	25%, 35% for SMEs	75%, 85% for SMEs	
	Data Space for Manufacturing	75% for SMEs, 50% for rest	10% for SMEs, 25% for the rest	85% for SMEs, 75% for the rest	
	Health: Data ingestion capacities and data services for the European genomic data infrastructure in the European Health Data Space	50%	25%, 35% for SMEs	75%, 85% for SMEs	
	MCP for agri-food	100% for the consortium, 50% for third party	n/a* for the consortium, 25% for third party, 35% for SMEs	n/a* for the consortium, 75% for third party, 85% for SMEs	
	Digital solutions for regulatory compliance through data	50%	25%, 35% for SMEs	75%, 85% for SMEs	
	Data Spaces Support Centre	100%	n/a*	n/a*	
Apply AI Strategy implementation	Testing genAI4EU applications at scale and under real-world conditions (TEFs)	50%	50%	100%	
	Apply AI: GenAI for the Public Administration	50%	25%, 35% for SMEs	75%, 85% for SMEs	
	Deployment of cutting-edge multi-modal AI-based solutions in medical imaging	75% for SMEs, 50% for rest	10% for SMEs, 25% for the rest	85% for SMEs, 75% for the rest	
	Virtual Human Twins and Artificial Intelligence in health: platform validation and uptake incubator	50%	25%, 35% for SMEs	75%, 85% for SMEs	
	Apply AI: Piloting AI-based image screening in medical centres	50%	25%, 35% for SMEs	75%, 85% for SMEs	
	Virtual worlds test beds	50%	25%, 35% for SMEs	75%, 85% for SMEs	
AI/European Digital Innovation Hubs	Completion of the Initial Network of European Digital Innovation Hubs (EDIHs)	50%	50%	100%	
	Consolidation of the Initial Network of	50%	50%	100%	

	European Digital Innovation Hubs (EDIHs with reinforced AI focus)				
Advanced Digital Skills	Sectoral digital skills academies	50%	25%, 35% for SMEs	75%, 85% for SMEs	
	Excellence in higher education and training programmes in key digital areas and applied technologies	50%	25%, 35% for SMEs	75%, 85% for SMEs	
	ELEVATE: European League of Advanced Digital Skills Academies	100%	n/a*	n/a*	
	European Advanced Digital Skills Competitions	100%	n/a*	n/a*	
	EdTech accelerator	100%	n/a*	n/a*	
Deployment of Public Services	European Digital Identity and Trust Ecosystem	50%	25%, 35% for SMEs	75%, 85% for SMEs	
	GovTech	50%	25%, 35% for SMEs	75%, 85% for SMEs	
	MCP on Innovative and Connected Public Administrations	50%	25%, 35% for SMEs	75%, 85% for SMEs	
	Building capacity to deploy the EEHRxF and digital health services and systems to support the rights of citizens and reuse of health data under the European Health Data Space (EHDS)	100% for the consortium, 50% for third party	n/a* for the consortium, 25% for third party, 35% for SMEs	n/a* for the consortium, 75% for third party, 85% for SMEs	
Confidence in Digital transformation	Network of Safer Internet Centres (SICs)	50%	25%, 35% for SMEs	75%, 85% for SMEs	
	Supporting community approaches to fight disinformation: European network of fact-checkers	100% for the consortium, 50% for third party	n/a* for the consortium, 25% for third party, 35% for SMEs	n/a* for the consortium, 75% for third party, 85% for SMEs	
Accelerating the Best Use of Technology	Support to the implementation of Multi-Country Projects (MCPs)	50%	25%, 35% for SMEs	75%, 85% for SMEs	

* 100% already coming from DIGITAL

For actions funded with DIGITAL resources and Member States contributions where beneficiaries carry out non-economic activities[22], and therefore there is no State aid involved, the combined DIGITAL and Member State support can go up to 100% of eligible costs. Where a measure constitutes State aid within the scope of Article 107(1) TFEU supporting economic activities, the maximum State aid intensities have to be respected for the type of State aid measure/category applicable for each action.

The Strategic Technologies for Europe Platform (STEP)[23] is an initiative designed to enhance the EU's industrial competitiveness and reinforce European sovereignty by focusing on the development and manufacturing of critical technologies. STEP aims to bolster investments within three strategic sectors: digital and deep tech, bio tech, and clean and resource efficient tech. It leverages and synergises resources from various existing EU funding programmes such as the Digital Europe Programme, the European Defence Fund, the EU4Health programme, Horizon Europe, the Innovation Fund, InvestEU, the Recovery and Resilience Facility, and cohesion policy funds.

The STEP Seal[24] is a recognition given to projects that contribute to STEP objectives and meet the minimum quality criteria set by calls for proposals under Horizon Europe, the Digital Europe Programme, the European Defence Fund, the EU4Health Programme, or the Innovation Fund. This Seal is awarded irrespective of whether the projects receive direct funding from these programmes. The Seal is a quality label and a facilitator for accessing EU funds, making it easier for projects to receive combined or cumulative funding from various EU budgetary instruments. For example, projects awarded the STEP Seal can receive support from cohesion policy funds (e.g., ERDF or ESF+) by Member States without undergoing additional selection processes[25]. A number of topics in this WP are designated as being in the scope of the STEP. See table below. Eligible proposals for those topics that exceed the evaluation thresholds will be awarded a STEP Seal and will be listed on the STEP portal[26].

Table 5: Topics in this WP that are under the scope of the STEP Seal

Area	Topics
AI/Cloud-to-edge	Reference deployments of European cloud-edge services
Data for AI Factories	Data Spaces for manufacturing, use cases and converging landing zones of EU and national initiatives
Apply AI Strategy implementation	Testing GenAI4EU application at scale and under real-world condition
	Deployment of cutting-edge multi-modal AI-based solutions in cancer and other medical imaging
	Virtual Human Twins and Artificial Intelligence in healthcare: platform validation and uptake incubator
	Virtual worlds test beds
AI/European Digital Innovation Hubs	Consolidation of the Network of European Digital Innovation Hubs (EDIHs with reinforced AI focus) Completion of the Initial Network of European Digital Innovation Hubs (EDIHs)

[22] For the interpretation of the notion of "non-economic activities" please see Commission Notice on the notion of State aid as referred to in Article 107(1) of the Treaty on the Functioning of the European Union, C/2016/2946, OJ C 262, 19.7.2016

[23] Regulation (EU) 2024/795 of The European Parliament and of the Council of 29 February 2024 establishing the Strategic Technologies for Europe Platform (STEP)

[24] STEP seal

[25] Provided these projects are aligned with the scope of ERDF or ESF+ and contribute to the programme objectives.

[26] Strategic Technologies for Europe Platform

Advanced Digital Skills	Sectoral digital skills academies
	Excellence in higher education and training programmes in key digital areas and applied technologies

In addition, the Chips Funds contributes to the STEP objectives as defined in STEP Regulation.[27]

MULTI-COUNTRY PROJECTS AND THE EUROPEAN DIGITAL INFRASTRUCTURE CONSORTIA

As part of the Path to Digital Decade policy programme (DDPP)[28], the Commission has introduced the concept of Multi-Country Projects (MCPs). MCPs are large-scale deployment and capacity-building projects for the digital transformation of the Union, facilitating the achievement of the Digital Decade objectives and targets. They channel coordinated investments between the EU, Member States and private stakeholders to, i.a. enable digital infrastructure projects that a single Member State could not deploy on its own. They help reinforce the Union's technology excellence and industrial competitiveness in critical technologies, as well as support an interconnected, interoperable and secure Digital Single Market and address strategic vulnerabilities and dependencies of the Union along the digital supply chain. This means that setting up an MCP fits the objectives of the Digital Europe programme, which provides funding to support the deployment of infrastructures and where the use of such infrastructures and the results generated are intended primarily for the Union and in countries associated to the Digital Europe Programme. The Digital Europe Programme funding will provide additional incentives for Member States and private sector to work together to build pan-European digital infrastructures.

The initial non-exhaustive list of areas for MCPs as contained in the Decision (EU) 2022/2481 establishing the Digital Decade Policy Programme 2030 (hereafter: DDPP Decision) is listed in the Appendix 5 of this WP.

A number of areas of MCPs, e.g., blockchain, genomics, dataspaces, European Digital Innovation Hubs (EDIHs) or Testing Experimentation Facilities (TEFs) are in the scope of the Digital Europe Programme and are receiving funding under the Digital Europe WP 2021-22 and WP23-24. These are also included in this WP.

MCPs can be implemented by a number of dedicated mechanisms such as joint undertakings (JUs), Important Projects of Common European Interest (IPCEI)[29], the European Research Infrastructure Consortia (ERIC) or the European Digital Infrastructure Consortia (EDICs) – see below. Some MCPs rely on implementation as spelled out in the Digital Europe WP, without using any of the dedicated implementation mechanisms listed in the DDPP Decision.

The DDPP Decision provides for the possibility to establish a European Digital Infrastructure Consortium, a new instrument that can be used, among other things, to facilitate the set-up and enable the speedy implementation of MCPs. The legal framework on EDICs is closely modelled on the existing and successful mechanism in the area of research activities, namely the European Research Infrastructure Consortia, focusing however on digital products, infrastructure and services that can facilitate the achievement of the digital targets set out in Article 4 of the DDPP Decision and introducing further limited changes to increase flexibility in the implementation, such as enabling private parties to participate in the EDIC as members, and making sure projects remain open to all interested Member States.

[27] Regulation (EU) 2024/795 establishing the Strategic Technologies for Europe Platform (STEP)

[28] Decision (EU) 2022/2481 of the European Parliament and of the Council of 14 December 2022 establishing the Digital Decade Policy Programme 2030 (Text with EEA relevance)

[29] The Member States' support to the companies' projects that participate in an IPCEI is subject to State aid rules.

Only the Member States[30] may submit an application to form an EDIC. For the actual setup of an EDIC, Member States will follow the procedure outlined in the DDPP Decision, as follows:

- The Member States applying for the setting-up of an EDIC shall submit an application to the Commission.
- The Commission shall assess the application, taking into account the general objectives of the DDPP, the proposed Statutes, the goals, and practical considerations related to the multi-country project to be implemented by an EDIC.
- The Commission shall, taking into account the results of the assessment, adopt an implementing act setting up the EDIC, or reject the application.

The use of EDICs should be suitable to make deployment actions sustainable and to attract further funding for large-scale MCPs. Once an EDIC is formally established, it can apply to a formal Call for proposals (like any other proposer) according to the rules contained in the relevant Call document.

Three EDICs have been formally established via an Implementing Decision, namely the Alliance for Language Technologies EDIC, the Local Digital Twins towards the CitiVERSE EDIC, and the EUROPEUM EDIC[31]. Further EDICs are currently in preparation and more initiatives are under consideration for becoming EDICs.

EU State aid rules apply to the public funding granted from Member State resources if all cumulative conditions for the presence of State aid, set out in Article 107 (1) of the Treaty on the Functioning of the European Union (TFEU), are met.

This includes supporting an economic activity and constituting State resources if national authorities have discretion as to the use of those resources (in particular the selection of beneficiaries).

All actions should also be fully compliant with the EU competition law, in particular with antitrust rules concerning information exchanges.

CALLS STRUCTURE AND PLANNING

Calls for proposals

The global budgetary envelope reserved for grants under this WP is EUR 702.75 million out of which EUR 289 million is for 2025, EUR 225.75 million in 2026 and EUR 188 million for 2027.

The topics included in this WP which are implemented by grants will be called according to the following indicative plan:

First set of calls

Table 6: List of topics in the first set of calls with a common deadline in 2025 under this Work Programme indicatively includes:

Area	Topics in the Work Programme	Indicative budget (in EUR million)
AI/Cloud-to-edge	Support to the secretariat for the Alliance on Processors and Semiconductor Technologies	1

[30] Member States means EU Member States and EEA EFTA countries. EU Member States and EEA EFTA countries shall have equal rights under the statutes governing an EDIC.

[31] European Digital Infrastructure Consortium (EDIC)

Data for AI Factories	Data Spaces Support Centre	10
	Digital solutions for regulatory compliance through data	8
	Multi-Country project in Agri-Food	15
Apply AI Strategy implementation	Apply AI: GenAI for public administration – grants for procurement	21
AI/European Digital Innovation Hubs	Consolidation of the Network of European Digital Innovation Hubs (EDIHs with reinforced AI focus)	170
	Consolidation of the Network of European Digital Innovation Hubs (EDIHs with reinforced AI focus) – recently associated countries	9
	Completion of the Initial Network of European Digital Innovation Hubs (EDIHs)	2
Advanced Digital Skills	Sectoral digital skills academies	27
Safer Internet	Network of Safer Internet Centres (SICs)	42
	European network of fact-checkers	5
TOTAL for the first set of calls		310

Second set of calls

Table 7: List of topics in the second set of calls with a common deadline in 2026 under this Work Programme indicatively includes:

Area	Topics in the Work Programme	Indicative budget (in EUR million)
Data for AI Factories	Data Space for Manufacturing	10
	Health: Data ingestion capacities and data services for the European genomic data	25
Apply AI Strategy implementation	Testing genAI4EU application at scale and under real-world condition	16
	Apply AI: GenAI for public administration – CSA	2
	Deployment of cutting-edge multi-modal AI-based solutions in medical imaging	16
	Virtual worlds test beds	20
AI/European Digital Innovation Hubs	Consolidation of the Network of European Digital Innovation Hubs (EDIHs with reinforced AI focus)	80
Advanced Digital Skills	Sectoral digital skills academies	7
	ELEVATE: European League of Advanced Digital Skills Academies	8
	European Advanced Digital Skills Competitions	8
Deployment of Public Services	GovTech	4
	MCP on Innovative and Connected Public Administrations	6
Safer Internet	IT system supporting the removal of online child sexual abuse material (CSAM)	0.75
Programme Support Actions	Support the Network of National Contact Points	2
TOTAL for the second set of calls		204.75

Third set of calls

Table 8: List of topics in the third set of calls with a second common deadline in 2026 under this Work Programme indicatively includes:

Area	Topics in the Work Programme	Indicative budget (in EUR million)
Data for AI Factories	Digital solutions for regulatory compliance through data	10
Apply AI Strategy implementation	Apply AI: Piloting AI-based image screening in medical centres	10
AI/European Digital Innovation Hubs	Consolidation of the Network of European Digital Innovation Hubs (EDIHs with reinforced AI focus)	8
Advanced Digital Skills	Excellence in higher education and training programmes in key digital areas and applied technologies	14
	Digital Skills and Jobs Platform CSA	2
	EdTech Accelerator	3
Deployment of Public Services	European Digital Identity and Trust Ecosystem	20
	Building capacity to deploy the EEHRxF and digital health services and systems to support the rights of citizens and reuse of health data under EHDS	16
Programme Support Actions	Support to Dissemination and Exploitation	2
TOTAL for the third set of calls		85

Fourth set of calls

Table 9: List of topics in the fourth set of calls with a common deadline in 2027 under this Work Programme indicatively includes:

Area	Topics in the Work Programme	Indicative budget in million EUR
AI/Cloud-to-edge	Reference deployments of European cloud-edge services	10
Data for AI Factories	Data Space for Tourism	8
	Data Space for Skills	4
Apply AI Strategy implementation	Testing genAI4EU application at scale and under real-world condition	10
	Virtual Human Twins and Artificial Intelligence in health: platform validation and uptake incubator	8
Advanced Digital Skills	Sectoral digital skills academies	10
	Excellence in higher education and training programmes in key digital areas and applied technologies	31
	Supporting the coordination of the Cybersecurity Skills Academy	1
The Best Use of Technology	Support to the implementation of Multi-Country Projects	25
TOTAL for the fourth set of calls		107

Calls for tenders

In addition to the calls for proposal, a set of actions will be implemented by procurement either using framework contracts or open calls for tenders. The global budgetary envelope reserved for procurement under this WP is EUR 356.06 million, out of which EUR 97.21 million is for 2025, EUR 148.80 million for 2026 and EUR 113.05 million for 2027.

Indirect management

The topics under Destination Earth will be implemented in indirect management, using annual instalments to continue implementation of existing contribution agreements with the European Space Agency (ESA), the European Centre for Medium-Range Weather Forecasts (ECMWF), and the European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT).

The implementation of the actions in cybersecurity will be entrusted to ENISA and the Computer Emergency Response Team for the EU institutions, bodies and agencies (CERT-EU).
The development of the Joint Investigation Teams Collaboration Platform (JITs CP) will be implemented by eu-LISA, as per Regulation (EU) 2023/969[32].

Moreover, the Chips Fund (see section 7) will also be implemented in indirect management under the InvestEU programme, more specifically, by the European Investment Fund (EIF) under the terms of the Regulation (EU) 2021/523 of the European Parliament and of the Council (InvestEU Regulation)[33] and the InvestEU Guarantee Agreement with the European Investment Bank (EIB) Group.

The global budgetary envelope reserved for indirect management under this WP is EUR 251.61 million, out of which EUR 75.49 million is for 2025 and EUR 67.23 million for 2026 and EUR 108.99 million for 2027.

[32] Regulation (EU) 2023/969 of the European Parliament and of the Council of 10 May 2023 establishing a collaboration platform to support the functioning of joint investigation teams and amending Regulation (EU) 2018/1726

[33] Regulation (EU) 2021/523 of the European Parliament and of the Council of 24 March 2021 establishing the InvestEU Programme and amending Regulation (EU) 2015/1017

Contents

1. High Performance Computing for the AI Factories

Specific Objective 1 on High Performance Computing (HPC) will continue to be implemented by the European High-Performance Computing Joint Undertaking (EuroHPC JU) in continuation of their mission as previously described in the first two WPs. Dedicated work programmes for activities are prepared separately from this WP, as specified in the EuroHPC legislation and in Article 4(2) of the Regulation (EU) 2021/694.

For the 2025-2027 period, Specific Objective 1 major Digital Europe investments amounting to EUR 775 million[34], channelled through the **EuroHPC JU**, will be devoted to the following activities:

- **Establishment of AI Factories[35] across the EU**: the main building block to foster and support the development of AI start-up and research ecosystem, in particular **Generative AI** in Europe. Funding will be allocated to the acquisition and operation of AI dedicated supercomputers, the establishment and operation of AI **supercomputing service centres**, activities to advance supercomputer-friendly **programming facilities**, developing **skills and education activities**, as well as upgrading existing EuroHPC supercomputing centres to AI Factories.
- **Deployment of the quantum computers:** acquiring the next generation of quantum computers, interconnecting them with the EuroHPC supercomputers across the EU, and funding the associated competence centres.
- **National HPC Competence Centres:** continued financial support for raising the HPC capabilities of the EuroHPC participating states.

The Specific Objective 1 budget under this WP is EUR 45.45 million and it is allocated towards the completion of **Destination Earth**'s main components' development, heading for the fulfilment of its main objective (full digital twin of the Earth) in 2030, powered by Europe's supercomputers and AI capacity. The Destination Earth initiative has a total budget of EUR 128 million under this WP and it is described under Chapter 2 – Artificial Intelligence.

[34] Operational budget, including indicative amount for EEA EFTA contributions.
[35] AI Factories

2. AI Continent

To make Europe an AI continent, thriving on the development, integration and adoption of AI, the EU, together with the EU Member States, industry, and civil society, will develop an **Apply AI Strategy**. It will support the development of world class AI models in the EU and foster the integration of AI technologies into the EU's most strategic sectors, including healthcare, energy and research. It will stimulate new industrial uses of AI and improve the delivery of various public services.

In that perspective, **Artificial Intelligence is a cross-cutting priority in the Digital Europe Programme**, with many of the funded actions supporting its development and deployment in Europe, across Specific Objectives. For example, the **Common European Data Spaces** (supporting the objectives of the AI Factories and the upcoming Data Union Strategy) are a key data resource for the AI community to train and improve their models. The continuation and further development of **Simpl** will prioritise using the platform as the vehicle to connect AI factories with HPC resources and help accelerate public sector transition to the cloud. Dedicated actions will support the integration of **generative AI in the testing and experimentation facilities** and the uptake of **generative AI applications in the public sector**, in support of the GenAI4EU initiative. Actions targeting **AI in health** will also be continued. For example, Digital Europe continues to support the **European Virtual Human Twins Initiative**, which leverages the power of novel computational methods and supercomputing to deliver patient-specific virtual world representations of real systems and processes.

The AI foundation model for the Earth system developed as part of **Destination Earth** (DestinE) will enable European AI innovators to train their models inter alia on the wealth of DestinE data (digital twin generated data, ERA5, Copernicus and other earth observation data and products, as well as federated data) and to develop downstream applications for a spectrum of policy concerns in key impact sectors such as urban development, renewable energy management or agriculture planning.

To support public and private organisations in their digital transition, Digital Europe set up a network of **European Digital Innovation Hubs (EDIHs)** in all EU countries as well as in Iceland, Norway and Liechtenstein, which counts today 151 hubs funded from DIGITAL and 76 Seals of Excellence funded by national or regional resources. The network is up and running since 1 January 2023, delivering services in four main clusters: 1) Test before invest, 2) Access to finance, 3) Training, and 4) Networking. In 2024, 18 EDIHs from seven associated countries (Albania, Montenegro, North Macedonia, Serbia, Turkey, Ukraine and Kosovo) were selected.

More than 136 of the 151 EDIHs funded under the previous WP provide AI and generative AI support services, with funding continued under the current WP. 2025-2027 will be an essential period of consolidation for the network, with funding geared towards the continuation of the operations of the EDIHs and support for the Digital Transformation Accelerator. The expected outcome is the progress in the digitalisation of SMEs and public administration on the ground, measured by an increase in the reported Digital Maturity Assessments. EDIHs will directly contribute to the Digital Decade objective of boosting the digital transformation of businesses, notably by allowing that more than 90% of SMEs reach at least a basic level of digital intensity as well as contributing to more than 75% of EU companies using advanced technologies such as AI, cloud, and big data.

In addition, several of the **education and training programmes** supported under Specific Objective 4 focus on strengthening the EU's AI talent pool, and a new digital skills academy on AI is planned to cover the latest advancements, including generative AI. ALT-EDIC and CitiVERSE EDIC are two examples of DIGITAL-funded **European Digital Infrastructure Consortia (EDIC)** supporting the development and

deployment of European AI solutions, and a new call for support to the implementation of Multi-Country Projects is planned under this WP, which will be open to already established EDICs.

This is complemented by funding to EuroHPC for the establishment of the **AI Factories** across the EU. AI factories will be the main building block to foster and support of the development of AI start-up and research ecosystem, in particular Generative AI in Europe. Funding will be allocated to the acquisition and operation of AI dedicated supercomputers, the establishment and operation of AI supercomputing service centres, activities to advance supercomputer-friendly programming facilities, developing skills and education activities, as well as upgrading existing EuroHPC supercomputing centres to AI Factories.

This chapter of the Work Programme has five main work strands:

- Continuation of activities in the area of **cloud-to-edge infrastructure and services;**
- **Deployment of sectorial data spaces** alongside activities in the area of Support to Data in the EU;
- Activities in the area of **AI** aimed at accelerating the uptake of generative AI in its key strategic sectors and application areas and furthering the application of AI in the health sector, as well as developing virtual worlds test beds;
- Completion of **Destination Earth**'s main components' development, heading for the fulfilment of its main objective (full digital twin of the Earth) in 2030;
- The continuation of the network of **European Digital Innovation Hubs** that were previously covered by a separate dedicated Work programme 2021-2023.

The budget for the topics included in this chapter is EUR 705.6 million, distributed as follows:

- EUR 69 million for topics supporting the deployment of the cloud-to-edge infrastructure and services;
- EUR 131.6 million for topics deploying the sectorial data spaces and the related support activities;
- EUR 104 million for topics on generative AI (in sectoral TEFs and in the public sector) and AI applications, including AI in health (AI-based solution in medical imaging, AI-based image screening in medical centres, further validation and uptake of Virtual Human Twins), and virtual worlds test beds;
- EUR 128 million for the Destination Earth initiative;
- EUR 273 million for the European Digital Innovation Hubs.

2.1 Cloud-to-edge infrastructure and services: a vehicle to connect AI, data and supercomputing resources

The 2021-2022 WP aimed to equip Europe with world-class, interconnected, trusted, interoperable and sustainable cloud-to-edge capabilities. To this end, it launched several projects, notably Simpl, a large-scale modular and interoperable open-source smart European cloud-to-edge middleware platform.

The next WP (2023-2024) complemented the projects with new actions, among which reference deployments of European cloud-edge services aimed to support cross-border and balanced Telco Edge deployment, demonstrating interoperability with industrial edge.

In the 2025-2027 period, DIGITAL investments will prioritise using Simpl[36], the Smart Middleware for European cloud federations and for common European data spaces, as **the vehicle to connect AI factories with HPC resources** and help **accelerate public sector transition to the cloud**. Through Simpl-Labs, all actors can experiment with the benefits of using Common European Data Spaces, and through Simpl-Live, selected data spaces can enhance their deployment, reaping benefits faster. Deploying data spaces on a mixed cloud/edge/Internet of Things (IoT) infrastructure fosters scalability and synergies among data spaces. In addition to providing an open-source solution available to all, Simpl is supporting 11 data spaces - covering data spaces for research and innovation, smart communities, languages, health, public procurement, Destination Earth, green, mobility, energy, agri and the EuroCloud initiative.

Under this WP, cloud-to-edge projects enter a new phase:

- During 2025-2027, Simpl will be extended and improved by providing operational support and expanding deployments in further data spaces and public sector cloud federations.
- The next phase of European cloud-edge services reference deployments will expand Telco Edge deployment geographical reach and federation mechanisms, and focus on enhancing sustainability, improved security, resilient connectivity infrastructure and interoperability.
- In addition, support will be provided for the activities of the Industrial Alliance on processors and semiconductor technologies.

Cloud computing service providers fall within the scope of Directive (EU) 2016/1148 of the European Parliament and of the Council concerning measures for a high common level of security of network and information systems across the Union (NIS Directive)[37]. The revised NIS Directive (Directive (EU) 2022/2555 of the European Parliament and of the Council (NIS 2 Directive)[38] of 14 December 2022 includes among others also data centre service providers in the directive's scope. The NIS 2 Directive highlights the necessity for entities in its scope to address the cybersecurity risks stemming from an entity's supply chain and its relationship with its suppliers, given the prevalence of incidents where entities have fallen victim to cyber-attacks compromising the security of their network and information systems by exploiting vulnerabilities affecting third party products and services. Consequently, the participation in some of these calls is subject to Article 12(6) Regulation (EU) 2021/694 as further detailed in Appendix 3, and in line with the justifications provided in the descriptions of the actions. This will contribute to mitigating the threats to network and information systems used to provide essential services in key sectors and ensure the continuity of such services when facing cybersecurity incidents, thus contributing to the Union's economy and society to function effectively.

In addition, all eligible entities should include in their proposal on actions subject to Article 12(6) evidence on how they will prevent international transfer or governmental access to data held in the Union where such transfer or access would create a conflict with Union law or the national law of the relevant Member State, and how they will deal with confidentiality of the information and include evidence of their security expertise. All selected entities implementing such actions shall have the obligation to prevent access by non-eligible third countries or by non-eligible third country entities to

[36] Simpl: cloud-to-edge federations and empowering EU data spaces

[37] Directive (EU) 2016/1148 of the European Parliament and of the Council of 6 July 2016 concerning measures for a high common level of security of network and information systems across the Union

[38] Directive (EU) 2022/2555 of the European Parliament and of the Council of 14 December 2022 on measures for a high common level of cybersecurity across the Union, amending Regulation (EU) No 910/2014 and Directive (EU) 2018/1972, and repealing Directive (EU) 2016/1148 (NIS 2 Directive)

classified and non-classified sensitive information. When applicable, the persons involved in the actions subject to Article 12(6) will have national security clearance issued by a Member State.

2.1.1 Simpl Cloud Federation / Smart Middleware for a European Cloud Federation and for the European Data Spaces (Simpl)

Objectives

This topic is a continuation of the earlier procurement of *Simpl* that included: *Simpl-Open,* the open-source large-scale, modular, secure, energy-efficient, and interoperable European cloud-to-edge smart middleware platform; *Simpl-Labs*, its demonstration and experimentation sandbox; as well as several instances of *Simpl-Live,* carrying out the integration of Simpl-open into data spaces and other initiatives.

During 2025-2027, the goal is to supplement these by extending and improving Simpl-Open capabilities and connection to relevant initiatives, providing operational support for Simpl-Labs, and expanding Simpl-Live deployments in further European data spaces and public sector cloud federations.

The Simpl initiative builds on top of earlier cloud federation and multi-cloud research initiatives carried out under Horizon Europe, H2020, and FP7.

Scope

Concerning Simpl-Open, the Commission will continue to develop, maintain and make available the Simpl-Open middleware to interested European Data Spaces and Cloud Federations stakeholders. These activities comprise the continuous maintenance of Simpl-Open building blocks, together with the provision of additional features and services required to integrate relevant initiatives such as AI factories, HPC, and the cloud marketplace, all of which are geared towards meeting future demands of data spaces.

For Simpl-Labs, the Commission will provision the maintenance and operation of the platform.

In terms of deployment, the Commission will expand Simpl-Live deployments to federate public sector clouds in addition to further integrations of data spaces, for instance in the Green Deal, Energy, Agriculture and Mobility data spaces. Such integration, notably with earlier initiatives and data spaces supported by Simpl (e.g. Health), is key for the efficient and deployment of interoperable infrastructures across data spaces.

Moreover, the Commission will extend Simpl's governance to public authorities and open-source communities.

The procurement(s) under this topic will be conducted using the framework contracts signed in the context of Work Programme 2021-2022 as long as they remain valid.

Deliverables

- For *Simpl-Open*, upgrades to the Simpl-open middleware platform, including new capabilities and services in support of the integration of relevant European initiatives and data spaces.
- For *Simpl-Labs*, service operation and updates of the publicly available platform and its associated services.
- For *Simpl-Live*, studies, implementations and operational support of *Simpl-Open integrations* within the respective European Data Spaces and Cloud Federations.

- For the overall *Simpl* initiative, definition and implementation of action plan towards the expansion of its governance mechanisms.

In all cases, the work will feed back into the development of *Simpl-Open* itself so that the achievements can benefit the community at large. These deliverables shall be piloted and tested in specific policy areas and involving the key European stakeholders in those areas.

Type of action	Procurement
Indicative budget	EUR 58 million[39]
Indicative time	2025-2027
Indicative duration of the action	48 months
Implementation	European Commission
Type of beneficiaries	Not applicable
Eligibility and security	Subject to participation restrictions for the protection of European digital infrastructures, communication and information systems, and related supply chains, as described in Appendix 4 of this Work Programme. Further justification for participation restriction is provided in Table 11 in Appendix 4.

2.1.2 Reference deployments of European Cloud-edge Services

Objective

The objective of this action is to deploy a reference cross-border Telco Edge software and hardware installation and showcase the resulting benefits for key application areas and sectors.

The reference cross-border Telco Edge deployment should support the balanced deployment of Telco Edge capacities across the EU territory and take into consideration the federation of related initiatives, while addressing applications and sectors crucial for Europe’s competitiveness and strategic autonomy.

Emphasis should be put on sustainability, and security of the Telco Edge infrastructure itself, resilient connectivity infrastructure (including cloud native 5G) and interoperability of the resulting cross-border Telco Edge infrastructure.

Actions must build on related initiatives delivering technological foundations and building blocks that enable this deployment, such as the IPCEI-CIS and activities with lower TRL under Horizon Europe, notably the 3Cs pilot actions for Connected Collaborative Computing networks.

The initiative should contribute to Europe's Digital Decade ambition of having 10,000 climate-neutral, highly secure Edge nodes deployed across Europe by 2030. Furthermore, it needs to address the essential role of Telco Edge as a key enabler for future convergent connectivity, cloud, and edge computing digital networks, as underlined by the Commission's White Paper "How to master Europe's digital infrastructure needs?".

[39] This call will be funded using annual instalments.

Scope

The proposals should target the deployment of Edge nodes of Telco Edge Cloud nature in a broad geographic coverage across at least two different Member States. The reference cross-border Telco Edge deployment should be able to demonstrate the capability to federate Edge infrastructures offered by different providers in diverse member states locations and its seamless and off the shelf usage in a range of demonstration use cases. Specifically, the federation should consider the tools and mechanisms to make interoperable and enable the sharing of resources among participant Telco Edge infrastructures across multiple dimensions including network, cloud, data, and services.

In addition, the reference cross-border Telco Edge deployments should consider its federation with complementary edge deployments, including but not limited to, Edge deployments stemming from other initiatives, for instance, resultant of EU programmes such as Horizon Europe, CEF, or other prominent and national and regional Edge deployment initiatives.

At the same time, the action must leverage the results of initiatives that deliver the technological foundations for this cross-border Telco Edge infrastructure, such as the IPCEI-CIS, and low technology readiness level (TRL) related activities in Horizon Europe and the Smart Networks and Services Joint Undertaking.

In this regard, the proposals should particularly pay attention to:

- Optimisation of edge nodes sustainability and energy efficiency, by defining energy efficiency and sustainability metrics for the broad spectrum of Edge computing data processing infrastructures, and openly making available sustainable and energy efficient Edge facility and devices hardware design blueprints.
- Improvements to Edge nodes security, for instance, by adopting certification schemes particularly tailored to the management and operation needs of Telco Edge infrastructures.
- Demonstration and enhancement of the resilience of the resultant Telco Edge Cloud infrastructure, both in terms of compute and connectivity elements performance, specifically for cloud native 5G.
- Wide support for interoperability and federation at multiple levels, concentrating on how edge nodes connect and interface among them and with various cloud technologies and services, facilitating network enablers with cloud services, and enabling, for example, coordination among diverse layers of orchestration at network and compute (multi-cloud and edge) levels.

In terms of use cases, proposals must cover a well-defined catalogue of industrial sectors and verticals that are essential to Europe's competitiveness and strategic autonomy, particularly those identified under the Strategic Technologies for Europe Platform (STEP)[40], and should ideally build appropriate relations with data spaces and EDICs. The proposals should provide detailed justifications to the number of Edge nodes to be deployed, based on the different combinations of types of edge computing (near / far edge), the concrete capacity of these set-ups and the target latencies across the territory.

Use cases should offer a cutting-edge viewpoint, demonstrate their value added and impact, as well as clearly reflect their real-world uptake and scalability potential, while complementing already-existing initiatives.

[40] More information on the sectors covered by STEP can be found on the Guidance Note concerning certain provisions of Regulation (EU) 2024/795 establishing the Strategic Technologies for Europe Platform (STEP), C(2024) 3148 final.

Moreover, the consortium should represent the key stakeholders within the Telco Edge Cloud value chain, involving the diverse market actors present in the supply side, as well as demand side players, to ensure smooth collaboration and co-creation of the resultant infrastructure.

Standardisation efforts to facilitate interoperability across these various edge, cloud, and networking technologies should be undertaken by the proposal, when appropriate. Beyond these, proposed activities should cater for the long-term sustainability of the initiative, exploring long term strategies for self-sustainability of the initiative and for the developments of its different stakeholders.

Deliverables

- Deployment of a reference cross-border Telco Edge installation in a broad geographic coverage and ensuring mature federation processes, showcasing the contribution of the initiative to the even distribution of Edge node deployment across the European territory and showcasing its use in crucial applications and sectors.
- Demonstrate clear achievements in terms of sustainability, security, resilience, and interoperability of the resultant infrastructure.
- Long term sustainability strategies for the reference cross-border Telco Edge deployments.

Type of action	Simple grant
Indicative budget	EUR 10 million
Indicative call planning	Fourth set of calls
Indicative duration of the action	36 months
Implementation	European Commission
Type of beneficiaries	Private organisations with proven expertise in Telco Edge developments.
Eligibility and security	Call restricted on the basis of Article 12(6) of the Regulation (EU) 2021/694. Subject to participation restrictions for the protection of European digital infrastructures, communication and information systems, and related supply chains, as described in Appendix 4 of this Work Programme.

This action will be subject to Article 12(6) of Regulation (EU) 2021/694 for the following reason. Given the sensitive confluence of cloud, edge and telecom infrastructures that includes the development of 5G technologies, this poses increased security risks due to the multiplication of (potentially unsecure) entry points in an edge network, which might be at risk of malicious action by individuals, groups or regimes that would attempt to compromise, distort or disclose data in the data infrastructures, thus compromising the availability of the service and the integrity of the information/data used for/within that service. Moreover, the participation of non-EU entities entails the risk of this sensitive data and information being subject to legislation or pressure that obliges those non-EU entities to disclose this information to non-EU governments. Therefore, based on the outlined security reasons, the action is subject to Article 12(6) of Regulation (EU) 2021/694. This does not exclude the participation of legal entities established in associated countries and legal entities that are established in the Union but are controlled from third countries, where they meet the conditions defined in this Work Programme.

2.1.3 Support to the Secretariat for the Alliance on processors and semiconductor technologies

Objective

This action is to support the activities of the Industrial Alliance on processors and semiconductor technologies[41]. The purpose of the Alliance is to gather relevant stakeholders, including industry, Member States representatives and other experts, from across Europe in view of strengthening Europe's capacities in advanced processors and other electronic components. The Alliance aims to identify gaps in the production and development of microchips and the technology developments needed for companies and organisations to thrive, no matter their size. This will help the competitiveness of companies, increase Europe's digital sovereignty and address the demand for the next generation of secure, energy-efficient, powerful chips and processors.

Scope

The Secretariat shall support the day-to-day work of the members of the Alliance in carrying out the main tasks of the Alliance. These include the identification of critical gaps in the semiconductor value chain and the development of targets and roadmaps for a number of working groups. In addition to representatives from industry, RTOs, and academia, Member States' delegates are invited to participate in the work of the Alliance in relevant working groups. This action consists in providing the following support services to the Alliance:

- Organisation and administrative support of relevant thematic working groups, and their follow up, in view of ensuring progress towards and delivering on the Alliance's milestones, in close collaboration with the Chair/Vice-Chairs;
- Supporting communication and exchanges between the European Commission, Alliance members and all other stakeholders with an interest in the fields of work of the Alliance;
- Disseminating the Alliance's work;
- Supporting providing advice and guidance to the European Semiconductor Board, when requested;
- Expand and ensure a representative Alliance community by promoting the Alliance towards relevant stakeholders that meet the eligibility criteria;
- Support the on-boarding of new members in the Alliance's work.
- Organise physical meetings for the General Assembly at least once per year.

Deliverables

The Secretariat of the European Alliance will support the European Commission in making the Alliance a sustainable stakeholder platform that will deliver on the following deliverables:

- The development and promotion of strategic roadmaps and action plans for the objectives and deliverables as established within the thematic Working Groups of the Alliance, in coordination with the members of the Alliance and the European Commission;
- The identification of the needs of end-users for the next decade;
- Creation and maintenance of the Alliance's website, a digital collaboration platform and day-to-day content creation to inform the broader audience about the Alliance's activities;
- Preparation and organisation of the annual General Assembly and Forum, and follow-up with all members of the Alliance, in close coordination with the European Commission and the Steering committee of the Alliance;

[41] Alliance on Processors and Semiconductor technologies

- The support of upskilling and reskilling opportunities for workers and students.

The Secretariat should offer a platform of support services to Alliance members and working groups.

Type of action	Coordination and support action grant
Indicative budget	EUR 1 million
Indicative call planning / timing	First set of calls
Indicative duration of the action	36 months
Implementation	European Commission
Type of beneficiaries	All entities
Eligibility and security	Subject to participation restrictions for the protection of European digital infrastructures, communication and information systems, and related supply chains, as described in Appendix 4 of this Work Programme. Further justification for participation restriction is provided in Table 11 in Appendix 4.

2.2 Data for AI Factories

In the WP 2021-2022 the basis was laid for the development of twelve data spaces in line with the European data strategy. The work on the data spaces is accompanied by a review of the policy and legislative framework for data access and use, with the Data Governance Act[42] and the Data Act,[43] as well as the Implementing Act on High-value datasets[44] under the Open Data Directive[45] adopted on 22 December 2022.

In the WP 2023-2024, further funding for data spaces ensured their continuous development, and a common platform for European open data covering the datasets from EU, national, local, regional and geo portals was deployed. Some new actions, such as the Digital Product Passport complemented the package.

- In this WP, work will continue on six data spaces that will be strengthened and expanded. Under the chapter on Support for Data for AI Factories, work will continue on the Data Spaces Support Centre and the Open Data Portal.
- New actions are introduced on the deployment of a robust and legally compliant Data Altruism Consent Management Tool (that will allow the digital implementation of the Data Altruism Consent Form according to the Data Governance Act), and on the development of a digital infrastructure for transmitting information relevant for compliance with EU legislation to streamline compliance processes within the EU and enhance EU industry's competitiveness.

[42] Regulation (EU) 2022/868 of the European Parliament and of the Council of 30 May 2022 on European data governance and amending Regulation (EU) 2018/1724 (Data Governance Act)

[43] European Parliament and the Council of the EU reached the political agreement reached on 28 June 2023 on the Data Act: Proposal for a Regulation on harmonised rules on fair access to and use of data

[44] Commission defines high-value datasets to be made available for re-use

[45] Directive (EU) 2019/1024 of the European Parliament and of the Council of 20 June 2019 on open data and the re-use of public sector information (recast)

- Work on the financial data space is continued by developing a collaborative space for financial firms and national supervisors to support innovation in the EU's financial system.

Services based on data available through data spaces will become more and more essential for the proper functioning of critical infrastructures. Any interruption on the access to data would cause disruptions and affect security or public safety.

The initiatives funded under this work programme will support the objectives of the AI Factories and the upcoming Data Union Strategy as announced in the President of the Commission's political guidelines[46]. Common European Data Spaces are strongly encouraged to establish robust links with AI Factories[47]. By integrating the vast, diverse datasets within data spaces with the advanced AI development and deployment capabilities of AI Factories, new opportunities and innovations across various sectors can be unlocked. This synergy will enhance data utilization and foster the creation of cutting-edge AI solutions, ensuring that AI models are trained on comprehensive and representative data sets, leading to more accurate and reliable outcomes. AI Factories and Common European Data Spaces should devise creative arrangements to reward data providers, such as profit-sharing models, exclusive access to AI insights, or co-ownership of developed solutions, ensuring their contributions are both recognized and incentivized.

It is expected in general that data spaces will be subject to a number of risks that should be addressed and notably, the risk of malicious action by individuals, groups or regimes that would attempt to compromise, distort or disclose data in the data infrastructures, thus compromising the availability of the service and the integrity of the information/data used for/within that service. The addition of unsecure elements by unauthorised users can undermine the security features of other elements. Moreover, data spaces will be combined, aggregated, recomposed and in many cases software-defined working on top of common or overlapping infrastructures. If such data spaces do not provide the same level of reassurance from the outset, the combined data will always lead to the lowest common denominator for security, which will weaken the trust that organisations have in those data spaces. Furthermore, the exploitation and use of the data will often require access to several data spaces, and the interlinking of access infrastructure will make the whole dataspace ecosystem even more reliant on a common high level of security.

As a consequence, some of the data spaces will be subject to the provisions of Article 12(6) of the Regulation (EU) 2021/694 on the specific grounds of public order and inner stability, protection of data privacy and fight against fraudulent and deceptive/ practices, in consistency with WP 2021-2022 and WP 2023-2024. The reasoning is twofold:

- First, there is a need to have trustworthy operators developing and running these data spaces so they can be protected from malicious attacks and be trusted by private and public stakeholders to entrust their data.
- Second, these topics will create an ecosystem of trust aiming to facilitate the reuse and take up of the data covered, and thus economic growth. Having different and separate security conditions for the abovementioned data spaces, and/or dividing each thematic data space into more and less sensitive sections, with different operators and levels of interconnection, would damage the ecosystem of trust as well as the desired take up with its positive economic consequences, implying higher transaction and interoperability costs and discourage, in particular, SMEs.

All data spaces are subject to participation restrictions for the protection of European digital infrastructures, communication and information systems, and related supply chains, as described in Appendix 4 of this Work Programme.

[46] Political Guidelines 2024-2029 | European Commission
[47] AI Factories

In line with Article 18 of the Regulation on the Digital Europe Programme, **calls related to the deployment and implementation of data spaces will be open only to public and private stakeholders established in Member States and Associated Countries.**

2.2.1 Data Spaces

2.2.1.1 Data Space for Cultural Heritage (deployment)

Objective

This action will advance and spread the deployment of the common European data space for cultural heritage, the flagship initiative to accelerate the digital transformation of the EU's cultural sector, to foster the creation, reuse and preservation of content in cultural, creative and other sectors. This data space will expand its functionalities in relation to 3D content, sharing and re-use of digitised cultural resources as well as cross-sector and cross-border cooperation. The security and trustworthiness of the data should also be assets for the fight against the illegal trafficking of cultural goods.

The objective is to strengthen the technical infrastructure, governance and trust mechanisms that will secure easy, cross-border access to cultural heritage datasets. The data space will also offer trust mechanisms with security and privacy by design, and various data services that will assure persistence of identifiers and preservation of content and metadata, as well as data access and usage rights.

Scope

The action will be implemented through procurement and will continue the deployment of the common European data space for cultural heritage, which was based on the Europeana initiative[48]. It will provide citizens, professionals, businesses, organisations, and public administration with efficient, trusted, high-quality, easy-to-use and reliable access to existing and under-digitised types of European digital cultural content, such as intangible heritage. The action will link to relevant European, national, and regional initiatives and platforms to provide interoperable access to cultural heritage databases all over Europe.

In particular, the action will:

- **Strengthen** the data space platform's technical capabilities, enhancing both the security and the resilience of its technical infrastructure.
- **Facilitate the digital transformation of the cultural sector** and capacity building, enabling a pan-European innovative data platform infrastructure[49] with an easy, secure, and trusted online access to European cultural content.
- Improve **findability** in all official EU languages, **interconnectivity** and **reuse** (via fair and open licensing) of the content (including 3D content).

[48] The Europeana initiative

[49] E.g. viewers for all types of content, storage, handling/management of content, re-use, interlinking and interoperability with other platforms, types of computing services provided such as access to cloud computing resources including artificial intelligence capabilities.

- Lead the work on **standards** for the provision of datasets, including the Europeana Data Model, and on standardised interfaces for data provision, expanding to 3D data; continue setting best practices and guidelines for digital cultural heritage, and their wider take up.
- **Link** existing initiatives, cloud facilities and other preservation endeavours in the field of cultural heritage at regional, national and EU level, in particular, the European Collaborative Cloud for Cultural Heritage. Such linkages should be constructed in an end-user friendly manner.
- Continue to develop and maintain the **responsive** and **accessible**[50] front-end of the platform services.
- Improve the **quality of service** for data providers and aggregators collaborating with the platform, including aggregation infrastructure and services, statistical dashboards, and Application Programming Interfaces as well as additional decentralised approaches to data sharing, enabling data providers to share data at source.
- Support technically and build capacity for the **creation and integration of high-value datasets** of digital cultural content of any kind, size, and nature. Particular attention will be given to **3D** models, their creation, archiving process and access. Such datasets will facilitate the research and development of innovative applications, and re-use in the cultural and creative industries and sectors as well as in other areas such as tourism, or education.
- Further **enlarge**, **coordinate**, and **engage** with the **network** of data partners (museums, galleries, libraries, archives, and other cultural institutions across Europe), aggregators (accredited or potentially participating in the Europeana Aggregator Forum, covering the whole EU), European experts working in the field of digital cultural heritage (part of or potentially participating in the Europeana Network Association), other related projects (such as the Competence Centres for 3D[51], the Competence Centre for the Conservation for Cultural heritage[52], the eArchiving initiative[53], as well as other related existing initiatives), and potential re-users of the data such as small and medium enterprises in the creative and content industries.
- **Improve the quality of services** available on the data space, such as technological tools, technical knowledge references, tools for knowledge sharing, a curriculum for digital cultural heritage, or consultancy. These may use existing Artificial Intelligence and machine-learning systems to improve user-engagement and experience, such as automatic translation of content or metadata enrichment, adaptive filtering of cultural heritage assets or personalised recommendations. New services will also include the possibility of adding **extended reality** capabilities to both the portal and the digital objects, with the aim to provide a more comprehensive experience to users, as well as advance technologies tools to the cultural heritage institutions.
- Support and promote **high quality** data (including not only content, but also metadata, paradata, editorial content, or collections) in the common European data space for cultural heritage. Extend the Twin it! campaign[54] to regional and local levels.
- Empower stakeholders of the wider cultural sector to further enlarge, use and benefit from this data space, as well as provide numerous digital opportunities for the public, ranging from

[50] Following the Directive (EU) 2016/2102.
[51] Call for proposals – Competence Centre for 3D (deployment)
[52] The 4CH project
[53] The eArchiving Initiative
[54] Twin it! 3D for Europe's culture

virtual visits to museums, libraries, galleries and heritage sites to history reconstruction and education.

- Improve the quality of the **curatorial thematic** approach to reinforce storytelling, building narratives with a European perspective across cultural sectors, regional and national borders and thus give visibility to the shared history and identity of European citizens.
- Make the data space progressively compliant with the **Data Spaces Support Centre**[55] recommendations, including the integration of the Simpl framework and any other technical requirements as appropriate, ensuring integration of interoperability and portability standards. Coordinate and collaborate also with other data spaces, particularly Language[56], Media and Tourism. Links with the AI factories should be assured so that the data available through the data space could be used to train AI models and develop new AI products and services.

The project should seek collaboration with the European Collaborative Cloud for Cultural Heritage (ECCCH)[57] and the European Open Science Cloud (EOSC) which are funded under Horizon Europe, as well as with the Copernicus World Heritage Hub which will serve as single entry point to Copernicus data and services related to cultural and natural heritage, with a view to coordinate actions and as appropriate establish synergies, complementarities and interconnections. In its collaboration with the ECCCH, the project should put a special emphasis on the end-user perspective, to ensure that the interaction with the platforms is user friendly, easy to understand and attractive, avoiding the need of double entry of data. Furthermore, the project may explore whether some of the user tools being developed for the ECCCH can also be deployed on the common European data space for cultural heritage in order to boost its technical capabilities.

Projects proposals may also seek collaboration with ongoing Horizon Europe projects funded for instance under the topic HORIZON-CL3-2021-FCT-01-08: Fight against trafficking in cultural goods or under relevant projects of Destination 2 of Horizon Europe Cluster 2 targeting cultural heritage and the cultural and creative sectors and industries and their digital transformation.

Deliverables

- Deployment and further development of the common European data space for cultural heritage
- High-value datasets available for re-use, in particular 3D datasets, including for conducting scientific research, preservation and restoration purposes, and re-use in other sectors, such as education or the cultural and creative industries and sectors.

Type of action	Procurement
Indicative budget	EUR 15 million
Indicative duration	24 months
Indicative call planning / timing	2026 – 2027
Indicative duration of the action	24 months renewable twice, 12 months each
Implementation	European Commission

[55] Data Spaces Support Centre
[56] European Language Data Space
[57] See further the Cultural Heritage Cloud

Eligibility and security	Subject to participation restrictions for the protection of European digital infrastructures, communication and information systems, and related supply chains, as described in Appendix 4 of this Work Programme. Further justification for participation restriction is provided in Table 11 in Appendix 4

2.2.1.2 Data Space for Tourism

Objective

The objective is to maintain, further develop and expand the functionalities, services and user community of the common European data space for tourism through a range of actions that guarantee tangible added value, building on the results of the deployment action selected under the DIGITAL work programme 2023-2024[58].

The data space for tourism aims to provide the ecosystem with access to data and to boost productivity, greening and sustainability, innovative business models and upskilling. It will provide participants with the possibility to better align offers with tourists' expectations, adapt service proposals to new tourist groups, predicting influx of tourists and allow planning of resources more efficiently, as well as to create new business opportunities and innovative solutions and practices.

The data space for tourism will play a key role both for innovation in tourism services and as a new data resource for decision making, by providing available information on tourism service implementation and impacts.

Scope

- Further developing and maintaining the tourism data space infrastructure, working in partnership with the Data Spaces Support Centre[59] to ensure alignment and interoperability with the rest of the ecosystem of data spaces implemented with the support of the Digital Europe Programme.
- Establishing close connections with additional sectoral data spaces (e.g. cultural heritage) and other relevant cross-border, national, regional and local initiatives, as well as other digital ecosystems that rely on data.
- Enhancing interoperability to ensure scalability and synergies with other data spaces and digital ecosystems.
- Building on the efforts of the current deployment action to further federate and interconnect existing data sharing initiatives in the tourism sector including the ones at local, regional and national level.
- Exploiting available data, including official statistics, for better interconnection, exchange of information and re-use.
- Continuing to foster community building and integrate additional end-users, while facilitating ease of use for existing and new users, including through dissemination/guidance/training documents.
- Contributing to tools that can be taken in practical use by SMEs to generate data in privacy-preserving manner that supports monitoring implementation and impacts of tourism services.

[58] Call for proposals – Cloud, data and artificial intelligence (DIGITAL-2023-CLOUD-DATA-AI-05)
[59] Data Spaces Support Centre

- Facilitating the use of new data (including the creation of a digital tool to support the application of a consent form for data altruism organisations or by making available good practice examples of real-life use cases to showcase the opportunities of re-use of data, data analysis and AI tools, in particular for and by SMEs and start-ups, for example).
- Giving access to/providing/offering/integrating AI tools, services, and applications for data analysis and utilization (including by supporting the interconnection of this data space with computing and experimentation environments to facilitate the development and deployment of AI models, and to integrate AI into the data spaces to provide AI tools, services, and applications for data analysis and utilization). Links with the AI factories[60] should be assured so that the data available through the data space could be used to train AI models and develop new AI products and services.
- Integrating end-users in Common European Data Spaces is critical for ensuring that these initiatives are effectively aligned with real-world needs and challenges. By involving end-users from the outset, developers gain valuable insights into the practical applications and usability of the data infrastructure.
- Considering financial sustainability from the outset is crucial in the development of Common European Data Spaces to ensure their long-term viability and effectiveness. By establishing a sound financial model, developers can secure the resources necessary to adapt to evolving technological landscapes and user needs, ensuring that data spaces remain robust and beneficial over time.

Deliverables

- Deployment and further development of the technical infrastructure for the Tourism Data Space that supports the interoperable discoverability of data across this and other data spaces and its services and tools, building on the work already carried out at EU level as well as national and regional level.
- Deployment of software tools, including AI tools, for all stakeholders and participants of the data space, with particular attention to the needs of SMEs and public authorities, that support reducing environmental impacts, monitoring and analysing tourism flows and services, and building positive social impact while generating data in a privacy-preserving manner to a form that could be automatically collected and transmitted for further use. Such tools should build on previous work, knowledge and solutions, in particular those developed by other EU funded projects, notably under Horizon Europe, for instance on sustainable cultural tourism[61].
- Regular reports on usage data and troubleshooting.

Type of action	Simple grant
Indicative budget	EUR 8 million
Indicative call planning / timing	Fourth set of calls
Indicative duration of the action	36 months
Implementation	Executive agency HaDEA

[60] AI Factories

[61] See further research and innovation projects funded under Horizon 2020 and Horizon Europe with an aim to strengthen sustainable cultural tourism. E. g. CORDIS Result Pack on cultural tourism

Type of beneficiaries	Public and private entities such as (but not limited to) public administrations and/or governmental bodies, economic actors/SMEs, relevant associations, alliances and non-governmental organisations (NGOs), academia/universities/research organisations, etc.).
Eligibility and security	Subject to participation restrictions for the protection of European digital infrastructures, communication and information systems, and related supply chains, as described in Appendix 4 of this Work Programme. Further justification for participation restriction is provided in Table 11 in Appendix 4.

2.2.1.3 Data Space for Skills

Objective

Following the initialisation of the Data Space for Skills in the previous Work Programmes, which have funded preparatory work and the deployment of the common European data space for skills, the objective is now to **sustain the development of its ecosystem** with the aim to leverage the availability of high-quality skills data to foster innovation and **provide solutions** to the labour shortage and skills gaps in Europe.

The common European Data Space for Skills counters the current fragmentation of skills and education data and increases the transparency of information on people's skills and employers' needs, qualifications and learning opportunities. Data from various sources feed into the data space, providing access for various purposes and to every interested stakeholder. By facilitating this steady supply of data to economic actors and public services, the data space for skills is creating the **fundament for AI innovation in the domain of skills and education in Europe**.

Harnessing the extensive potential for innovation that is present in the pool of skills and education data, particularly through AI solutions, will be essential for bridging the skills gap and labour shortage in Europe. **Active involvement from businesses, including the Education Technology (EdTech) sector and the public sector** is indispensable to deliver the European, national and private solutions that are needed, such as matching learners and jobseekers with suitable jobs and training opportunities and tailoring these services to the user needs. Furthermore, it will foster the creation of more data-driven, evidence-based policies across the EU.

Scope

Aligned with the previous WP, the action will support the **continued uptake and further expansion** of the data space for skills, reinforcing its role as the **main collaboration mechanism** for data-based innovation in the domain of education and skills in the EU. The action will focus on specific issues of concern that can be mitigated through data-based solutions, thereby guaranteeing tangible added value with the objective of **improving labour market outcomes** for the EU population. Support for the data space for skills will be provided through two work strands:

1. The first work strand will involve the **expansion of the data space**, including improving its **interoperability**, enhancing the framework and quality of its services, functionalities, and infrastructure, including **the definition of access and exit conditions**, as well as **establishing**

connections with other data spaces or platforms that provide skills and education data, as well as data from neighbouring fields. The action should ensure accessibility and interoperability with a large number of existing data spaces at European, national as well as regional level. **Links with the AI industry** should be assured so that the data available through the data space could be used to train AI models and develop new AI products and services. Synergies and scalability of several Commission and national initiatives related to skills data should be promoted, including the Advanced Digital Skills Academy, established under this WP. This strand should also encourage the uptake of the data space by **strengthening the ecosystem** of data and service providers, data intermediaries and end users around the data space, allowing its broad use for the benefit of European citizens and businesses. Focus should be given to establishing industry connections, especially with the AI industry and SMEs. The action must also work in close partnership with the Data Spaces Support Centre to ensure alignment and interoperability with the rest of the ecosystem of data spaces implemented with the support of the Digital Europe Programme, in particular in view of a data spaces reference architecture; common building blocks, toolboxes and standards, semantic interoperability, and data governance models.

2. Under the second work strand, activities are expected to **implement new use cases** operated on top of the data space for skills in line with the Data Space for Skills Blueprint[62]. This will include **developing innovative, data-driven products and services** that provide tangible added value for end users, such as matching services, skills assessment tools, skill intelligence or skill foresight tools. These products and services should leverage, where appropriate, existing solutions available at the EU level.

Integrating end-users in Common European Data Spaces is critical for ensuring that these initiatives are effectively aligned with real-world needs and challenges. By involving end-users from the outset, developers gain valuable insights into the practical applications and usability of the data infrastructure.

Considering financial sustainability from the outset is crucial in the development of Common European Data Spaces to ensure their long-term viability and effectiveness. By establishing a sound financial model, developers can secure the resources necessary to adapt to evolving technological landscapes and user needs, ensuring that data spaces remain robust and beneficial over time.

Deliverables

The awarded proposal is expected to deliver:

(1) Expansion of the existing data space for skills infrastructure and functionalities:

- Improved functionality and usability of the data space for skills, including an enhanced scope of data to be shared and established connections with other digital ecosystems.
- Further developed building blocks and infrastructure to ensure interoperability with the ecosystem of common European data spaces.
- Interconnection of the data space for skills with computing and experimentation environments to facilitate the development and deployment of AI models.
- Support and guidance activities for the implementation of use cases, including trainings for interested stakeholders.
- Outreach activities, including communications, workshops and/or hackathons.

[62] DS4Skills Blueprint

(2) Implementation of new use cases using innovative data-driven solutions

- Innovative tools, services, and applications for data analysis, processing and reuse that provide tangible value to end-users, using AI, Cloud, Data Science, extended reality (XR) and other advanced digital technologies.
- Fully operational use cases that are accessible to end users.

Type of action	Simple Grant
Indicative budget	EUR 4 million
Indicative call planning / timing	Fourth set of calls
Indicative duration of the action	36 months
Implementation	Executive Agency HaDEA
Type of beneficiaries	Academic and research partners, public administrations and/or governmental bodies, education and training providers, IT developers, private and public actors, public employment services, recruitment services, trade and industry associations and alliances
Eligibility and security	Subject to participation restrictions for the protection of European digital infrastructures, communication and information systems, and related supply chains, as described in Appendix 4 of this Work Programme. Further justification for participation restriction is provided in Table 11 in Appendix 4.

2.2.1.4 Data Space for Manufacturing

Objective

Aligned with the previous WP, this action aims to support the **continued uptake and further expansion** of the data space for manufacturing. The primary objective is to develop legal, technical and business solutions to pool sufficient data and enable authorized AI developers to have direct or indirect data access to train generative AI models specifically for the manufacturing sector. This initiative seeks to reinforce the role of the data space for manufacturing as a major productivity enhancement and collaboration mechanism within the EU.

Scope

This initiative will support up to three data-collection projects, with around EUR 3 million co-funding from Digital Europe each, focused on manufacturing use cases to unlock advanced AI models, for example, predictive maintenance, process automation, supply chain management, product design and development and sustainability in production, and increase productivity in industrial environments such as purchases, logistics, resource planning and production halls. These projects aim to collect massive, high-quality data from real industrial environments, ensuring proper labelling where relevant, that could be used to train or finetune generative AI models for the manufacturing sector. The data collection has to be relevant for developing AI applications that can significantly benefit major EU manufacturing sectors (such as automotive, chemical, aeronautics and energy-intensive industries). The project proposal has to clearly identify the target sectors, the stakeholders, and have preliminary agreements about the intended data exchange.

The data-collection projects will develop both technical and business solutions to enable authorized AI developers to have direct or indirect data access and utilize these large datasets while fully respecting the data holders' control over their data.

Each data-collection project should propose clear use cases to ensure alignment with real-world needs and challenges. Ideally, the AI developers interested in using such data should be already identified in the proposal.

The proposal will also ensure technical and legal solutions to make the generated datasets available to users of AI Factories. This will also enable AI Factories to leverage these datasets for the development of AI applications. To this extent, the inclusion of AI Factories in the project will be considered an advantage.

Consortia are encouraged to use data intermediaries, as outlined in Chapter III of the Data Governance Act, or other appropriate mechanisms to manage the secure access to and processing of these datasets.

The initiative must also work in close partnership with the Data Spaces Support Centre to ensure alignment and interoperability with the broader ecosystem of data spaces implemented with the support of the Digital Europe Programme. Additionally, the action must coordinate with AI Factories to ensure that the datasets generated can be effectively used in conjunction with data already available facilitating in this way collaborative approaches for the development of advanced AI models.

Considering financial sustainability from the outset is crucial in the development of Common European Data Spaces to ensure their long-term viability and effectiveness. By establishing a sound financial model, developers can secure the resources necessary to adapt to evolving technological landscapes and user needs, ensuring that data spaces remain robust and beneficial over time.

Deliverables

The awarded proposals are expected to deliver:

1. Solutions that allow the collection of large, high-quality data from real industrial environments, from different manufacturing systems/sectors.
2. Solutions that allow access to these large datasets to train Generative AI models that respond to real-world industrial needs and challenges, preferably relying on trusted third parties hosting data and training compute on behalf of authorized AI developers.
3. Agreements with specific AI factories providing information on the data sets available and the conditions for using them for training AI models.
4. Interoperability and governance framework of manufacturing data spaces including from national industrial data spaces to ensure that mechanisms to aggregate data for training AI could be taken up at EU level.

Type of action	SME support action
Indicative budget	EUR 10 million, co-funding up to three projects[63]
Indicative call planning / timing	Second set of calls
Indicative duration of the action	36 months
Implementation	Executive Agency HaDEA

[63] This call will be funded using annual instalments.

Type of beneficiaries	All entities, with a focus on manufacturing SMEs and mid-caps, IT companies and integrators. The consortium will include data suppliers, data users, as well as any other organisation (such as data brokers, data stewards, data integrators, trusted data intermediaries) participating in data aggregation and governance activities.
Eligibility and security	Call restricted on the basis of Article 12(6) of the Regulation (EU) 2021/694. Subject to participation restrictions for the protection of European digital infrastructures, communication and information systems, and related supply chains, as described in Appendix 4 of this Work Programme.

This action will be subject to article 12(6) of Regulation (EU) 2021/694 for the following reasons. The action aims to scale up the deployment to reach critical mass of the Manufacturing Data Space. The action will also develop use cases and models on the base of sensitive data on manufacturing and distribution. This will also include industry sectors critical for national security which might be at risk of malicious action by individuals, groups or regimes that would attempt to compromise, distort or disclose data in the data infrastructures. The participation of non-EU entities entails the risk of this sensitive data and information being subject to legislation or pressure that obliges those non-EU entities to disclose this information to non-EU governments. Therefore, based on the outlined security reasons, the action is subject to Article 12(6) of the Regulation (EU) 2021/694. This does not exclude the participation of legal entities established in associated countries and legal entities that are established in the Union but are controlled from third countries, where they meet the conditions defined in this Work Programme.

2.2.1.5 Public Procurement Data Space

Objective

The objective is to further scale up the Public Procurement Data Space (PPDS)[64] which was developed under the previous WPs, enhance its analytics capabilities, to make more use of AI and to connect to other Data Spaces through Simpl. The aim of the PPDS is to have not only public procurement data from Tenders Electronic Daily (TED) accessible, but also procurement data from Member States. Some Member States have been already connected to the PPDS and this activity will go on. Also, Member States showed interested in reusing components of the PPDS for a national implementation.

Scope

The following activities are in scope of this action:

- Continue to connect national publication portals from Member States to the PPDS. The data will be mapped to the eProcurement Ontology, which is managed by the Publications Office of the EU in collaboration with user groups, to have a harmonized data format.

[64] Communication from the Commission Public Procurement: A data space to improve public spending, boost data-driven policy-making and improve access to tenders for SMEs

- Further develop the data analytics toolset and make more use of AI. The PPDS should provide in addition to the available functionalities the following features:
    - Develop algorithms to, for example, see the level of competition and how this could potentially be improved.
    - Upgrade the PPDS, so that it can help buyers to increase the data quality of the data they provide in notices but also to provide a functionality so that the PPDS could become a companion for their daily work.
    - Provide increased functionality to support suppliers to find business opportunities. This includes making the data available in such a way that it can help data re-users to bring those opportunities closer to suppliers.
    - Make the PPDS also more interesting for citizens. A functionality to be implemented would be "how sustainably does my commune procure goods and services?".
- Link the PPDS with existing data sources and data spaces available at EU and Member States level (e.g. beneficial ownership registers, business registers, eInvoicing, etc.) to be able to generate additional insights. To connect to other data spaces, the aim is to use Simpl. The PPDS itself will also provide access to its data through Simpl.
- Continue to provide communication activities, events and workshops on the PPDS. This is important to take the needs from the various user groups like Member States and buyers on board.
- Work with the Data Spaces Support Centre to ensure alignment and interoperability with the rest of the ecosystem of data spaces implemented with the support of the Digital Europe Programme.

Deliverables

- A PPDS that has access to more procurement data from connected Member States.
- New indicators that are developed together with Member States and other user groups.
- An improved data analytics toolset that includes AI/machine learning (ML) and natural language processing (NLP) to identify patterns.
- Improved dashboards and functionality to support different user groups better.
- Improved website to support different user groups better to make use of the PPDS.
- Integration with other data sources to enrich the data available in the PPDS.

Type of action	Procurement
Indicative budget	EUR 3 million
Indicative call planning / timing	2026
Indicative duration of the action	36 months
Implementation	European Commission
Type of beneficiaries	Not applicable

Eligibility and security	Subject to participation restrictions for the protection of European digital infrastructures, communication and information systems, and related supply chains, as described in Appendix 4 of this Work Programme. Further justification for participation restriction is provided in Table 11 in Appendix 4.

2.2.1.6 Health: Data ingestion capacities and data services for the European Genomic Data Infrastructure in the European Health Data Space

Objective

This action aims to enhance the European genomic data infrastructure by supporting the deployment of advanced tools for data curation and use and its alignment with the European Health Data Space (EHDS). It also contributes to boosting the capacity of Member States to sequence human genomes through scaling up dedicated secure data storage and processing environments.

Data quality and volume are key success factors for health data infrastructures supported under the Digital Europe Programme, such as the one developed by the Genomic Data Infrastructure (GDI) project implementing the 1+ Million Genomes (1+MG) initiative of the Member States.[65] The availability of thoroughly curated genomic data and related clinical and phenotypic information is a prerequisite for accelerating the move to the next level of multi-modal data modelling and deployment as well as health sector innovation in Europe. 1+MG and the projects implementing the initiative have worked and agreed on common data standards and ontologies, data quality criteria and thresholds, data inclusion policies and the necessary standard operational procedures. On that basis, data holders will need to quality-check and curate the datasets that they will be making available to 1+MG and EHDS (HealthData@EU) to ensure their high value for users. Once data are curated, they need to be stored safely and processed in secure processing environments, which is a particular challenge with the highly voluminous genomic data.

Wide accessibility of the data and user-friendliness of the tools and services facilitating the access to data are critical success factors of the 1+MG data infrastructure. While such functionalities for research purposes have been already largely covered in the deployment project GDI, application in other use scenarios, in particular healthcare and public health policy, requires additional tools, application programming interfaces (APIs) and interfaces to address the corresponding specific user needs and requirements. The citizen perspective must be also factored in to ensure, through appropriate IT tools, full compliance with the General Data Protection Regulation (GDPR) rules regarding citizens' rights on personal data protection.

This action relates to the potential creation of a European Digital Infrastructure Consortium for genomic data (Genome EDIC) and supports the activities related to operating the 1+MG data infrastructure established with the support of Digital Europe under Work Programme 2021-2022 (GDI project), including its alignment with the requirements, technical specifications, and processes established by the EHDS Regulation to ensure a smooth functioning within the HealthData@EU infrastructure.

[65] European '1+ Million Genomes' Initiative

Scope

The support will be provided via two closely related work strands.

First work strand: data tools

Data tools for the 1+MG data infrastructure should be based on common standards and as automated as possible, and should enable data quality check at source, benchmarking, annotation and enhancement on the data provider end and by the operator of the data infrastructure, as appropriate. This covers the whole process of data inclusion, integration and access provision, as well as compliance assessment, risk management and data security assurance on the side of data infrastructure. All steps and functionalities should be designed to support the needs and requirements of three main use scenarios, i.e. research (largely already covered by the GDI project), and clinical care and public health policymaking. They should follow and implement the standards and procedures agreed within the 1+ Million Genomes initiative (1+MG Framework) and be compliant with the EHDS Regulation. For example, data curation tools should facilitate the description of datasets using a metadata standard compatible with the one required for the EU Dataset Catalogue of the EHDS (Health DCAT-AP), including its data quality and utility label defined in the project QUANTUM. Metadata should also cover information about legal conditions and enablers for sharing the respective dataset. Moreover, the action should leverage best practices and strategies for linking clinical and genomic data at individual level, within the framework of EHDS where appropriate, to maximise access to data while preserving the security and privacy of data subjects (e.g. sampling, anonymisation and pseudonymisation techniques, data gap filling). Data minimisation tools should support compliance with the respective GDPR rules.

Moreover, this action covers piloting and the deployment of tools, APIs and interfaces to provide high-quality data services to the users of the 1+MG data infrastructure for healthcare and public health policy purposes as well as addressing any remaining user needs in research not yet covered by other projects. For example, APIs and interfaces for data discovery, and federated analysis and modelling in a secure processing environment will enable users to find, access and integrate the data at the required level of data protection safeguards to serve their projects, clinical questions or policy development. Adequate data de-identification/synthetisation methods and support to multi-modal data discovery and analysis across the data infrastructures (e.g. linking up with the Cancer Image Europe and HealthData@EU infrastructures) should also be considered and implemented. The tools delivered and deployed should be user-friendly and clearly support high uptake of the data infrastructures and their services. Furthermore, the action is expected to establish a citizen portal for 1+MG enabling citizens to exercise their GDPR rights, such as obtaining information about their data inclusion / processing and their legal basis, manage the consent, requesting data access, rectification or erasure.

All solutions deployed by the project should be compatible with the Simpl middleware platform, where appropriate, and ensure interoperability with the HealthData@EU infrastructure. Tools related to authentication should be eIDAS-compliant. While fully respecting the prerogative of participants within the 1+MG data infrastructure to determine who can access what data and under which conditions, suitable links to the AI Factories should be envisaged. The project should include a description of data access and usage arrangements.

Second work strand: data storage and processing capacity

This action supports the acquisition and set-up of a secure federated data storage and processing capacity for the 1+MG data infrastructure, which is expected to be operated by the relevant EDIC. It should include “hot storage” working in synergy with secure processing environments aligned with the

EHDS requirements, such as compliance checks for secure processing environments, and detached long-term storage for curated data made available to the 1+MG by the data providers, including the Genome of Europe dataset. The data storage capacity should be designed based on an agreed data storage optimisation strategy, balancing between storage costs and data depth/breadth/versioning while considering the most appropriate data storage architecture, technology and legal aspects, and ensuring scalability.

Deliverables

First work strand: data tools

- Tools to perform automated data and metadata curation / inclusion / minimisation by data providers, foster data quality assurance and enable compliance checks and risk/security management developed, tested and deployed in the 1+MG data infrastructure in alignment with agreed 1+MG requirements and related standards and procedures, as well as the legislative and technical framework of the European Health Data Space and European Digital Identity Framework.
- Tools, APIs and interfaces developed, tested and deployed in the GDI, covering well documented needs of users from research, healthcare and public health policy, in alignment with the European Health Data Space.
- Citizens' portal.

Second work strand: data storage and processing capacity

- 1+MG data storage strategy.
- Secure federated data storage and processing capacity for 1+MG data infrastructure.

First work strand: data tools

Type of action	Simple grant
Indicative budget	EUR 5 million[66]
Indicative call planning / timing	Second set of calls
Indicative duration of the action	48 months
Implementation	European Commission
Type of beneficiaries	Public and private entities such as (but not limited to): public administrations (national, regional and local level), Health Data Access Bodies, hospitals, research institutes, biobanks, research agencies, research infrastructures, European Digital Infrastructure Consortia
Eligibility and security	Call restricted on the basis of Article 12(6) of the Regulation (EU) 2021/694. Subject to participation restrictions for the protection of European digital infrastructures, communication and information systems, and related supply chains, as described in Appendix 4 of this Work Programme.

[66] This call will be funded using annual instalments.

Second work strand: data storage and processing capacity

Type of action	Grant for procurement
Indicative budget	EUR 20 million
Indicative call planning / timing	Second set of calls[67]
Indicative duration of the action	48 months
Implementation	European Commission
Type of beneficiaries	Public and private entities such as (but not limited to): public administrations (national, regional and local level), hospitals, research institutes, biobanks, research agencies, research infrastructures, European Digital Infrastructure Consortia
Eligibility and security	Call restricted on the basis of Article 12(6) of the Regulation (EU) 2021/694. Subject to participation restrictions for the protection of European digital infrastructures, communication and information systems, and related supply chains, as described in Appendix 4 of this Work Programme.

In consistency with WP 21-22 and WP 23-24, this topic will be subject to Article 12(6) of the Regulation (EU) 2021/694 because it will cover provision of sensitive technology (e.g. tools enabling processing of and access to personal health data) which in conjunction with AI-based applications could potentially expose sensitive data and thus compromise EU's security and public health. The participation of non-EU entities entails the risk of them being exposed to legislation or pressure to disclose this sensitive technology and/or data to non-EU governments.

2.2.1.7 Multi-Country Project in Agri-Food

Objective

The objective of this action is to support a Multi-Country Project (MCP) in the agri-food sector. The MCP in Agri-Food aims to leverage digital infrastructure, particularly data infrastructure, to enhance the efficiency, sustainability, and competitiveness of the agri-food sector across Europe. This action will, foster the access, sharing, and reuse of data to support decision-making, reduce administrative burdens, and enable innovative solutions within the sector.

In line with the European Data Strategy, the action should contribute to creating a fair, competitive, and innovative data economy. In line with the Political Guidelines[68], it should support the digital transformation of the agri-food sector, making it smarter, more sustainable, and better adapted to the needs of its users, in line with the objectives to build a competitive and resilient agriculture and food system, aiming to support the sector's sustainability and productivity. The action is also expected to support the reduction of the administrative burden in both business-to-business (B2B) and business-to-to government (B2G) data sharing, in particular in cross-border settings, and explore the potential

[67] This call will be funded using annual instalments.
[68] Political Guidelines 2024-2029 | European Commission

for simplification. The awarded proposal will take into account existing data-sharing initiatives at European, national, and local levels. Especially, it will complement and accelerate the development and implementation of the Common European Agricultural Data Space (CEADS).

Scope

The awarded proposal should address the following activities:

- Provide operational support to create a sustainable collaboration framework among Member States and other stakeholders aimed at facilitating large-scale investments in digital and data infrastructure for agri-food projects with a multi-country focus.
- Support the exchange of information and take stock of available infrastructures, solutions, tools, agreements, and standards related to the scope of the action among participants, and coordinate across initiatives and projects in different countries and domains.
- Analyse gaps in existing agri-food data infrastructures and services, and propose measures to support the deployment, operation, and maintenance of data and service infrastructures.
- Develop and set-up digital infrastructure enabling agri-food data exchange, access, and analysis at the European level.
- Provide assistance, including financial support to third parties, for the development of cross-border use cases focusing on real-life applications based on agri-food data sharing and promote the sharing and reuse of best practices. These use cases should be implemented across several Member States. They should foster advanced technologies, including AI, and should follow a coherent approach, that ensures interoperability. Indicative areas for use cases include the preparation of scaling of the multi-country project and/ or subsequent actions that support the objectives of the MCP.
- Support the implementation and deployment of a large-scale data-infrastructure with a multi-country or EU-level dimension to roll out data services in agri-food relevant for the public and private domains.

All activities under this project will require close collaboration and alignment with existing and evolving EU initiatives related to agri-food data, in particular:

- Common European Agricultural Data Space (CEADS)
- Testing and Experimentation Facilities (TEF) for AI in agri-food
- Horizon Europe Partnership Agriculture of Data
- European Digital Innovation Hubs (EDIHs) and EDICs
- EU Digital Identity Wallet/eID

Duplication of existing initiatives should be avoided. Compliance with applicable EU legislation, such as the General Data Protection Regulation (GDPR) and the Directive on open data and the re-use of public sector information, is required.

The awarded proposal is expected to achieve financial sustainability beyond the project's duration. The outcomes and deliverables of the project should be owned or usable by a lasting structure supporting the implementation of the MCP in the agri-food sector.

The active involvement of data providers and users in the public and private domains is highly recommended to ensure that the project’s outcomes are designed to meet their needs and to create a stronger sense of ownership.

To encourage the participation of diverse actors, the proposed project is encouraged to use financial support to third parties as part of the development, customisation, and integration of digital infrastructure for the agri-food ecosystem; and the implementation of cross-border use cases. More information on funding rates and rules for this type of action is available in Appendix 2 and Annex 5 of the model grant agreement.

Deliverables

- **Capacity building:** Proactive collaboration with stakeholders.
- **Information exchange platform:** A platform for sharing, primarily among participants, insights and data about infrastructure, tools, standards, and agreements related to the scope of this action, complementing related initiatives.
- **Coordination roadmap:** A comprehensive plan for preparing the implementation of the actions under this project and their contribution to the multi-country project, detailing the alignment of various initiatives, of actors participating in the action across different sectors and member states.
- **Recommendations for the development, operation, and maintenance:** Key foundational elements to roll-out the project towards countries not yet involved in the MCP and towards further segments of the agri-food sector.
- **Assessment of ongoing initiatives**: Stocktaking of ongoing initiatives at national and EU level relevant to the project and documentation of lessons learnt to tailor the approach towards the deployment action.
- **Concept, technical specification, and set-up of digital infrastructure for the agri-food ecosystem.**
- **Use cases portfolio:** A collection of cross-border use cases implemented by third parties that demonstrate cooperation and interoperability, including guidelines and standards for implementing such use cases more generally, in alignment with existing European initiatives and in compliance with applicable legislation. This deliverable should be prepared by the consortium with support from third-party beneficiaries. Those use cases might be implemented as preparation for the deployment action, the envisaged digital infrastructure project, or as subsequent action to capitalise the deployment action.
- **Use case evaluation reports:** Detailed assessments for each use case, including performance results, lessons learned, and recommendations for future projects. This deliverable should be prepared by third parties under the consortium's guidance.
- **Deployment action:** Implementation of the envisaged project in agri-food at multi-country/ EU level with sustainable structures for its maintenance and further development.
- **Policy recommendations on the creation of favourable framing conditions for achieving MCP objectives and furthering the digital transformation of the sector**, reducing administrative burden, and simplification.

Type of action	Grant for Financial Support
Indicative budget	EUR 15 million
Indicative call planning / timing	First set of calls
Indicative duration of the action	48 months
Implementation	European Commission

Type of beneficiaries	EDIC, Public and private entities such as (but not limited to): public administrations (national, regional, and local level), economic actors (SMEs, large organizations) in the agri-food sector.

2.2.2 Support for Data for AI Factories

2.2.2.1 Data Spaces Support Centre

Objective

The objective is to identify a consortium that will assure the continuation of the Data Spaces Support Centre (DSSC). The DSSC coordinates all relevant actions on Common European Data Spaces to ensure that they develop in a coherent way, are interoperable and benefit from economies of scale by the use of common practices, components (referred to as 'building blocks'), protocols and tools (e.g., software implementations or services implementing the building blocks mentioned above that are considered fit to purpose). The aim is to support the development, proper functioning and interconnection of data spaces to facilitate secure and trusted data sharing and reuse within and across sectors, benefiting both the public sector and European businesses, particularly SMEs.

Additionally, the DSSC supports the work of the European Data Innovation Board (EDIB), e.g., by identifying cross-sector standards for data use and sharing, by conducting comparative analyses across sectors, and by highlighting best practices related to security and access to data, all while considering sector-specific standardization efforts. In order to ensure alignment with sectoral initiatives, the DSSC will work in close cooperation with the key stakeholders in the data spaces.

Scope

The Support Centre will include three main work strands:

1. Community Building

The first work strand aims to maintain and enlarge the network of stakeholders.

- Fostering a community of practice focused on data sharing.
- Engaging participants from projects supported by the EU, especially those funded by the EU.
- Engaging with projects deploying data spaces at European level and that might serve as showcase.

A particular attention should be given to startups and SMEs in order to facilitate access and participation in data spaces.

2. Governance and Infrastructure Requirements

In collaboration with the stakeholder network, the second work strand focuses on:

- Promoting the use of common solutions for data infrastructure across sectoral data spaces, covering technical design, functionality, operation, governance and legal aspects.

- Identifying standards, including semantic standards and interoperability protocols (both domain-specific and crosscutting).
- Engaging in standards development initiatives, where needed, to ensure data space requirements are supported.
- Exploring potential synergies between data spaces and coordinate cross-cutting exchanges among them.
- Promoting data governance models, business strategies, and operational approaches for running data spaces.
- Addressing legal issues and other market-relevant barriers.
- Identifying opportunities for value added services.

3. Platform for knowledge sharing and support

The third work strand will focus on the maintenance and development of the DSSC.EU platform which will act as a central hub for knowledge sharing, stakeholder support and the development of data spaces. It will provide resources, promote best practices, and allow to connect stakeholders across various initiatives. The platform will also include a customer support centre function, allowing stakeholders to easily get into contact with the DSSC for specific support requests.

The Data Spaces Support Centre addresses a wide range of stakeholders involved in the creation, maintenance, and governance of common European data spaces. It aims to create a collaborative environment where these diverse stakeholders can work together to establish common data spaces that are secure, interoperable, and trustworthy. These stakeholders include European organisations from different sectors:

- Private: Businesses and industries that can benefit from data sharing and interoperability as well as software and technologies providers that can offer solutions for the deployment of data spaces.
- Public: Government agencies and public administrations that manage and use data for public services.
- Academia: Research institutions and universities that contribute to the development of data space technologies and standards.
- Civil Society: Non-governmental organizations and community groups that advocate the use of data in a secure and trusted manner.

Deliverables

This action will result in the continuation of the operation of the Data Spaces Support Centre. The Centre will continue to coordinate, support, and promote all relevant initiatives related to sectoral data spaces. It will provide essential blueprints, technologies, processes, standards, and tools necessary for the effective deployment, operation, and interconnection of these data spaces, ensuring their seamless integration and functionality across various sectors. It will ensure that key stakeholders from data spaces are involved in these activities.

Type of action	Coordination and support action (CSA)
Indicative budget	EUR 10 million
Indicative call planning / timing	First set of calls

Indicative duration of the action	36 months
Implementation	European Commission
Type of beneficiaries	EU Public entities, private entities including economic actors / SME, relevant associations and NGO, academia/universities/research organisations with extensive expertise on data spaces.
Eligibility and security	Subject to participation restrictions for the protection of European digital infrastructures, communication and information systems, and related supply chains, as described in Appendix 4 of this Work Programme. Further justification for participation restriction is provided in Table 11 in Appendix 4.

2.2.2.2 Open Data Portal

Objective

The service data.europa.eu provides the common platform for European open data, both from European countries and from EU institutions and bodies and acts as a bridge between European data providers and data users and re-users in different ways.

This action has the purpose to further develop the platform, which collects metadata to give access to open data from EU, national, regional, local and geo portals, and to increase the availability, quality and usability of public sector information in compliance with the requirement of the Open Data Directive and the Data Governance Act (DGA). This will facilitate the findability and usage of the data for a range of purposes, for example for users who want to support policy decisions by trustworthy data, build businesses on innovative data tools, or train large language models (generative AI).

The service data.europa.eu will also continue to offer training courses, webinars and personalised support for data providers in making their data available as well as activities targeted at boosting data reuse.

The focus of this action will be on adapting the functionalities of the portal to facilitate discovery, comparison, visualisation and analysis and access to data through APIs and at the same time make sure that the portal continues to have a high security standard.

The main goals are:

- To continue the development, evolution, maintenance, operation, and hosting of the data.europa.eu portal (including metadata of open data from Member States public administrations and European institutions, bodies and agencies), to enhance its role as a secure, robust, and user-friendly European portal for access to public sector data, enabling professionals and the general public to find, download, query and visualise datasets of interest and learn and give feedback about public data resources; also enabling publishers to test and improve metadata quality.
- To foster the uptake of data supply, including through support to the improvement of the metadata quality supply. Empowering and guiding Member States and public sector bodies to understand

re-users' demands and be able to collect and publish good quality, fit-for-purpose public data resources complying with appropriate regulatory, technological, and organisational requirements.
- To foster the uptake of data re-use. Facilitate an engaged community of re-users in the public and private sector that becomes aware and knowledgeable of the public data resources potential and recognises and shapes data.europa.eu as a single access point to European public data resources and as a hub for research, exchange and learning.

Scope

Funding will be provided for:

- Continuation, expansion and maintenance of the data.europa.eu portal (data.europa.eu gives access to open data from European national, regional, and local open data portals, as well as to open data from EU institutions, bodies and agencies), including integration with the EU and Member States open data, INSPIRE geoportals. Specific attention to be given to harvesting and presentation of high-value datasets.
- Continuation of providing data pipelines for public sector bodies publishing their datasets on data.europa.eu. Improvements of existing features like automated translations, data citation, dataset embedding, data quality checks and many more features, including adaptive improvements of features where necessary to accommodate best practice-differences between the open and restricted data on data.europa.eu. Providing a tool for generating customised reports on the Member States' compliance with of the Implementing Regulation on High-Value Datasets.
- Strengthening the ability to support sharing of metadata about protected public sector information under the DGA.
- Providing a network of data specialists in the public sector publishing more and more high-quality datasets.
- Cultivating a network of public sector data re-users, both current and potential ones.
- Contribute, where relevant, to the Common European Data Spaces in providing a platform and tools for accessing multiple sources of open data through a harmonised single-entry point.
- Activities to foster uptake of open data, both online and in the physical world, when it comes to data supply and data re-use.
- Explore the implementation of AI technologies to enhance metadata and data, spot duplications, explain data to users and to further improve the search of datasets.

Deliverables

- An enhanced version of the data.europa.eu portal, fully integrating the High-Value Datasets (including specific means for their presentation) to be made available by Member States under Commission Implementing Regulation (EU) 2023/138 of 21 December 2022.
- An updated European Registry of Protected Data in the Public Sector (ERPD) section on the data.europa.eu portal with more Member States and features added.

Type of action	Procurement
Indicative budget	EUR 6.8 million
Indicative call planning / timing	2025 – 2026
Indicative duration of the action	36 months
Implementation	European Commission
Type of beneficiaries	Not applicable

Eligibility and security	Subject to participation restrictions for the protection of European digital infrastructures, communication and information systems, and related supply chains, as described in Appendix 4 of this Work Programme. Further justification for participation restriction is provided in Table 11 in Appendix 4.

2.2.2.3 A European Data Altruism Consent Management Tool

Objective

The Data Governance Act (DGA) aims to enhance trust and legal clarity in data sharing. In particular, it seeks to support "data altruism", i.e. the making available of data by persons and companies for an objective of general interest. As part of this, the DGA mandates the development of a European data altruism consent form for granting and withdrawing consent. This form will facilitate making available data across Member States in a uniform manner, ensuring that individuals who share their data can easily provide and withdraw their consent. Additionally, it will provide legal certainty in the use of data made available on an altruistic basis, in particular in the context of scientific research and statistical analysis.

To scale up data altruism, however, the process of consent management needs to be digitised. Hence, this objective supports the development, procurement and subsequent deployment of a robust and legally compliant Data Altruism Consent Management Tool that will allow the digital implementation of the Data Altruism Consent Form. The Data Altruism Consent Management Tool will empower users to manage their consent preferences effectively, ensuring transparency and adherence to global privacy regulations. Specifically, the objectives are as follows:

- **Legal Compliance**: Create a tool that complies with the DGA and the relevant EU legislation (e.g. GDPR).
- **User Trust**: Build trust for users by allowing them granular control over their data consent choices.
- **Ease of use:** Provide a user interface that makes it easy for users to provide, withdraw and manage consent
- **Integration**: Easily integrate with existing software and analytical tools including the EU Digital Identity Wallet.

Scope

The developed solution should cover the following key aspects:

- Develop a user-friendly interface/app for generating consent statements, using eID for identification, qualified signature services under eIDAS for signature and storing consent receipts, i.e. digital copies of the consent statement.
- The tool would allow that the purposes of processing of personal data can be specified by the future data controller.
- Enable data subjects to easily revoke or withdraw consent.
- Data controllers learn in real-time of any relevant changes of the consent granted.

- Allow data altruism organisations and data users to request consent for reusing data for new purposes.

Deliverables

An open-source, secure, reusable Data Altruism Consent Management Tool that will allow data altruism organisations to implement consent-related processes.

The solution will be easy to implement and provide to the user (data subject) an easy way to manage its consent.

Type of action	Procurement
Indicative budget	EUR 5 million
Indicative call planning / timing	2025
Indicative duration of the action	24 months
Implementation	European Commission
Type of beneficiaries	Not applicable
Eligibility and security	Subject to participation restrictions for the protection of European digital infrastructures, communication and information systems, and related supply chains, as described in Appendix 4 of this Work Programme. Further justification for participation restriction is provided in Table 11 in Appendix 4.

2.2.2.4 Digital solutions for regulatory compliance through data

Objective

The complexity and volume of reporting requirements stemming from EU legislation are growing, posing difficulties for both regulatory bodies to enforce laws and for public and private entities trying to comply. These challenges underscore the need for innovative solutions to streamline compliance processes and enhance competitiveness within the EU.

This objective will support projects testing digital solutions for transmitting information relevant for compliance with EU legislation (e.g. regulations on environmental issues) and automate the compliance process for a number of pilot use cases.

Regulatory reporting requirements cover a wide range of information, from aggregate (e.g. company balance sheets) to granular, representing individual transactions and events, and in many situations also on the identification and (pre-market) registration of products. Such detailed data is often already routinely and automatically recorded in the systems of businesses, sometimes to meet regulatory requirements, but in many cases for their own management purposes. In other cases, data can be captured automatically from business processes and devices and, with the right technical solutions in place, such data could be used for automatic compliance.

Activities funded under this objective would combine advanced technologies such as data capturing technologies, automatic transmission and analysis, cloud storage, and encryption to ensure data

security, confidentiality and regulatory adherence. By integrating comprehensive APIs, the projects will facilitate real-time compliance and self-compliance checks, they will provide common terminology to define and describe the meaning of reported data as well as standards and formats for the reported data while machine learning algorithms will automate monitoring and reporting. Crucially, direct communication with regulatory authorities enables automated updates and reporting, ensuring the system remains current with evolving regulations. This approach emphasizes robust access control and audit trails for transparency, while significantly reducing the risk of non-compliance and the associated penalties. It would also make use of the EU Digital Identity Wallet, when available, to ensure identification of natural persons and legal entities active in data spaces as well as other relevant trust services, such as electronic seals or ledgers.

It will be essential to propose use cases that allow the data to be automatically collected and processed with minimal manual intervention, and to ensure that the compliance verification process is both efficient and scalable.

Sectors with a high bureaucratic burden such as agriculture, environment, manufacturing, healthcare, and energy, are examples of possible pilot use cases to be funded.

Consortia can consist of public administrations such as government bodies/ regulatory agencies, private entities or a mix of the two.

Scope

The activities funded under this initiative will focus on the following aspects:

- Technical aspects:
    - Utilize advanced technologies such as data capturing technologies, automatic transmission and analysis, cloud storage and encryption for data security and compliance with regulations.
    - Implement comprehensive APIs to enable real-time compliance and self-compliance checks.
    - Employ machine learning algorithms for automated monitoring and reporting.
    - Where possible, use precisely defined concepts available in the data catalogue entries of common European data spaces enabling deterministic data collection.
    - Establish direct communication channels with regulatory authorities for automated updates and reporting, keeping the system updated with changing regulations (e.g. by expressing the reporting requirements in machine readable and executable way).
    - Ensure robust access control and maintain audit trails for transparency and accountability.
    - Minimize the risk of non-compliance and potential penalties through these technological and procedural safeguards.
    - Integrate the EU Digital Identity Wallet for secure identification of individuals and legal entities.
- All systems must incorporate robust data privacy and security measures.
- Proposers must ensure that the systems developed are open source, interoperable with existing government data systems and adhere to European data standards and specifications.
- The system must be scalable to handle large volumes of data and high transaction rates.
- The system must be designed with end-users in mind, ensuring ease of use and accessibility.
- A comprehensive data governance framework must be established. This should include policies for data quality management, data stewardship, and data lifecycle management.
- Active engagement with all relevant stakeholders is essential.

- Proposals should target legislations that have clear, quantifiable compliance metrics that can be automatically assessed using data analytics and they should ensure no overlaps with ongoing initiatives (e.g. Digital Product Passport, Customs reform).

Deliverables

- Delivering three or four separate projects on the streamlining of regulatory reporting through automated and trusted sharing of compliance data, each demonstrating how the governance and technical aspects as well as the legal and processing aspects have been addressed.
- Each project will deliver a pilot in realistic operational conditions and a live presentation (demo) of the pilot use case by the participants as well as a final report.
- The project outcomes, including the developed solutions, will have to be disseminated to relevant stakeholders, such as public administrations and private entities (in particular SMEs), showcasing the benefits of streamlining compliance processes and reducing administrative burdens.

Type of action	Simple grant
Indicative budget	EUR 8 million (2025) EUR 10 million (2026)
Indicative call planning / timing	First set of calls, Third set of calls
Indicative duration of the action	24 months
Implementation	European Commission
Type of beneficiaries	National and EU authorities (as data users), public and private entities, businesses, farmers, etc/providers of compliance data (data holders), data sharing organisations, universities.
Eligibility and security	Subject to participation restrictions for the protection of European digital infrastructures, communication and information systems, and related supply chains, as described in Appendix 4 of this Work Programme. Further justification for participation restriction is provided in Table 11 in Appendix 4.

2.2.2.5 Data and technology for reducing reporting burden and automate compliance in financial services

Objective

Financial institutions and other entities active on financial markets are required to report a wide range of data on their financial condition and activities. EU and national supervisory authorities need the data to supervise financial institutions and markets. Data enable supervisors to monitor risks, ensure financial stability and market integrity, and protect investors and consumers of financial services in the EU. The volume and granularity of data reported for supervisory purposes have grown substantially over the last decade. The objective is to improve reporting and data flows in financial services by using modern digital technologies to reduce the reporting burden. The project aims to deliver on key building

blocks of the strategy on supervisory data in EU financial services[69] and links to the wider Commission's ambition to rationalize reporting.

Scope

Develop digital technologies to facilitate compliance, improve data quality, and reduce reporting burden for the EU authorities, national authorities, and reporting entities in the financial sector. The project will focus on two strands:

1) Build a data dictionary providing common terminology to define and describe the meaning of reported data, as well as standards and formats for the reported data. This will avoid ambiguity in interpretation of the reported data and provide an underpinning for sharing and reuse of reported data in an interoperable way.

2) Develop technical infrastructure for authorities to securely share and reuse reported data, allowing an efficient flow of financial data, working towards a supervisory data space.

Deliverables

1) A digital dictionary containing a description of the content and format of data collected under select reporting frameworks in financial services in a structured, comprehensive, consistent and unambiguous manner, using terms anchored in legislation to establish a clear link between collected data items and the relevant legislative requirements, taking into account and potentially reusing any existing domain vocabularies.

2) A dedicated secure IT environment in which data can be accessed and exchanged safely between authorities based on appropriate access rights, irrespective of its physical location of storage.

Type of action	Procurement
Indicative budget	EUR 2 million
Indicative call planning / timing	2025
Indicative duration of the action	24 months
Implementation	European Commission
Type of beneficiaries	Not applicable
Eligibility and security	Subject to participation restrictions for the protection of European digital infrastructures, communication and information systems, and related supply chains, as described in Appendix 4 of this Work Programme. Further justification for participation restriction is provided in Table 11 in Appendix 4.

2.2.2.6 Digital Finance Platform

[69] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - Strategy on supervisory data in EU financial services (COM(2021) 798)

Objective

The objective is to build a collaborative space bringing together innovative financial firms and national supervisors to support innovation in the EU's financial system. The platform offers practical tools designed to facilitate the scaling up of innovative financial firms across the EU.

Scope

In September 2020, the European Commission adopted the Digital Finance Strategy to foster a more competitive and innovative European financial sector. The EU Digital Finance Platform initiative is part of this effort to support innovation in finance and build a true single market for digital financial services.

This platform was set up two years ago based on funding from the Digital Europe Programme. The platform has been successfully built and broadly welcomed by stakeholders. The platform includes (i) a mapping of all the fintechs in the EU, and (ii) a cross-border testing feature, (iii) it regularly adds content on digital finance events and news, and (iv) it has recently created the Data Hub. This latest addition is a synthetic data-sharing feature which was launched on 21 March by Commissioner McGuinness. The current uptake of the platform confirms that users (national competent authorities and financial companies) find it useful and consider using it more often in the future.

Deliverables

The additional budget would be needed for the maintenance and security updates of the infrastructure behind the platform, evolutionary developments and for the data synthetization software for the Data Hub.

Type of action	Procurement
Indicative budget	EUR 0.8 million
Indicative call planning / timing	2025-2026
Indicative duration of the action	36 months
Implementation	European Commission
Type of beneficiaries	Not applicable
Eligibility and security	Subject to participation restrictions for the protection of European digital infrastructures, communication and information systems, and related supply chains, as described in Appendix 4 of this Work Programme. Further justification for participation restriction is provided in Table 11 in Appendix 4.

2.2.2.7 EU Language Technology Tools

Objective

Over several years, the Commission has built a large set of language tools and services, which are available to public administrations, SMEs, NGOs and academia, through the eLangTech AI-based tools

portal[70]. This started with the Commission's in-house automated translation service eTranslation, but the package now covers other language technologies including eSummary, eBriefing, pseudo-anonymisation and, most recently, automatic transcription services and WEB-T, a tool to automatically translate websites. In 2023, the eTranslation tool handled around 800 million requests, and in one week alone in 2024, produced over 34 million translated pages. These tools offer confidentiality as well as a high level of quality and reliability, and guarantee that the data processed is not stored.

Complementing this offer of in-house developments, the recently established Alliance for Language Technologies EDIC (ALT-EDIC) creates a European ecosystem around language technologies, fostering the take-up of the latest AI based technologies by both the public and private sector. Expected outcomes of this increased European cooperation include a lowering of language barriers across Member States and increased trade in goods and services (not only cross-border, as large language models offer unprecedented efficiency gains and data insights).

The objective of this action is to ensure the continuation, maintenance and upgrade of these widely used eLangTech tools and services as well as their provision to the ALT-EDIC. This will allow an even higher uptake of these tools by the public and private sector, as the direct involvement of many Member States in the ALT-EDIC means higher visibility. In addition to a broad set of scalable language solutions from the Commission, this action will also provide the ALT-EDIC with additional data.

This entails (i) collecting, creating multilingual and multimodal language data and models for its sharing and re-using in particular via the ALT-EDIC, (ii) integrating the existing eLangTech portal into the ALT-EDIC, and (iii) continuing to create and improve large scale and cost-effective AI based language technology services, of general use to the public sector, SMEs, academia and NGOs, to complement the large language foundation models and their deployment made available by the ALT-EDIC.

This action will ensure coherent coverage of all the official languages of the Member States (not only the official languages of the EU) as well as the most socially, economically and politically relevant languages. It will thereby support the aims of equality, inclusion and accessibility expressed in the European Declaration on digital rights and principles, as well as international market competitiveness and commercial growth.

Scope

Aligned with the previous WP, support to the eLangTech and the ALT-EDIC will be provided through three work strands.

The first work strand, via a Language Data Space node, will involve making new language datasets available in particular via the ALT-EDIC, with a focus on inter-institutional data from the Publications Office of the EU, collections of multilingual, aligned and labelled translation memories, speech transcriptions from public conferences, and audio-visual material. Making more up-to-date European test and training language datasets available will support the creation, evaluation and deployment of multimodal language data models and services. Actions in this work strand will also coordinate the collection, processing (e.g., adjustment of metadata, data formatting and standardisation, etc.), maintenance and legal clearance (data protection by default and by design, licensing schemes, governance scheme, etc.) of these new language datasets.

Under the second work strand the eLangTech package of language tools and services will be integrated into the ALT-EDIC offering and broadly promoted to support their take-up. In addition to the existing online access, the eLangTech tools and services will be delivered through APIs and containers into the

[70] The eLangTech AI-based tools portal, previously known as the CEF Automated Translation Core Service Platform or eTranslation portal.

ALT-EDIC. Similarly, generic and domain-specific eLangTech language models will be made available on the ALT-EDIC repository. As a result, the eLangTech portal and the catalogue of European language technologies services will gain visibility and reach a broader user base, increasing use further both in the private and public sector throughout EU Member States and Digital Europe Programme-affiliated countries.

The third work strand will focus on enhancing the quality and extending the range of the eLangTech portal, e.g., automated translation and speech technologies, subtitling, text simplification, anonymisation and other Natural Language Processing (NLP) tools and use cases, etc., while covering a broader set of socially, economically and politically relevant languages, including national MS languages that are not EU official languages. Actions in this work strand will also provide user support for the tools and services of the eLangTech ALT-EDIC portal.

Deliverables

First work strand:

- A list of new datasets is made available in particular via the ALT-EDIC;
- Publication of the above-identified language datasets, including metadata standards, blueprints, etc.

Second work strand:

- Making eLangTech language models available in particular via the ALT-EDIC, taking account of both technical (architecture and infrastructure building blocks) and legal aspects (data protection by default and by design, licensing schemes, governance scheme, etc.).

Third work strand:

- New state-of-the-art AI-based language processing tools and services;
- Covering a wider range of socially, economically and politically relevant languages, both in the tools and services.

Type of action	Procurement
Indicative budget	EUR 9 million
Indicative time	2025-2027
Indicative duration of the action	36 months
Implementation	European Commission
Type of beneficiaries	Not applicable
Eligibility and security	Subject to participation restrictions for the protection of European digital infrastructures, communication and information systems, and related supply chains, as described in Appendix 4 of this Work Programme. Further justification for participation restriction is provided in Table 11 in Appendix 4.

2.3 Apply AI Strategy implementation

No other technology has been actively re-shaping the world of today as much as AI. It is transforming the way we live and work, bringing both challenges and opportunities for economy and society. This fast-paced development is reflected in the work that has been achieved under the previous WPs and will be continued in this one, matching the policy developments such as the EU AI Act – the world's first comprehensive law on Artificial Intelligence – entered into force in August 2024, and the AI Innovation package[71] launched in January 2024 that will support European start-ups and SMEs in the development of large-scale trustworthy artificial intelligence.

To improve its competitiveness and ensure strategic autonomy, Europe needs to accelerate the uptake of generative AI in its key strategic sectors and application areas. Building on other efforts funded under the Digital Europe Programme and beyond, notably in building open-source foundation models and large AI models fine-tuned for different business sectors, Europe needs to develop tools and infrastructure to develop downstream applications as well as to upgrade existing testing facilities to validate generative AI applications. **To make Europe an AI continent**, thriving on the development, integration and adoption of AI, the EU, together with the EU Member States, industry, and civil society, will develop an **Apply AI Strategy**. It will support the development of world class AI models in the EU and foster the integration of AI technologies into EU's most strategic sectors, including healthcare, energy and research. It will stimulate new industrial uses of AI and improve the delivery of various public services. The **European Virtual Human Twins Initiative,** launched on 21 December 2023, aims to accelerate personalised care from targeted prevention to tailored clinical pathways and support healthcare professionals in virtual environments (e.g. from medical training to surgical intervention planning). Virtual Human Twins (VHT) leverage the power of novel computational methods and supercomputing to deliver patient-specific virtual world representations of real systems and processes. In addition to access to supercomputing capacities, Digital Europe is supporting the initiative through several projects, covering a state-of-the-art digital platform for advanced VHT models integration and validation, a coordination and support action and pan-European infrastructure for Intensive Care Units (ICU) data and computational model-based tools.

Developments in this WP include:

- Actions focused on the uptake of generative AI applications in key sectors, including integration of GenAI into existing sectorial testing and experimentation facilities (TEFs). A particular focus is also placed in the uptake of generative AI in the public administration through large scale pilots.
- Under the Section on AI in Health, actions will support the deployment of AI solutions in medical settings. Further actions will also continue the work on the development of Virtual Human Twins.
- Lastly, an action will support the full integration, testing and experimentation of latest Virtual Worlds immersive and eXtended Reality technologies which includes creation of world-class experimentation facilities in Europe – one for industrial and one for social applications.

Projects may seek collaboration with ongoing Horizon Europe projects funded for instance under the topic: HORIZON-CL3-2021-CS-01-03: AI for cybersecurity reinforcement.

[71] Commission launches AI innovation package to support Artificial Intelligence startups and SMEs

2.3.1 Apply AI: Generative AI for TEFs and the uptake of generative applications in key sectors

2.3.1.1 Testing GenAI4EU applications at scale and under real-world conditions

Objective

In order to support European innovators in generative AI (GenAI), these actions aim to integrate GenAI into sectorial testing and experimentation facilities (TEFs), thus accelerating European innovation and competitiveness as well as addressing the twin transition of digitalisation and sustainability. Given the on-going (r)evolution in AI with generative AI, the current sectorial TEFs can play a pivotal role in the articulation of the GenAI4EU initiative and implementation of the Apply AI Strategy in their respective domains.

The aim is to facilitate the transition of GenAI solutions from lab environments to real-world applications, ensuring they meet sector-specific requirements and contribute to European technological leadership. The focus will be on strategic sectors including agrifood, healthcare, and manufacturing, as well as other key sectors identified by the GenAI4EU initiative[72].

Given the Digital Europe Programme participation rules (Articles 12 and 18 of the Regulation), objectives and purpose of the actions (Articles 4 to 8 and Annex 1) and the importance of its results and infrastructures, the use of and access to the results and critical infrastructures developed under the Digital Europe Programme is intended for eligible country entities. This restricted access to infrastructure and results is justified by the primary focus to support European innovators with validation and testing services for GenAI applications by the GenAI TEFs. European innovators are understood as entities at least headquartered in eligible countries. **Applicants will need to include this restriction in their infrastructure access policy.**

Scope

The actions will first upgrade up to four of the existing TEFs and in a second step develop at least one new world-class reference TEF with a focus on testing and validation of GenAI applications in real-world scenarios. The budget is allocated as follows:

- EUR 16 million for the upgrade of the existing TEFs: up to four projects, each receiving up to EUR 4 million in co-funding from Digital Europe;
- EUR 10 million to co-fund one project covering the new TEF.

The GenAI TEFs shall provide the expertise and infrastructure necessary for the design and implementation of GenAI testing methodologies in real-world environments. GenAI TEFs shall support European innovators[73] in validating in real-world environments their state-of-the art genAI solutions already tested in the lab, in order to assess the suitability of the solutions to meet the needs of the sector.[74] Where applicable, compliance with the AI Act's requirements by the solutions validated and tested is expected.

The actions should prioritise strategic sectors for Europe, grouped in the following categories:

[72] Commission launches AI innovation package to support Artificial Intelligence startups and SMEs

[73] European innovators are technology providers based in the EU or in countries associated to the Digital Europe Programme.

[74] The tested GenAI4 applications in a TEF should be within technological readiness levels from six to eight.

- Agrifood, smart cities & communities, healthcare and manufacturing, building on the existing sectoral TEFs co-funded by DIGITAL in previous work programmes.
- Other key strategic ecosystems mentioned in the GenAI4EU initiative[75], including robotics.

The upgrading of existing TEFs should be done by bringing in new European partners with the needed expertise in GenAI and at the same time allow new Member States not already covered by the existing TEFs to join. The actions upgrading the existing TEFs shall be linked to the existing TEFs.

Capacities to test and validate generative AI solutions at scale under real-world conditions should be extended to other relevant sectors by upgrading existing relevant infrastructures into new GenAI TEFs focusing on strategic sectors mentioned in the GenAI4EU initiative. A structure similar to the existing TEFs should be used by creating a network of nodes with critical mass across at least three different Member States or associated countries, and satellites.[76]

Co-funding matching at national level is foreseen and should be indicated at the application stage. The total public funding for this action is 100% of eligible costs (50% coming from the Digital Europe Programme and up to 50% coming from the Member States). In line with Appendix 6 on State Aid, Member States have to ensure that State aid is granted in line with State aid rules, such as the GBER (complying with GBER eligibility conditions including on aid intensities and notification thresholds set out in Article 4 GBER and cumulation rules set out in Article 8 GBER).

The actions should establish links and build synergies with related initiatives, such as the Alliance for Language Technologies, the open-source European foundational model for fine-tuning, the AI-on-Demand Platform, the sectoral AI & Robotics Testing and Experimentation Facilities, the European Digital Innovation Hubs, data spaces and relevant EuroHPC initiatives. Furthermore, they should work with actions implementing the AI Act, such as the EU AI Innovation Accelerator and AI regulatory sandboxes, as well as with the AI Factories. Relevant sectoral initiatives, such as the European Cancer Imaging Initiative[77], should also be considered for closer cooperation. Results from research actions under Horizon Europe on testing methodologies for generative AI should be also incorporated where possible, especially for the new GenAI TEF.

AI and robotics qualify as critical technologies and dual use items under Article 2(1) of Council Regulation (EC) No 428/2009 and as factors that may be taken into consideration by Member States or the Commission for screening foreign direct investment under EU foreign investment regulation (EU 2019/452). In particular, the TEFs' outputs, validated AI solutions, ready to be deployed, will be made available to any type of users, including public authorities, providing public services, or private sector, including those working in security sensitive areas (energy, mobility, some security sensitive manufacturing sectors), or areas with an impact on public order (e.g. healthcare, food supply chain, internal security & law enforcement) therefore a high level of trust and security of the TEF process and output must be ensured. Trust is an essential feature of the TEFs: organizations running and coordinating the TEFs will have a big responsibility in validating the AI products and solutions, including their security features and protection of fundamental right and EU values as well as human centric outcomes, before their large diffusion. They will also have access to confidential information about the solutions tested in their facilities, some of which are likely to be related to the security or safety aspects of the solutions; therefore, they will have to be trusted by third parties, and must ensure highest level

[75] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the regions on boosting startups and innovation in trustworthy artificial intelligence [COM(2024) 28 final]
[76] See for example the call DIGITAL-2022-CLOUD-AI-02-TEF-HEALTH available online.
[77] European Cancer Imaging Initiative

of trust and security. In addition, organisations running and coordinating the TEFs will have access to sensitive public sector and private data, including from data spaces, as well as to business related data and AI algorithms, before they are eventually deployed to the market.

Deliverables

- Upgraded testing and experimentation facilities for generative AI applications in the mentioned categories of strategic sectors and made available to European innovators.
- Long-term financial sustainability after EU and national funding stops.
- Creating a GenAI4EU community in Europe and integrating it into the large AI ecosystem of excellence, comprised of initiatives as the EDIHs, data spaces, AI-on-Demand platform etc.

Type of action	Simple grant
Indicative budget	EUR 26 million[78] • EUR 16 million for the second set of calls. • EUR 10 million for the fourth set of calls, co-funding one project.
Indicative call planning / timing	Second set of calls to upgrade existing TEFs with GenAI capabilities Fourth set of calls to develop at least one new GenAI TEF
Indicative duration of the action	24-36 months
Implementation	European Commission
Type of beneficiaries	Private companies, including SMEs and start-ups, research and technology organisations, higher education entities and TEFs.
Eligibility and security	Subject to participation restrictions for the protection of European digital infrastructures, communication and information systems, and related supply chains, as described in Appendix 4 of this Work Programme. Further justification for participation restriction is provided in Table 11 in Appendix 4.

2.3.1.2 Apply AI: GenAI for the public administrations

Objective

Generative Artificial Intelligence (GenAI) can play a transformative role in public administrations by automating routine tasks, enhancing personalized citizen-centric service delivery, and improving communication with citizens. It supports decision-making by analysing large datasets and simulating policy outcomes, while also helping in the drafting of legal texts. GenAI can also play a role in mitigating staff shortages and language barriers to access public services. Its implementation must take into account challenges related to privacy, robustness, sustainability, explainability, bias and transparency, while mitigating cybersecurity risks and ensuring human oversight in critical decisions complying with the AI Act.

[78] This call will be funded using annual instalments.

The objective of the call is to accelerate the adoption of GenAI in public administrations by supporting three to four pilot projects. Each pilot project will comprise one or more use cases where European GenAI solutions are developed and applied in the public administrations of the involved countries.

The pilot projects will focus on using European GenAI solutions to drive innovation, improve public services, and enhance citizen experiences, including through:

- supporting decision making in areas such as sustainable urban planning, infrastructure development, and transportation-systems design;
- optimising public administrations' internal processes and operations, and promoting smarter budget planning and human-resource allocation;
- tailoring interactions with citizens via advanced platforms, such as chatbots and agents, to deliver personalized assistance, improve the accessibility of public services, and offer integrated support across multiple domains, including combining social protection, healthcare, social services, public employment, migration management, security, and other services into a seamless, one-stop experience; and/or
- making legislation more machine-readable ('law as code') and complicated procedures and text more understandable to citizens and businesses, for instance regarding environmental authorisations, procedures for starting a new business, or funding opportunities.

A key element of the piloted GenAI solutions will be their replicability across various EU public administrations, enabling consistent digital service delivery across Member States.

Scope

A call will be launched to select consortia of public administrations at national, regional, or local level that wish to participate in the pilot projects. The consortia may also include other entities such as higher education institutions, research and technology organisations, and civil-society and non-governmental organisations, which will support the public administrations in the implementation of the pilot projects.

To apply, consortia must submit a project proposal that includes:

- An overview of the planned GenAI models and solutions and the specific use cases where these solutions will be deployed across participating public administrations;
- An overview of the expected outcomes and benefits of the proposed GenAI models and solutions;
- An outline of the consortium's capacity to successfully integrate and scale up the proposed GenAI models and solutions; and
- A letter of commitment from the Member States or local or regional authorities of the participating public administrations, undertaking to provide 50% co-funding of the respective project costs, should the project be selected for funding.

Successful consortia will be awarded a grant to implement the proposed pilot projects. Specifically, public administrations within these consortia will be responsible for procuring the fine-tuning of proposed foundation models, developing tailored solutions based on these models, and integrating them into their existing platforms, systems, and operational workflows. The procurement could moreover cover supporting infrastructure and implementation activities such as:

- The technical infrastructure required to deploy and run GenAI solutions at scale and across single or multiple public administrations;
- The support needed by public administrations to ensure they have the necessary skills and knowledge to effectively implement and manage the deployed GenAI solutions; and
- The maintenance and optimisation costs for the deployed GenAI solutions.

Procured GenAI solutions should be designed to be compatible with various systems and platforms used by different public administrations to allow for easier replication across different contexts.

In addition, other consortium entities may provide support to the public administrations across a range of areas, including:

- Developing procurement specifications;
- Sharing knowledge and building capacities;
- Organising change-management and adoption-support actions;
- Documenting best practices; and
- Engaging and communicating with citizen and other stakeholders.

Entities that are part of a successful consortium will be ineligible to participate as suppliers in the procurement processes initiated by the public administrations within that consortium.

To ensure public trust, the procurement process will require the use of foundation models and systems which aligns with EU values and rules, particularly in terms of data protection, explainability, sustainability, and compliance with the EU AI Act. Projects that demonstrate EU-added value will be prioritized. This approach supports the EU's objective of fostering innovation while safeguarding fundamental rights and ensuring public trust in AI systems. As stated in the regulation establishing the Digital Europe Programme[79], the financial contribution from the Union should pursue as one operational objective under Specific Objective 2 – Artificial Intelligence: "build up and strengthen core AI capacities and knowledge in the Union"; therefore, solutions based on European models (i.e., models developed by European AI companies/laboratories) will be required. Overall, this action will support three to four pilot projects of the order of EUR 5-7 million of EU funding, which will be matched by an equal amount of funding by the project beneficiaries and or other public funding (e.g., from Member States' national, regional authorities, etc.).

A separate call for proposals will be issued for a single Coordination and Support Action (CSA), with a budget of up to EUR 2 million. This call will be open to consortia comprising higher education institutions, research and technology organisations, civil-society organisations, non-governmental organisations, and other interested stakeholders. The successful consortium will be responsible for enhancing the scalability and replication of successful European GenAI pilot solutions, through activities that foster knowledge sharing, community building, and capacity development. Such activities could consist, for example, in implementing software documentation best practices, facilitating peer-to-peer knowledge sharing and experience exchange, deploying targeted training and support programs, and establishing a community of practice. These activities will ensure that the implementation strategies of successful pilot projects can be readily replicated, enabling seamless

[79] Regulation (EU) 2021/694 of the European Parliament and of the Council of 29 April 2021 establishing the Digital Europe Programme and repealing Decision (EU) 2015/2240

adoption across different public administrations and Member States, EEA-EFTA countries and countries associated to the Digital Europe Programme. This CSA will moreover support the creation of a GenAI4EU community of public administrations in Europe and its integration into the large European AI ecosystem of excellence. Participants in this action should in particular, cooperate closely with the European Digital Innovation Hubs and the AI-on-Demand-Platform, leveraging their expertise and building on their efforts targeted to the public administrations. Entities that are part of the successful CSA consortium will be excluded from participating as suppliers in the procurement of the public administrations involved in the pilot projects.

The action should establish links and build synergies with related initiatives, such as the Alliance for Language Technologies[80], the action on open-source European foundational model fine-tuning[81], the sectoral AI & Robotics Testing and Experimentation Facilities[82], data spaces[83] and relevant EuroHPC initiatives[84]. Furthermore, it should work with actions implementing the AI Act[85], such as the EU AI Innovation Accelerator and regulatory sandboxes, as well as with the AI Factories[86].

Strong links should also be built with the future Multi-Country Project on Innovative and Connected Public Administrations.

Deliverables

- Pilots of European GenAI solutions in public administrations.
- Replication of piloted GenAI solutions across public administrations and Member States.
- GenAI4EU community of public administrations in Europe.

Type of action	Grant for Procurement – CSA
Indicative budget	EUR 23 million • EUR 21 million of EU funding for grant for procurement (matched by an equal amount of funding by project beneficiaries and/or public funding (e.g., from Member States' national, regional authorities, etc.) • EUR 2 million of EU funding for CSA
Indicative call planning / timing	First set of calls: grant for procurement Second set of calls: CSA
Indicative duration of the action	Grant for procurement: 36 months CSA: 36 months
Implementation	European Commission
Type of beneficiaries	Grant for procurement: public and private entities such as (but not limited to) public administrations (national, regional, and local), higher education

[80] Alliance for Language Technologies EDIC
[81] Making available a high performing open-source European foundation model for fine-tuning
[82] Sectorial AI Testing and Experimentation Facilities under the Digital Europe Programme
[83] Common European Data Spaces
[84] The European High Performance Computing Joint Undertaking
[85] AI Act
[86] AI Factories

	entities, research and technology organisations, civil-society and non-governmental organisations. Coordination and Support Action: public and private entities such as (but not limited to) higher education entities, research and technology organisations, civil-society and non-governmental organisations.
Eligibility and security	The grant for procurement is restricted on the basis of Article 12(6) of the Regulation (EU) 2021/694. The CSA work strand is not restricted on the basis of Article 12(6) of the Regulation (EU) 2021/694. Both work strands are subject to participation restrictions for the protection of European digital infrastructures, communication and information systems, and related supply chains, as described in Appendix 4 of this Work Programme.

The grant for procurement will be subject to Article 12(6) of Regulation (EU) 2021/694 for the following reasons: AI technologies qualify as critical technologies and dual use items under Article 2(1) of Council Regulation (EC) No 428/2009 and as factors that may be taken into consideration by Member States or the Commission for screening foreign direct investment under EU foreign investment regulation (EU 2019/452). In particular, large-scale pilots of GenAI applications in the public sector will involve sensitive and security-related aspects (legislation; provision of public services; fraud detection) and may have an impact on the functioning of basic and critical public services. Therefore, the highest level of trust and security of the action processes and output must be ensured. Moreover, trust is an essential feature of running the large-scale pilots: organizations implementing the action will have a big responsibility in trailing AI products and solutions in the public sector, including their security features and protection of fundamental rights and EU values, before their large diffusion. They will also have access to confidential information from the public sector, some of which are likely to be related to the security or safety aspects of the solutions; therefore, they will have to be trusted by third parties, and must ensure highest level of trust and security, which justifies the use of Article 12(6) for the grant for procurement work strand. In addition, organisations running and coordinating the large-scale pilots will have access to sensitive public sector and private data, including from the sensitive data spaces subject to the application of Article 12(6).

2.3.2 Virtual worlds test beds

Objective

The principal objective is to support testing, experimentation and integration of state-of-the-art Virtual Worlds, immersive and extended reality technologies in specific sectors. The action will focus on testing and integrating mature technologies and solutions that have already been tested in the labs with the objective to be tested and validated in real-world environments. It will also cover the aspects of interoperability and transferability between Virtual Worlds.

Scope

Virtual Worlds bring unprecedented opportunities in many societal areas, such as better health services, more engaging education and training, new forms of interaction and collaboration among people, immersive cultural experiences or personalised administrative services. Industrial applications of virtual worlds will enable intelligent, resilient and connected operations, with new digital processes

and digital models that are more efficient, cheaper and more sustainable than current industrial processes. Many industrial sectors such as the automotive, advanced manufacturing or logistics industries already start using virtual environments to design, develop, simulate and test new products, services or workflows, accelerate permitting, but also to optimise inventories down the production line or to train workers.

As Virtual Worlds are gradually moving from hype to reality, new issues appear on the agenda especially when it comes to integration, testing and deployment.

For this action, support to two sectorial test beds is envisaged: one for industrial applications (such as manufacturing, construction or industrial design) and one for societal applications (such as education and training, cultural heritage and other cultural experiences or healthcare). Each test bed should create a network of facilities with critical mass across at least three different Member States or associated countries.

The test beds will offer a combination of physical and virtual facilities to be used by technology providers, and key relevant stakeholders providing access to real conditions depending on the selected sectors (e.g. manufacturing sites, hospitals, construction sites). Activities supported by this action will cover the demonstration, testing and validation in real-life application environment, solving issues and providing improvements. Each test bed will pay a special attention to closely involve end-users in their activities for customisation of technologies to work environments, and for ensuring human-centric outcomes[87].

Each test bed will facilitate full integration of Virtual Worlds underlying technologies (eXtended Reality and immersive technologies coupled to, for example, AI, IoT, edge and cloud computing, digital twins, sensors, microelectronics).In addition to access to facilities, the test beds will offer services such as access to hardware components (for example helmets and glasses, XR devices, haptics equipment), computing power, operating systems, software and SDK, testing of new services and devices, involvement of potential end-users as well as on-demand technical advice and expertise. Each test bed will develop use cases and demonstrators, while investigating issues related to legal and ethical issues and provide support on these (e.g. ethics, data protection, legal regulation, cybersecurity, privacy, Intellectual property including copyright, certification and standardisation). The test beds will also explore the possibility to support the creation of regulatory sandboxes around the envisaged facilities.

The test bed infrastructure established within this activity will set-up or build on physical and digital resources, which will be available to the facilities users for the testing and experimentation of their hardware and software related to Virtual Worlds.

The facilities will link to relevant Digital Europe Programme projects such as Testing and Experimentation Facilities, EDIHs and data spaces. Facilities are also encouraged to establish links to relevant projects funded by Horizon 2020 or Horizon Europe, whenever feasible and meaningful. For State aid considerations, refer to Appendix 6 of this Work Programme.

Deliverables

First versions of the two test beds will be developed and made operational by the end of the projects: one for industrial applications (such as manufacturing, construction or industrial design) and one for societal applications (such as education and training, cultural heritage and other cultural experiences

[87] See ERA Industrial Technologies Roadmap on Human-Centric Research and Innovation

or healthcare). They will both include use cases demonstrators and a catalogue of relevant issues identified and of offered services (support and solutions).

The selected projects will develop and, if necessary, adapt over time, a long-term plan over 48 months to 1) build up or upgrade facilities with resources and services, 2) offer and extend the use of facilities to promising Virtual Worlds providers, and 3) achieve long-term financial sustainability after EU funding stops.

Expected outcomes contributing to Virtual Worlds innovation:

- Contributing to European digital sovereignty and open strategic autonomy in the domain of Virtual Worlds.
- Contributing to development of interoperable Virtual Worlds solutions.
- Contributing to the creation of EU regulatory sandboxes for Virtual Worlds.

Type of action	Simple grant
Indicative budget	EUR 20 million[88]
Indicative call planning / timing	Second set of calls
Indicative duration of the action	48-60 months
Implementation	European Commission
Type of beneficiaries	Public or private entities, primarily focusing on Small Universities, SMEs and start-ups in the domain of Virtual Worlds.
Eligibility and security	Subject to participation restrictions for the protection of European digital infrastructures, communication and information systems, and related supply chains, as described in Appendix 4 of this Work Programme. Further justification for participation restriction is provided in Table 11 in Appendix 4.

2.3.3 Apply AI for Health

2.3.3.1 Deployment of cutting-edge multi-modal AI-based solutions in medical imaging

Objective

Medical imaging is one of the most advanced and promising areas in health where Artificial Intelligence (AI) applications can truly make a difference in transforming health and care for the benefit of the patients and health care providers. AI-powered tools in medical imaging can support earlier and more accurate diagnosis, better prediction of patient outcomes, and identification of new disease characteristics. They can combine and interpret data of different types (e.g. imaging, omics, laboratory

[88] This call will be funded using annual instalments.

results, etc.) and from different sources, supporting more personalised diagnosis, predictions and treatments.

In oncology, the Cancer Image Europe platform implemented by the EUCAIM project under the Digital Europe Programme will offer access to medical imaging data and a testing environment to maximise the uptake of AI solutions in clinical practice and medical research. The platform should gradually extend its coverage beyond oncology towards supporting more general needs and applications for AI in medical imaging, supporting SMEs from the medtech sector which hold a great potential for innovating the European digital healthcare systems and biomedical research environment.

Moreover, integration of health data of different types is crucial for advancing innovation and healthcare outcomes. Advanced technologies, methods and tools, including AI, will enable discovery of data across different data infrastructures, linking and integrating them to enable multi-modal analysis and inform patient treatment towards more personalised approaches. A pre-requisite will be to ensure a high degree of interoperability between the different health data infrastructures and with the HealthData@EU infrastructure of the European Health Data Space (EHDS) and Simpl middleware for data spaces. Moreover, the development and deployment of multi-modal AI-based tools is still hampered by data quality issues, high costs, insufficient clinical evidence and limited knowledge and training of healthcare professionals.

Therefore, the objective of this action is to:

- Accelerate the uptake of EU AI-driven solutions that are ready to be deployed in healthcare settings for patient care and which can also be leveraged for research purposes. This will facilitate the paradigm shift in the digital transformation of healthcare towards personalised medical solutions;
- Facilitate the deployment of EU cutting-edge AI-driven solutions in medical imaging, combined with other health data, for increased efficiency and better patient outcomes, leveraging the Cancer Image Europe platform;
- Expand the Cancer Image Europe platform beyond oncology applications and further develop its data, testing and validation services and user tools in alignment with the legal and technical framework of the European Health Data Space, also towards supporting the development and uptake of EU cutting-edge multi-modal AI-based solutions in medical imaging (including generative AI solutions) for healthcare;
- Ensure alignment and inter-operability of the Cancer Image Europe platform with the HealthData@EU infrastructure of the EHDS.

This action relates to the potential creation of a European Digital Infrastructure Consortium for cancer image data (Cancer Image Europe EDIC) and supports the activities related to operating the respective data infrastructure established with the support of Digital Europe under Work Programme 2021-2022 (EUCAIM project).

Scope

By building on, extending and leveraging the Cancer Image Europe platform, this action is expected to facilitate the uptake of EU AI-driven solutions (including Machine Learning and Generative AI), towards their deployment in clinical settings, for medical imaging in combination with other data types. It should also include upskilling of healthcare professionals and evidence generation to evaluate the performance of the deployed AI-driven solutions and engage patients.

The AI-solutions should be associated with one or multiple imaging modalities (e.g. X-ray, CT (computed tomography), MRI (magnetic resonance imaging), ultrasound, endoscopy, etc.), and should leverage different types of health-related data (e.g. laboratory results, genomics, other omics, clinical data, other real-world data) in combination with one or more types of medical imaging. For example, the following tools or functionalities can be deployed within the action: annotation, summarization, error identification, information extraction, report generation, interpretation of data, conversion of medical image format, image reconstruction, image generation, image classification, personalised treatment plans, or patient stratification (for clinical trials, medical research, data referencing in personalised medicine). Any medical specialty can be covered. The action must cover the validation of reproducible image-based decision support models in oncology. Synergies with the ongoing AI related activities of the Health Data Access Bodies (HDABs) in the EHDS (SHAIPED project) should be leveraged in this context.

The action should also contribute to upgrading and enhancing the uptake of the Cancer Image Europe platform through deployment of tools, application programming interfaces (APIs) and interfaces enabling high-quality data services for the users of the Cancer Image Europe platform. The solutions should cover, at least, data quality assessment, including security, data access and analysis, as well as services for AI developers supporting their regulatory compliance pathway, including the EHDS Regulation). Tools and services to facilitate the deployment of EU generative AI models in health should be addressed. Moreover, data services will cover comprehensive data quality assessment—including security, data access, and analysis. Specifically, tools will be deployed to ensure that datasets from the European Cancer Imaging Initiative are fully compliant with EHDS, utilizing Health DCAT-AP for metadata descriptions and adhering to the data quality and utility label standards set by the EHDS Regulation. Moreover, the action should consider synergies and cross-fertilisation of tools within other relevant health data infrastructures: HealthData@EU, 1+Million Genomes (1+MG), Intensive Care Unit data infrastructure, the European Virtual Human Twins Initiative, and UNCAN.eu platform to further facilitate the integration and processing of different types of health data. Also, the outcomes of EU-funded projects dealing with other imaging modalities, such as digital pathology (e.g. BigPicture project), should be considered.

This action should ensure that appropriate tools are deployed to support data curation at source, quality benchmarking, annotation, dataset description and enhancement on the side of data providers and the data infrastructure. This covers the whole process of data inclusion, integration and access provision, as well as compliance assessment, risk management and data security assurance on the side of Cancer Image Europe. All functionalities and services should be designed to support the needs and requirements of three main use scenarios of Cancer Image Europe, i.e. the deployment of AI solutions in healthcare settings, biomedical research and SME innovation for digital healthcare. They should follow, implement and further develop the standards and procedures agreed in the European Cancer Imaging Initiative and deploy a risk governance framework compliant with the AI Act, ensuring data security and safety of AI solutions designed to be applied on humans. Inherent risks of the new technology must be effectively mitigated and managed.

This action also supports the alignment of the Cancer Image Europe platform with the requirements, technical specifications, and processes established by the EHDS Regulation to ensure a smooth functioning within the HealthData@EU infrastructure. By leveraging the platform's advanced tools and services, the action will support and promote the secondary use of medical imaging data across various medical specialties where medical imaging plays a crucial role, and for different purposes including research, innovation, healthcare delivery and regulatory purposes. This is expected to support the

integration, processing and combination of diverse types of health data, promoting holistic health data analysis.

SMEs must be appropriately involved in further developing the platform so that it best supports their needs and requirements to bring innovative solutions to clinical practice, especially in view of the requirements of the EHDS Regulation, AI Act and Medical Device Regulation (MDR) (interoperability and regulatory compliance).

One project will be funded under this topic. The project should reserve appropriate budget and consider measures to collaborate with medtech companies and SMEs to support clinical validation and deployment of AI-driven solutions in the field of medical imaging.

Deliverables

- New data services and user tools for the Cancer Image Europe platform covering data curation / inclusion by data providers, data quality assurance and compliance checks, and risk/security management in alignment with agreed standards, procedures and requirements, including the framework of the European Health Data Space.
- Validation of AI-driven solutions in the field of medical imaging.
- Deployment of multi-modal, cutting-edge AI-driven solutions in the field of medical imaging in healthcare and research settings, leveraging different types of data (at least one imaging modality and one other data type e.g. genomics, other omics, laboratory results, real-world data etc.) and building on the achievements of the Cancer Image Europe platform.
- Training and upskilling of medical imaging personnel and/or healthcare professionals for the deployed technology and further use.

Type of action	SME support grant
Indicative budget	EUR 16 million
Indicative call planning / timing	Second set of calls
Indicative duration of the action	48 months
Implementation	European Commission
Type of beneficiaries	Hospitals and outpatient clinics (both public and private entities are eligible), healthcare research institutions (e.g. university departments providing patient care and conducting clinical trials), relevant Member States authorities (e.g. ministries of health, regional health authorities, Health Data Access Bodies, …), AI developers e.g. MedTech companies (especially SMEs) applying together with healthcare providers (hospitals/ outpatient clinics), European Digital Infrastructure Consortia (EDIC).
Eligibility and security	Call restricted on the basis of Article 12(6) of the Regulation (EU) 2021/694. Subject to participation restrictions for the protection of European digital infrastructures, communication and information systems, and related supply chains, as described in Appendix 4 of this Work Programme.

This action builds on the European Federation of Cancer Images (EUCAIM) that was subject to article 12(6) restrictions under DIGITAL WP 2021-22. It will involve access to sensitive personal health data (such as individual medical images) which in conjunction with AI-based applications could potentially reveal sensitive information and impact on medical treatments that can be critical for the EU's security and public health. Moreover, the participation of non-EU entities entails the risk of sensitive data and information being subject to legislation or pressure that obliges those non-EU entities to disclose this information to non-EU governments. Furthermore, the healthcare institutions where the AI solutions will be deployed are at risk of malicious action by individuals, groups or regimes that could attempt to compromise their IT systems. Healthcare is one of the sectors most impacted by cybersecurity incidents.

2.3.3.2 Virtual Human Twins and Artificial Intelligence in health: Platform validation and uptake incubator

Objective

1. Platform validation

A virtual human twin (VHT) is a digital representation of a human health or disease state. VHTs can refer to different levels of human anatomy (e.g. cells, tissues, organs or organ systems). The key potential in health and care of this technology is related to targeted prevention, tailored clinical pathways, and to supporting healthcare professionals in virtual environments. The objective of this action will be to independently validate and confirm that the Platform for advanced VHT models (item 2.3.4 of the amended DIGITAL WP 23-24) is performant across a range of use cases and ready to be used as planned. It will also further contribute to building and widening trust of the ecosystem in the advanced platform.

2. Uptake incubator

Following the development of the VHT Platform and its validation process, the objective of this action is to support the next stage for VHT modelling. In particular, this includes the deployment and scaling up of VHTs solutions in the European market and the acceleration of steps towards their uptake in healthcare settings and their use in clinical research (e.g. clinical trials, clinical investigations) for the benefit of the patients. This action aims to build on proof-of-concept solutions and bridge the gap between feasibility, market entry and beyond, to enable the deployment and uptake of these solutions in healthcare settings, while also fostering clarity of the specific regulatory landscape and stimulating a commercially viable ecosystem for VHTs in Europe.

Moreover, the action will support VHT-related innovative AI solutions, such as for example:

- AI solutions for accelerating the deployment of VHTs, e.g. for processing relevant data and models, generating necessary synthetic data, or for advancing regulatory science in terms of regulatory approval processes, methods and tools benefitting both the regulators and the innovators.
- AI solutions that can be used in complementarity with VHTs either in the planning and delivery of healthcare for patients or in clinical research.

The action will support the wider deployment of VHTs and related AI solutions, and their validation and uptake in clinical settings, by offering targeted support to developers and healthcare providers, and enable capacity building for clinical, technical and research teams. In all applications, bias in terms of ethnical background and gender must be avoided and mitigated.

Scope

1. Platform Validation:

The first work strand of the action is expected to perform **platform validation** by covering the following activities:

- Validate the use of the VHT platform for several use cases and involving all key computational and other components, confirming that complex workflows will be effectively supported once the platform is used in production.
- Confirm that the advanced VHT platform meets users' expectations through structured interactions with users' organisations and other members of the VHT ecosystem.
- Providing a set of recommendations for further improvement and further development of the advanced VHT platform.

2. Uptake incubator:

The second work strand of the action will support an **uptake incubator** for VHT and related AI solutions targeted to developers and innovators (including SMEs and startups). The incubator should be a knowledge sharing, networking, co-operation and collaboration hub, helping solution developers and innovators to:

  - match the supply and demand by facilitating contacts among potential partners, including healthcare providers, during the last stages of development and deployment of VHT and related AI solutions;
  - support compliance with relevant EU laws and rules (e.g. data protection, intellectual property management, cybersecurity, artificial intelligence, competition law, sectorial legislation on data spaces such as the forthcoming EHDS Regulation[89]) and help effectively navigate the regulatory pathway;
  - provide support services and publicly available resources to facilitate scaling up and deployment in healthcare settings of VHTs and related AI solutions, such as knowledge and advice on funding opportunities.

The action should build on the achievements of the European Virtual Human Twin (EDITH) Coordination and Support Action (funded under DIGITAL WP 22-23), including its Roadmap, and the Platform for advanced VHT models (funded under DIGITAL WP 23-24), including promoting its use. The action should increase visibility of VHTs and related AI solutions through the distribution of information on such solutions in existing platforms and repositories and through capacity building for potential future users of such solutions, including both clinical, technical and research teams. It will offer a platform for, for example, information exchange, study visits, webinars, coaching and coordination of communities of practice in different clinical, technical and research domains.

Deliverables

Platform validation*:*

- Validation report with evidence that the platform affords a commensurate level of performance across several use cases;
- Report on feedback from the VHT platform users as well as from the wider ecosystem;
- Set of recommendations for further improvement and future development of the platform.

Uptake incubator*:*

[89] European Health Data Space Regulation (EHDS)

- Incubator service with specific targets for VHT and AI solutions supported and deployed in healthcare settings;
- Networking events;
- Communication channels (e.g. newsletters, website, etc.);
- Platform for information exchange, study visits, webinars and other capacity building activities, such as knowledge sharing events / courses / coaching for VHT and relevant AI solution developers on a wide variety of topics (e.g. regulatory science; data protection; intellectual property management; cybersecurity; market entry; business models and entrepreneurial skills);
- Report on the activities performed by the incubator and its impact;
- Report on the capacity building activities and recommendations for the sustainability of the information exchange platform.

Work strand 1: Platform validation

Type of action	Procurement
Indicative budget	EUR 1 million
Indicative call planning / timing	2027
Indicative duration of the action	9 months
Implementation	European Commission
Type of beneficiaries	Not applicable
Eligibility and security	Work strand 1 is restricted on the basis of Article 12(6) of the Regulation (EU) 2021/694. Subject to participation restrictions for the protection of European digital infrastructures, communication and information systems, and related supply chains, as described in Appendix 4 of this Work Programme.

Work strand 2: Uptake incubator

Type of action	Simple grant
Indicative budget	EUR 8 million
Indicative call planning / timing	Fourth set of calls
Indicative duration of the action	48 months
Implementation	European Commission
Type of beneficiaries	Public sector bodies and Member States' authorities; academia; healthcare providers; private entities such as health technology SMEs and start-ups.
Eligibility and security	Subject to participation restrictions for the protection of European digital infrastructures, communication and information systems, and related supply chains, as described in Appendix 4 of this Work Programme.

Work strand 1: Platform validation is restricted on the basis of Article 12(6) of the Regulation (EU) 2021/694. As the platform development under WP 2023-2024 was subject to security restrictions based on the considerations described below, it is equally important to ensure the platform validation meets the same level of security. The interaction between the user infrastructures and the main platform infrastructure will provide users, due to the distributed and interconnected nature of the infrastructure to support platform operations, access to other EU and Member State critical infrastructures (e.g. data spaces, hospital systems, telecom networks, public computing infrastructures including Cloud and HPC). These critical and other essential public infrastructures and services are exposed to significant security risks, notably cyber-attacks. When such risks materialise, the impact on high numbers of patients and citizens is significant as critical operations could be disrupted, as well as having the potential to affect malicious access to manipulation, exploitation and exposure of sensitive personal data concerning health.

2.3.3.3 Apply AI: Piloting AI-based image screening in medical centres

Objective

AI and GenAI applied to medical data can bring efficiencies in care settings and improve patient outcomes while reducing costs. AI/GenAI algorithms offer a major tool for early detection and diagnosis of a large variety of medical conditions, supporting decision-making by medical staff. They may be used, for example, to perform the initial medical imaging and clinical data analysis quickly in widely distributed medical centres equipped with medical imaging devices and with limited availability of specialised staff, to support the detection of suspected disease cases requiring specialist follow-up. This approach holds great potential for reducing inequalities in access to care across regions, alleviating staff shortages, speeding up diagnosis and decision-making for all, including those living far from specialised facilities, and drastically reducing health and care costs.

The aim of this action is to set up one or more pilot projects that will deploy a cloud-based AI/GenAI system with trained and fine-tuned European AI/GenAI algorithms. The system would assist resource-limited health care settings with performing analysis of medical imaging data they are acquiring while providing healthcare services in their sites using medical imaging devices such as MRI, CT, X-rays, PETs, ultrasound, etc. By analysing imaging data, the system should automatically detect findings of potential clinical significance for a given patient, including incidental findings. Additional clinical data of a patient may be used, if available, to support the analysis and prioritisation of the case. When an anomaly is suspected, the system would send the patient data and suspected finding(s) to a medical doctor having the appropriate expertise and the resources required for verifying and validating the AI/GenAI-based suspected finding, and eventually plan the next steps in patient care. In addition, the system would help prioritise cases locally within the medical centres.

The proposed AI-based solution will have the following clinical impacts:

- Enhance prioritisation of critical cases, enabling faster decision-making.
- Optimize resources in radiology departments, alleviating workload pressures.
- Support underserved regions by enabling remote, high-quality screening without requiring on-site specialists.
- Reduce diagnostic delays through integrated workflows with existing clinical systems (e.g., PACS, RIS, EHR)

Scope

The pilot project(s) should implement a cloud-based AI/GenAI system running European trustworthy and safe AI/GenAI algorithms that were developed, trained and validated using very large sets of similar patient data (see the DIGITAL work programme topic 2.3.3.1 "Deployment of cutting-edge multi-modal AI-based solutions in medical imaging"). They should put in place a secure, privacy-preserving cloud environment required for the health data analysis tasks, with appropriate access and identification tools for authorised use only, and implement the whole system as described under this topic, seamlessly integrated in regular clinical workflows of the care settings involved. Interoperability and the need to communicate with the health IT infrastructure (e.g. the electronic health record (EHR) of the patient, Picture archiving and communication systems (PACS), Radiological Information Systems (RIS), etc.) need to be addressed.

While the cloud-based AI/GenAI system should be use-case agnostic, the pilot project(s) should demonstrate its application and large-scale validation, following a thorough assessment and testing over a large number of patient test cases in real healthcare settings. The proposers are expected to choose the types of health data, the AI/GenAI models that are trustworthy and secure, and medical use cases to demonstrate the validation and usability of the system. Whenever relevant, the pilot(s) should perform the tasks of checking and confirming acceptability and usability of AI/GenAI solutions already tested and validated within the TEF for Health.

A key element of the piloted system solutions will be their scalability and replicability across various Member States and their health systems, enabling consistent and equitable digital service delivery. Any developed or procured solutions should be designed to be compatible with national health systems across Member States to allow for easier replication across different contexts. The AI/GenAI system will prioritise interoperability, integrating seamlessly with existing tools such as PACS, RIS, and EHR systems to avoid disruptions in clinical workflows. In this respect, the pilot project(s) should largely disseminate their activity across several Member States by showing how their operation can be replicable across Member States. Replication and large-scale deployment across Member States is then expected to take place through funding from national sources (such as structural and regional funds, national funds, private funds or other). To ensure a wide societal uptake and acceptance of the AI-based screening approach, the pilots should bring together technical, medical and public health expertise and patient representatives and address the applicable ethical and legal implications. The pilot will ensure that AI/GenAI results are systematically validated by qualified medical professionals to confirm findings, assess clinical relevance, and maintain patient safety. This approach is essential for building trust and ensuring alignment with medical workflows. Active involvement of medical practitioners is required to ensure acceptability and usability of the pilot and to check its results. Medical practitioners will be actively engaged throughout the process to assess AI performance, validate outputs, and integrate the system seamlessly into clinical practice. In addition, active multi-stakeholder engagement, communication activities and capacity building measures are expected. To ensure public trust, the AI/GenAI systems to use must align with EU values and rules, particularly in terms of data protection and compliance with the EU AI Act.

The pilot project(s) should leverage already existing medical imaging and health data infrastructures, such as the Cancer Image Europe platform and HealthData@EU infrastructure of the European Health Data Space, tools, algorithms and facilities for training and fine-tuning the algorithms, dispatching the results to specialised hospitals and deploying a user-friendly interface for the end-users. Where applicable, they should support innovative initiatives related to cancer, cardiovascular diseases and other non-communicable diseases and build on the results of successful projects funded under

Horizon 2020, Horizon Europe, the Digital Europe Programme, EU4Health, or other relevant Union initiatives supporting innovation, such as the Cancer Image Europe platform, the projects funded under the "GenAI4EU: Creating European Champions in Generative AI" Accelerator challenge and under the call DIGITAL-2024-AI-06-IMAGING ('AI in support of Quantum-Enhanced Metabolic Magnetic Resonance Imaging Systems').

The consortia can either fine-tune their existing AI/GenAI algorithms using imaging/patient data and procure the services of a European trusted cloud provider, or procure both the AI/GenAI algorithm(s) and the cloud infrastructure, both from European providers, for further fine-tuning and testing of the algorithms. The consortia should ensure the availability of the data sets and the agreements for their intended use, taking into account the relevant regulatory requirements.

Deliverables

- Proof-of-concept of a replicable, scalable cloud-based AI/GenAI system for analysis of medical imaging data in a healthcare setting, with demonstration of the role of the clinicians in validating AI/GenAI findings and a report showcasing seamless integration of the system into clinical workflows.
- Evidence-based analysis of (cost-)efficiency of the piloted solution for healthcare systems.
- A plan for obtaining regulatory approval for application of the AI/GenAI solutions in real life scenarios and clinical settings. This includes the required risk management and compliance activities, as well as clinical evaluation plans and post-market clinical follow-up.
- Detailed data protection and cybersecurity plan, with measures to secure sensitive health data, mitigate cybersecurity risks, and comply with EU legal and ethical frameworks.
- Sustainability plan for the uptake of the system across the EU.
- Stakeholder engagement and dissemination report with measurable actions (KPIs).

Type of action	Simple grant
Indicative budget	EUR 10 million for up to 2 pilot projects
Indicative call planning / timing	Third set of calls
Indicative duration of the action	36 months
Implementation	European Commission
Type of beneficiaries	The consortium can include public and private entities such as (but not limited to): medtech industry, SMEs, AI/GenAI and IT solution providers, hospital organisations, research organisations, governmental authorities (at national, regional, local level).
Eligibility and security	Call restricted on the basis of Article 12(6) of the Regulation (EU) 2021/694. Subject to participation restrictions for the protection of European digital infrastructures, communication and information systems, and related supply chains, as described in Appendix 4 of this Work Programme.

This action will involve access to sensitive personal health data (such as individual medical images) which in conjunction with AI-based applications could potentially reveal sensitive information and impact on medical treatments that can be critical for the EU's security and public health. Moreover, the participation of non-EU entities entails the risk of sensitive data and information being subject to legislation or pressure that obliges those non-EU entities to disclose this information to non-EU governments. Furthermore, the healthcare institutions where the AI solutions will be deployed are at risk of malicious action by individuals, groups or regimes that could attempt to compromise their IT systems. Healthcare is one of the sectors most impacted by cybersecurity incidents.

2.4 Destination Earth: AI-powered digital twin of the Earth

Destination Earth (DestinE) is a flagship initiative of the European Commission to develop a highly accurate digital model of the Earth (a digital twin of the Earth) to model, monitor and simulate natural phenomena, hazards such as extreme weather conditions caused by climate change and the related human activities. The initiative has a strong sustainability and civil protection impact as it enables evidence-based policy making and risk assessment. These groundbreaking features assist users in designing accurate and actionable adaptation strategies and mitigation measures.

DestinE unlocks the potential of digital modelling of the Earth system at a level that represents a real breakthrough in terms of accuracy, local detail, access-to-information speed and interactivity.

By pushing the limits of computing and climate sciences, DestinE is an essential pillar of the European Commission's efforts towards the Green Deal and Digital Strategy.

As DestinE is an initiative implemented in phases, the WP 2021-2022 covered the activities of Phase 1, focusing on the design of the overall infrastructure and the deployment of the first version of the system, services, tools and applications. The next WP (2023-2024) funded the further evolution of the whole system, a new range of user services, including state-of-the-art AI/ML tools and capabilities, the expansion of the user base and the synergies with the EuroHPC JU and other relevant initiatives working in the area of Digital Twins.

The roll-out of the first version of the DestinE system took place on the 10th of June 2024, marking the end of Phase 1 and the transition to the implementation of Phase 2.

Under this WP, the DestinE initiative will continue being implemented through the contribution agreements with the three implementing entities (ESA, ECMWF, EUMETSAT) and the activities funded are going to cover the implementation of Phase 3.

In addition, as concerns the use of HPC resources by DestinE, pursuant to the Decision No 65/2024 of the Governing Board of the EuroHPC JU, the relevant EuroHPC hosting entities and Destination Earth shall collaborate with the EuroHPC Joint Undertaking to find appropriate access arrangements for maximum efficiency of resources, including by ensuring regular and sustained use of the resources granted by this Decision, while minimizing any impact on other users.

Generative AI for the Earth-system

Lightning-fast AI Earth-system models and developments in large languages models (LLMs) offer the prospect of unparalleled interactivity for users wishing to probe the current and future of the Earth-system, getting fully tailored solutions, empowering decision making. Using foundation model techniques and combining data and developments over the previous implementation phases of

DestinE foundation model for the Earth system will be created and shared to be fine-tuned towards applications across weather, climate adaptation and resilience, and directly into impact sectors.

The foundation model for the Earth system will be the extension of the DestinE Digital Twin Engine to the use of AI/ML, as it will build a generic framework to benefit users in the wider Earth Science community and beyond, and one of the first foundation models applied in a physical domain. The model will be optimised to seamlessly run on DESP, trained on EuroHPC supercomputers to be applied in various contexts, able to be fine-tuned by combining the Earth system model/data with datasets from various impact domains like agriculture, energy, health etc. It will enable the community to quickly build powerful ML tools, enabling European AI SMEs and startups to train their models inter alia on the wealth of DestinE data (digital twin generated as well as federated data), to develop downstream applications based on relevant, unique ML-powered predictions in key impact sectors.

Capturing and communicating uncertainty information to make informed decisions will be a key aspect of the model. This will be a step beyond the state-of-the-art in this area.

The main components of the DestinE system, developed under the previous WPs, are:

- Core Service Platform: a user-friendly entry point for DestinE users. The platform will provide evidence-based decision-making tools, applications and services, based on an open, flexible, and secure cloud-based computing system. It will also make available relevant AI tools, extreme-scale data analytics and Earth-system monitoring, simulation and prediction capabilities. The procurement of the platform and the associated DestinE service operations is the responsibility of the European Space Agency (ESA).

- The Data Lake is the federation of pre-existing European data holdings from Copernicus, the data holdings of the three DestinE implementing entities (ESA, EUMETSAT and ECMWF) and other sources, like the IoT and socio-economic data, also integrating the new data that will originate from the Digital Twins. It will also host user data, shared with the DestinE user community while supporting near-data processing to maximize performance and service scalability. The Data Lake will be operated by the EUMETSAT.

- The Digital Twins – digital replicas of the highly complex Earth systems – are based on a seamless fusion of real-time observations and high-resolution predictive modelling in the thematic areas, starting from the Weather-induced and Geophysical Extremes and climate change adaptation. The long-term goal is to integrate additional digital twins for a comprehensive digital twin of the Earth. The digital twins of DestinE will provide users with tailored access to high-quality knowledge for user-specific scenario development for decision support. The first two Digital Twins (Climate change adaptation, Extreme Events and Geohazards) are developed by the ECMWF. Powering the DTs, the Digital Twin Engine is the software infrastructure needed for extreme-scale simulations and data fusion, data handling and machine learning, adapted to exploit the capabilities of the EuroHPC supercomputers. It also provides a flexible environment to operate the digital twins and trial on demand configurations adapted to specific applications.

The description below therefore covers the overall period of the WP 2025-2027.

Objective

The main objective under this Work Programme is to continue implementing the DestinE initiative in seamless continuity with the work undertaken under the previous Work Programmes and towards the realisation of the initiative's end goal which is the creation of the full digital replica of the Earth system. The aim is to advance the scope of work of DestinE based on a sustainable service provision framework and with an established and vibrant user community. The main targets under Work Programme 2025-2027 are to upgrade the whole system framework and continue the service provision by providing

additional services to more users, including tailored sustainable services for key users at EU, national, regional and local levels, proceed with the deployment of breakthrough AI capabilities, expand into further priority areas and topics of interest, proceed with the bridging and update of relevant Horizon Europe projects' outcomes, as well as start integrating new Digital Twins.

The use of and access to the results and critical infrastructures developed under the DestinE flagship initiative are intended for entities in EU Member States and countries associated to the Digital Europe Programme. Access to some or all parts of the DestinE infrastructure and services can be granted to entities from other countries on a case-by-case basis, in the context of specific agreements, partnerships or initiatives undertaken as part of DestinE implementation activities.

Scope

1. Continuation of the current activities, maintenance and further improvement of all system aspects (all main components and overall infrastructure)
2. Completion of the foundation model for the Earth system. In addition, further advancements and deployment of breakthrough AI/ML capabilities and features.
3. Inclusion of new thematic priority areas (e.g. civil protection), consolidation of the main DestinE work areas, reaching the level of a coherent, and accurate model of the Earth system.
4. Further expansion of the end-user services' ecosystem, including bespoke services for main policy users (e.g. Commission Services, Member States at national, regional, local levels). Completion and deployment of the ongoing services' design and kick-off of the co-design process for the new ones. With respect to the principle of subsidiarity, the co-design process ensures that the to-be-developed services do not interfere with the mandate of national, regional and local authorities.
5. Adaption and calibration of the infrastructure and code optimisation to meet the exascale HPC requirements.
6. Further interoperability activities with the European Digital Twin of the Ocean (EU DTO), the Local Digital Twins, Copernicus and the common European Data Spaces, further uptake of Simpl[90], aiming to establish a sustainable ecosystem providing horizontal services and applications to a broad user base.

Deliverables

- Calibration and consolidation of all main system components, reaching a close-to-final stage.
- Fully developed, operational Climate change Adaptation and Extreme events Digital Twins enabling everyday operations with sound data quality and quality assurance.
- New services tailored for the needs of involved Commission Services and Member States (National, regional, local levels).
- A new set of advanced services and tools hosted on the core platform.
- New data assets federated as part of the expansion to new priority areas based on EU strategic priorities and identified user needs.

[90] Simpl: Cloud-to-edge federations empowering EU data spaces

- Onboarding of relevant Horizon Europe projects' outcomes working on new Digital Twins for DestinE.
- An array of breakthrough AI/ML tools to facilitate the flourishing of an ecosystem enabling European AI SMEs and startups to train their models on the wealth of DestinE data, to develop in turn, downstream applications based on end-to-end ML-based impact predictions for a spectrum of policy concerns in key impact sectors.
- Full interoperability capabilities in place, regarding the synergies with priority digital twins and data spaces like the European Digital Twin of the Ocean and other digital twins funded by Horizon Europe, Local Digital Twins and the common European Data Spaces.

Type of action	Contribution Agreement
Indicative budget	EUR 128 million[91]
Indicative time	2026-2028
Indicative duration of the action	24 months
Implementation	Indirect management with ESA, ECMWF, EUMETSAT
Eligibility and security	In line with the general conditions laid down in Article 18(1) of the Regulation (EU) 2021/694, participation in the implementation of the DestinE is open to the legal entities established in the Member States and Associated Countries as well as to international organisations of European interest and other legal entities created under Union law. Subject to participation restrictions for the protection of European digital infrastructures, communication and information systems, and related supply chains, as described in Appendix 4 of this Work Programme. Further justification for participation restriction is provided in Table 11 in Appendix 4. These eligibility criteria shall apply to candidates and tenderers for procurement contracts to be concluded by the implementing entities for the implementation of their respective tasks.

2.5 Deployment of the Apply AI Strategy: European Digital Innovation Hubs

The actions included in this Work Programme will focus on the completion and consolidation of the network of **European Digital Innovation Hubs (EDIHs) and the focus of its activities on supporting AI technologies and AI ecosystem in Europe.** The network will aim to cover all regions of the European

[91] For information, the overall budget for Phase III of Destination Earth is 153 million EUR.

Union and Associated Countries, including the EU's outermost regions as defined in Article 349 of the TFEU.

A European Digital Innovation Hub (EDIH) is a single entity or a coordinated group of entities with complementary expertise and a not-for-profit objective to support on a large scale the digital transformation of (1) SMEs and mid-caps, and/or (2) public sector organisations conducting non-economic activities. EDIHs provide services such as testing before investing, training and skills development, support to find investments, networking, and access to innovation ecosystems. EDIHs are essential to diffuse AI technologies and to support AI ecosystem both for the companies building the technologies and for those making use of them. In their second phase of operations, they will focus on AI technologies as offering unprecedented opportunities for growth and competitiveness and offer a first-line AI help desk to businesses and public sector organisations.

The initial network of EDIHs was established through a two-step selection process. First, Member States and countries associated to DIGITAL designated EDIH candidates through a national process. Secondly, the European Commission launched restricted calls for proposals in which only designated EDIH candidates were eligible to participate. The network was therefore formed based on three calls organised in 2022, 2023 and 2024. The call in 2024 specifically targeted seven countries associated to DIGITAL that had not participated in the previous two calls.

This Work Programme will set up new calls at the end of 2025 or beginning of 2026 **to complete the EDIHs network** with EDIH candidates from countries that associated to DIGITAL later, thus completing the geographical coverage of the network.

Two further calls are planned for 2025 and 2026 to **consolidate and continue** the European Network of European Digital Innovation Hubs (EDIHs) as well as to further focus its support to companies and public sector organisations with AI technologies. These calls are restricted to funded EDIHs and EDIHs with the Seal of Excellence listed in the Commission's Implementing Decision 2023/1534 establishing the Initial Network of EDIHs (see also Section 2.5.2) and in the Decision following the Call for Proposal DIGITAL-2023-EDIH-04.

Recognising the importance of Strategic Technologies for the Union's economic security[92], these calls support the strengthening of deployment of critical technologies, such as AI, across industry and value chains, further fostering deep tech innovations with significant economic potential. As a consequence, **a STEP Seal will be awarded to applicants that passed all evaluation thresholds**, including the EDIHs that remain unfunded due to budget limitations in the Digital Europe Programme. The highest-ranked will receive DIGITAL funding of up to 50%, with the remainder to be covered by national, regional or private funding. Unfunded EDIHs with a STEP Seal may receive funding by Member States or regions without additional evaluation, and, if operational, will be recognised as **European Digital Innovation Hub** in their own right and will be integrated as full members of the EDIH network.

The EDIH network will be supported by a strengthened **Digital Transformation Accelerator** (see Section 2.5.3), which will provide services such as community building, training, networking, impact assessment, communication, coordination and connection to relevant initiatives. This will be improving the effectiveness of the EDIHs in providing their services, including strong AI technologies and solutions, to SMEs and the public sector. The procurement (Section 2.5.3) is open to all eligible

[92] Regulation (EU) 2024/795 of the European Parliament and of the Council of 29 February 2024, establishing the Strategic Technologies for Europe Platform (STEP), and its guidance note C(2024)3148

entities as established by Art. 18 of the Digital Europe Programme, in particular public sector as well as private sector organisations including SMEs, social economy entities and NGOs.

Artificial intelligence is a specific focus for the EDIH network. 9 out of 10 EDIHs already offer today services related to these technologies. Recognizing AI's transformative potential and contribution to the digitalisation of SMEs and the public sector, the EDIH network must further prioritize integrating AI technologies into the vast majority of EDIHs' core activities, by delivering services that span from data acquisition and structuring to exploitation for greater competitiveness, in combination with other digital innovations. The EDIHs will also leverage AI solutions to significantly enhance their own activities, thereby increasing their impact with stakeholders in both the private and public sectors. AI technologies will allow the EDIHs to provide more effective services, from automating routine tasks to enabling advance data analytics to monitor the Digital Maturity of their clients, which can offer deeper insights and drive better tailored services.

European AI innovation ecosystems

EDIHs are part of the AI innovation ecosystems in the EU which also encompass infrastructures such as AI Factories[93], AI Testing and Experimentation Facilities[94] (TEFs), AI on Demand Platform[95] implemented through the Deploy AI Initiative[96], and the forthcoming AI skills Academy, Generative AI pilots for public administrations and AI Regulatory sandboxes. The EDIHs will closely collaborate with European AI innovation infrastructures, in particular with AI factories, the AI-on-demand platform and AI Testing and Experimentation Facilities to ensure a flexible journey for European companies to benefit fully from these AI innovation infrastructures.

These cooperation between EDIHs, TEFs and AI factories will not only accelerate the deployment of AI technologies but also ensure that these technologies are applied effectively and ethically. By fostering such collaborations, EDIHs will play a pivotal role in bridging the gap between AI research and real-world applications, driving economic growth and improving public services across Europe.

The governance of the network will continue involving the Member States through the AI Board, notably the AI Innovation Ecosystem subgroup.

2.5.1 Completion of the initial Network of European Digital Innovation Hubs (EDIHs)

Objective

The objective is to complete the existing network of European Digital Innovation Hubs (EDIHs) with entities from countries associated to the Digital Europe Programme that have not yet participated in any previous EDIH call. These entities will provide the complete set of services of an EDIH, including the necessary infrastructure, focusing primarily on a specific geographical area and covering the digital transformation needs of the local SMEs, mid-caps and/or public sector organisations with a reinforced AI focus for EDIH operations.

[93] AI Factories
[94] Sectorial AI Testing and Experimentation Facilities under the Digital Europe Programme
[95] Driving Innovation with Trusted AI Solutions
[96] DeployAI

The completion of the EDIHs network will be pivotal in supporting the widespread deployment and uptake of European AI technologies, solutions and tool, while also promoting the adoption of other crucial digital technologies, all in alignment with EU values and a human-centric approach.

Furthermore, the network will harness the potential of green digital technologies, contributing to Europe's collective climate and environmental goals. This approach will not only enhance the resilience of European industry but also strengthen its strategic autonomy. With an enhanced presence in countries associated with Digital Europe, the EDIH network will help bridge technology gaps, and support competitiveness and economic convergence.

EDIHs will collaborate with EU AI Innovation infrastructures, serving as central hubs for companies and the public sector. They will ensure a flexible and seamless digital journey, referring stakeholders to relevant services provided by these AI innovation infrastructures when appropriate. However, this collaboration does NOT mean that EDIHs need to integrate a representative of each EU AI infrastructures in their own consortium. It means that EDIHs must map out these infrastructures, establish contacts with them and help their customers towards benefiting from available services within a structured client journey. These collaborations will not only accelerate the deployment of AI technologies but also ensure their effective and ethical application. EDIHs will play a pivotal role in bridging the gap between AI research and real-world applications, driving economic growth and improving public services across Europe.

The EDIHs will act as a multiplier and widely promote and facilitate the use of all the digital capacities built up under the different specific objectives of the Digital Europe Programme, including the effective use of key digital standards. Where possible, EDIHs should leverage AI solutions from European start-ups and SMEs, as well as those provided and stemming from EU-funded projects, including the AI-on-Demand Platform.

Highlighting the vital importance to strengthen the value chains of critical digital technologies, the EDIHs should closely collaborate with AI Factories and High-Performance Computing competence centres. Where relevant, EDIHs will facilitate access for their customers to the EuroHPC AI-optimised supercomputers. They will also help SMEs fine-tune available AI solutions to their business needs and use cases by providing access to AI training when necessary.

Duplication of actions between EDIHs and other AI innovation infrastructures should be avoided. Therefore, working arrangements will be agreed among them, where the focus of the EDIHs will be on their role as multiplier, extending their geographical reach in the EU and the associated countries. Proposals will describe the planned delivery of AI services and referral mechanisms.

Scope

Each new EDIH will provide services based on a specific focus/expertise, which will support the local private and public sector with their digital transformation and the integration of AI technologies. This specialisation can be strengthened over time and should make use of existing local competencies in this area.

The EDIH network is dedicated to promoting and facilitating the digital transformation of SMEs and public services through four types of services:

- **Test before invest**: providing access to technical expertise and experimentation, in particular to AI-related services.
- **Training and skill development**: offering training sessions to SMEs and public services for upskilling and reskilling of the workforce.
- Support to identify and get **access to potential financing sources** to support digital transformation.

- Foster an **innovation ecosystem and networking opportunities**, including building links to AI factories and TEFs where relevant for associated countries.

Each EDIH is expected to provide all four types of services. They can however have different weights in the overall services portfolio. The services will be provided on an open, transparent and non-discriminatory basis and will be targeted mainly to (1) SMEs and midcaps and/or (2) public sector organisations conducting non-economic activities.

Each EDIH will act as an access point to the European network of EDIHs, helping local companies and/or public actors to get support from other EDIHs in case the needed competences fall outside their competence, ensuring that every stakeholder gets the needed support wherever it is available in Europe. Reversely, each EDIH will support the companies and public actors from other regions and countries presented by other EDIHs that need their expertise.

The EDIHs will also serve as contact point for the AI innovation infrastructures as described above, notably the AI factories, the AI-on-demand platform and TEFs. They will provide a first-line AI help desk for businesses and public sector organisations, offering basic information on compliance with the AI Act and relevant sources for further guidance. This will help ensure the broad adoption of strategic technologies, supporting the development of an AI continent.

Each EDIH will make available the relevant experimentation facilities and demonstrators related to its specialisation. SMEs, mid-caps and the public sector will be able to test the technologies proposed, including where relevant their environmental impact, and the feasibility of applying these technologies to their business before investing in them Likewise, EDIHs will leverage green digital technologies to advance Europe's collective climate and environmental goals.

EDIHs will also provide access to finance services, including information on and facilitation of access to public and private funding sources, as well as connections to public and private investors.

The EDIHs will actively network with other hubs, share best practices and specialist knowledge, connect companies within their value chain, and seek synergies with innovators and early adopters who test solutions in novel experiments. These efforts will foster the adoption of digital technologies, particularly AI, in work and business environments in a more human-centric manner. Additionally, EDIHs will serve as brokers between public administration and companies providing e-government technologies.

In all the networking activities, EDIHs will be supported by the Digital Transformation Accelerator (DTA). Therefore, it is compulsory that EDIHs participate actively in the relevant support activities of the DTA, such as matchmaking, training and capacity building events.

The DTA, in cooperation with the Commission, will also host tools such as the Digital Maturity Assessment Tool and will centralise the overall Key Performance Indicators (KPIs) of the network. As a result, each EDIH must report the necessary information to the DTA. While EDIHs are encouraged to make use of the digital tools provided, they are also free to use their own tools. However, interoperability with the EDIH network tools is a requirement, to ensure a seamless experience for users.

DTA will organize events and activities for the network of EDIH, to share information and experiences, train, build cohesion. EDIHs should foresee active participation in those events and activities.

The EDIHs should closely collaborate with the AI Factories as well as with the High-Performance Computing competence centres, the Cybersecurity centres, the AI-on-demand platform, AI Testing and

Experimentation Facilities and other EDIHs seeking complementarities in view of supporting companies and public sector organisations with their digital transformation.

Where relevant, the EDIHs will facilitate access for their customers to the EuroHPC AI-optimised supercomputers. They will also help SMEs fine-tune available AI solutions to their business needs and use cases by providing, wherever needed, also access to AI training.

EDIHs will maintain structured long-term relationships with the relevant local actors like regional authorities, industrial clusters, SME associations, business development agencies, incubators, accelerators, chambers of commerce, and partners of the Enterprise Europe Network (EEN) and Startup Europe by offering joint investor-related events, organising common trainings, workshops or info days, directing SMEs from EEN to EDIHs and from EDIHs to EEN as needed. It is expected that local actors planning mutual support with a local EDIH will sign a Memorandum of Understanding for a proper governance of their collaboration.

Finally, EDIHs will serve as an interface for the European Commission to support the implementation of specific sectorial policies, SME policies and eGovernment policies. This will imply that EDIHs specialised in a specific sector could be consulted on policies related to their sector of competence and could participate in specific actions.

EDIHs will design their operations to ensure sustainability beyond the implementation phase. They will indicate how they plan to build local capacity, foster community ownership, and integrate the initiative into their ecosystems.

The total public funding for this action is 100% of eligible costs (50% coming from the Digital Europe Programme and up to 50% coming from the Member States). In line with Appendix 6 on State Aid, the countries must ensure that State aid is granted in line with the applicable State aid rules, such as de minimis or GBER (ensuring compliance with GBER compatibility, including on aid intensities and notification thresholds set out in Article 4 GBER) or whatever the state aid rules stipulate in the associated country.

Deliverables

The new EDIHs will support the digital transformation of SMEs, mid-caps, and public sector organizations within its geographical area and area of expertise, while also aiming to extend its impact beyond its immediate region. An EDIH can select to focus on specific group(s) of clients (e.g. mainly SMEs or mainly public sector).

The performance of the hub will be evaluated based on their key performance indicators (KPIs); proposals should define their indicators as well as the targets related to each of them:

- Number of entities which have used the European Digital Innovation Hubs' services, by user category (businesses of different sizes, public sector entities, etc.), sector, location, by technology and type of service received. Specific sub-indicators must be proposed when the services are related to develop and uptake AI solutions, and will include a description of which European AI Innovation Infrastructures have been used (such as the AI-on-Demand platform) or referred to (such as the AI Factories).
- Number of entity referral to European AI Innovation Infrastructures
- For access to finance: amount of additional investments successfully triggered (e.g. through venture capital, bank loan, etc.).
- Number of collaborations foreseen with other EDIHs and stakeholders outside the region at EU level, and description of jointly shared infrastructures / joint investments with other EDIHs.

A set of additional impact indicators will be collected and analysed with the support of the Digital Transformation Accelerator:

- Increase in digital maturity of organizations that have used the services of the EDIH network. Digital maturity will be defined based on a questionnaire assessing the categories of digital strategy and readiness, intelligence and automation, data and connectedness, sustainable and human-centric digitalisation. EDIHs will administer the questionnaire at the start of the engagement with a client, and later after having delivered services, and report without delay the results to the DTA repository.
- Increase in number of companies benefiting from the use of European AI technology.

Cross-border trans-national hubs are possible with several countries jointly proposing and co-funding cross-border trans-national hubs, serving neighbouring regions in different countries, tackling shared challenges identified in the border regions and exploiting the untapped growth potential in border areas. In this case, only the share of the funding of each country involved in the cross-border trans-national will be considered for the total amount of funding for that country.

Type of action	Simple grant (50% funding from DIGITAL)
Indicative budget	EUR 2 million
Indicative call planning / timing	First set of calls
Indicative duration of the action	36 months
Implementation	Executive Agency HaDEA
Type of beneficiaries	Only entities that are designated by their Associated country may apply to this call. As a proof of their designation, they need to attach the letter of designation to their proposal. This call will target only associated countries which could not yet participate in any previous EDIH call to set up EDIHs in their countries.

2.5.2 Consolidation of the Network of European Digital Innovation Hubs (EDIHs with reinforced AI focus)

Objective

The objective of this call is the consolidation of the network of **European Digital Innovation Hubs (EDIHs)** aiming to cover all regions of the European Union and Associated Countries, including the EU's outermost regions, by strengthening its performance and capacity to meet local, regional, national and European digitalisation needs.

With increased experience and capacities, the EDIHs will continue providing the complete set of services of an EDIH, including the necessary infrastructure, focusing primarily on specific geographical areas, and covering the digital transformation needs of local SMEs, mid-caps and/or public sector organisations. Considering the transformation potential of AI technologies, these will be a reinforced focus of EDIHs' operations under this call.

The consolidation of the EDIHs network will be pivotal in supporting the wide deployment and uptake of European AI technologies, solutions, and tools and in promoting the adoption of other crucial digital technologies, while upholding Union values and human-centric perspective.

Furthermore, the network will harness the potential of green digital technologies, advancing Europe's collective climate and environmental goals. This approach not only enhances the resilience of Europe's industry but also boosts its strategic autonomy. With its enhanced presence in countries associated to Digital Europe, the EDIH network will help bridge technology gaps, and support competitiveness and economic convergence.

EDIHs will collaborate with the EU AI Innovation infrastructures and will become a central point for companies and public sector ensuring a flexible and seamless digital journey and referring them to the services provided by these AI innovation infrastructures where appropriate. This collaboration does NOT mean that EDIHs need to integrate a representative of each EU AI infrastructures in their own consortium. It means that EDIHs have to map out these infrastructures, establish contacts with them and help their customer benefit from the services provided by the other initiatives in a client journey perspective. These collaborations will not only accelerate the deployment of AI technologies but also ensure that these technologies are applied effectively and ethically. EDIHs will play a pivotal role in bridging the gap between AI research and real-world applications, driving economic growth and improving public services across Europe.

The EDIHs will act as a multiplier and widely diffuse the use of all the digital capacities built up under the different specific objectives of the Digital Europe Programme and including the effective use of key digital standards. To the extent possible, the EDIHs should use the AI solutions of European start-ups and SMEs and/or those provided and stemming from EU projects, including from the AI-on-Demand Platform.

Highlighting the vital importance to strengthen the value chains of critical digital technologies, the EDIHs should closely collaborate with AI Factories as well as with the High-Performance Computing competence centres. Where relevant, the EDIHs will facilitate access for their customers to the EuroHPC AI-optimised supercomputers. They will also help SMEs fine-tune available AI solutions to their business needs and use cases by providing, wherever needed, also access to AI training.

It should be avoided that there is duplication of actions of the other AI innovation infrastructures and the EDIHs, and therefore working arrangements will be agreed among them, where the focus of the EDIHs will be on their role as multiplier and reaching out to all regions in Europe. Proposals will describe the planned delivery of AI services and referral mechanisms.

Countries associated to the Digital Europe Programme

Countries recently associated to the Digital Europe Programme participated in the call organised in 2024 that leads to the launch of several EDIHs in these countries starting in 2025. It is crucial to consolidate a stronger and more comprehensive network with a call to the EDIHs with a Seal of Excellence in these countries. By incorporating new EDIHs in these countries, the EDIH network can tap into a broader pool of expertise, resources, and innovation ecosystems, enhancing its capacity to drive digital transformation and Artificial Intelligence (AI) adoption across the continent. Furthermore, this expansion will enable the hubs to refocus on the uptake and wide deployment of European AI solutions and tools, fostering a more robust and competitive European digital landscape. Most importantly, the widened network will ensure that a larger number of customers, including Small and Medium-sized Enterprises (SMEs), midcaps, and public administrations, can benefit from the digital transformation and AI revolution, thereby promoting economic growth, social prosperity, and regional development across the entire Europe.

Scope

Each EDIH will provide services based on a specific focus and expertise, which will support the local private and public sector with their digital transformation with particular focus on support to development, training deployment and uptake of European AI. This specialisation can be strengthened over time and should make use of existing local competencies in this area.

The EDIH network is dedicated to promoting and facilitating the digital transformation of SMEs and public services through four types of services:

- **Test before invest**: providing access to technical expertise and experimentation facilities, in particular to AI-related services.
- **Training and skill development**: offering training sessions to SMEs and public services for upskilling and reskilling of the workforce.
- Support to identify and facilitate **access to potential financing sources** to support digital transformation.
- Foster an **innovation ecosystem and networking opportunities**

Each EDIH is expected to provide all four types of services. They can however have different weights in the overall services portfolio. The services will be provided on an open, transparent and non-discriminatory basis and will be targeted mainly to (1) SMEs and mid-caps and/or (2) public sector organisations conducting non-economic activities.

Each EDIH will act as an access point to the European network of EDIHs, helping local companies and/or public actors to get support from other EDIHs in case the needed competences fall outside their remit, ensuring that every stakeholder gets the needed support wherever it is available in Europe. Reversely, each EDIH will support the companies and public actors from other regions and countries presented by other EDIHs that need their expertise.

The EDIHs will also serve as contact point for the AI innovation infrastructures as described above, notably the AI factories, AI-on-demand platform and TEFs, and offer a first-line AI help desk to businesses and public sector organisations, including basic information on compliance with the AI Act as well as relevant sources of further information and ensuring a broad adoption of strategic technologies supporting the development of an AI Continent.

Each EDIH will make available the relevant experimentation facilities and demonstrators related to its specialisation. SMEs, mid-caps, and the public sector will be able to test the technologies proposed, including where relevant their environmental impact, and the feasibility of applying these technologies to their business before further investing in it. Likewise, EDIHs will harness the potential of green digital technologies, advancing Europe's collective climate and environmental goals.

EDIHs will also provide access to finance services including providing information and facilitating access to public and private funding sources as well as to public and private investors.

The EDIHs will be active in networking with other hubs, sharing best practices and specialist knowledge, in bringing companies into contact with other companies of their value chain, and in seeking synergies with innovators and early adopters that test solutions in novel experiments and can foster the adoption of digital technologies, and notably AI, in working and business environments in a more human-friendly way. EDIHs will also play a brokering role between public administrations and companies providing e-government technologies.

In all the networking activities, EDIHs will be supported by the Digital Transformation Accelerator (DTA) and therefore it is compulsory that EDIHs participate actively in the relevant support activities of the Digital Transformation Accelerator, such as matchmaking, training, and capacity building events. The Digital Transformation Accelerator in cooperation with the Commission will also host tools, such as the Digital Maturity Assessment Tool, and have the role to centralise overall Key Performance Indicators (KPIs) of the network, and therefore each EDIH will report the necessary information to the DTA. EDIHs are encouraged to make use of the digital tools provided but are also free to use their own tools. However, interoperability with the EDIH network tools is a requirement, so that users of the EDIHs will have a seamless experience.

DTA will organize events and activities for the network of EDIH, to share information and experiences, train, build cohesion. EDIHs should foresee active participation in those events and activities.

The EDIHs should closely collaborate with the AI factories as well as with the High-Performance Computing competence centres, the Cybersecurity centres, the AI Testing and Experimentation Facilities, and other EDIHs seeking complementarities in view of supporting companies and public sector organisations with their digital transformation. To the extent possible, the EDIHs should use the AI solutions of European start-ups and SMEs and/or those provided and stemming from EU projects, including from AI on Demand Platform. Where relevant, the EDIHs will facilitate access for their customers to the EuroHPC AI-optimised supercomputers. They will also help SMEs fine-tune available AI solutions to their business needs and use cases by providing, wherever needed, also access to AI training.

EDIHs will maintain structured long-term relationships with the relevant local actors like regional authorities, industrial clusters, SME associations, business development agencies, incubators, accelerators, chambers of commerce, and partners of the Enterprise Europe Network (EEN), Cybersecurity Centres and Startup Europe by offering joint investor-related events, organising common trainings, workshops or info days, referring SMEs from EEN to EDIHs and from EDIHs to EEN according to their specific needs. It is expected that local actors planning mutual support with a local EDIH will sign a Memorandum of Understanding for a proper governance of their collaboration[97].

Additionally, EDIHs will serve as an interface for the European Commission to support the implementation of specific sectorial policies, SME policies and eGovernment policies. This will imply that EDIHs specialised in a specific sector could be consulted on policies related to their sector of competence and could participate in specific actions.

EDIHs will design operations to achieve sustainability level beyond the implementation and will indicate how they will build local capacity, foster community ownership, and integrate the initiative into their ecosystems.

The total public funding for this action may be up to 100% of eligible costs (50% coming from the Digital Europe Programme and up to 50% coming from the Member States). Proposals will describe their co-funding sources (e.g. public funding and remaining amounts to be paid by customers) and how they will achieve economic sustainability for their operations. In line with Appendix 6 on State Aid, Member States have to ensure that State aid is granted in line with the applicable State aid rules, such as *de*

[97] See also the Cooperation guidelines for a seamless digitalization support to European SMEs.

minimis or GBER (ensuring compliance with GBER compatibility conditions, including on aid intensities and notification thresholds set out in Article 4 GBER).

Deliverables

Each EDIH will support the digital transformation of SMEs, mid-caps, and public sector organizations within its geographical area and area of expertise, while also aiming to extend its impact beyond its immediate region. An EDIH can select to focus on specific group(s) of clients (e.g. mainly SMEs or mainly public sector).

Each selected project will provide the four core types of services (testing before investing, training and skills development, support to find investments, networking and access to innovation ecosystems) covering a wide range of digitalisation needs, from mainstream technologies and AI capacities to specialised technologies. The services will be provided seamlessly, through proxies when required, maintaining consistency and accessibility for stakeholders. EDIHs complement and build synergies with existing regional and national initiatives, collaborate with the EU AI Innovation infrastructures and will become a central point for companies and public sector ensuring a flexible and seamless digital journey and referring them to the services provided by these AI innovation infrastructures where appropriate.

All together, EDIHs will contribute to consolidation of a balanced network of EDIHs, ensuring the broadest coverage of regions in Europe, addressing the needs of public and private sectors across all economic sectors, fostering cross-regional collaboration and resource sharing and offering a wide range of digitalisation services, from mainstream to specialised technologies.

The following indicators will be used to evaluate the performance of the hub; proposals should define their indicators as well as the targets related to each of them:

- Number of entities which have used the European Digital Innovation Hubs' services, by user category (businesses of different sizes, public sector entities, etc.), sector, location, by technology and type of service received. Specific sub-indicators have to be proposed when the services are related to develop and uptake AI solutions, and will include a description of which European AI Innovation Infrastructures have been used (such as the AI-on-Demand platform) or referred to (such as the AI Factories).
- Number of entity referral to European AI Innovation Infrastructures
- For access to finance: amount of additional investments successfully triggered (e.g. through venture capital, bank loan, etc.).
- Number of collaborations foreseen with other EDIHs and stakeholders outside the region at EU level, and description of jointly shared infrastructures / joint investments with other EDIHs.

A set of additional impact indicators will be collected and analysed with the support of the Digital Transformation Accelerator:

- Increase in digital maturity of organizations that have used the services of the EDIH network. Digital maturity will be defined on the basis of a questionnaire assessing the categories of digital strategy and readiness, intelligence and automation, data and connectedness, sustainable and human-centric digitalisation. EDIHs will administer the questionnaire at the start of the engagement with a client, and later after having delivered services, and report without delay the results to the DTA repository.
- Increase in number of companies benefiting from the use of European AI technology.

Cross-border trans-national hubs are possible with several countries jointly proposing and co-funding cross-border trans-national hubs, serving neighbouring regions in different countries, tackling common challenges identified in the border regions and exploiting the untapped growth potential in border areas. In this case, only the share of the funding of each country involved in the cross-border trans-national will be taken into account for the total amount of funding for that country.

Type of action	Simple grant (funding rate 50% with the possibility of a call with up to 100% funding rate for the countries deciding to do a transfer of funds from ERDF to DIGITAL)
Indicative budget	EUR 258 million[98]
Indicative call planning / timing	First set of calls, Second set of calls and Third set of calls
Indicative duration of the action	36 months
Implementation	European Commission
Type of beneficiaries	The first two calls will be open for application to current EDIH network. This covers all EDIHs selected or awarded the Seal of Excellence listed in the Commission's Implementing Decision 2023/1534 establishing the Initial Network of EDIHs. The calls will be organised in 2025 and in 2026 allowing all eligible EDIHs to participate irrespectively of the end date of the current project. A candidate EDIH may change the composition of the original consortium, and/or the coordinating entity of the EDIH. All countries will have an allocated budget envelope for the EDIHs on their territory. As EDIHs in a country will only compete with EDIHs of the same country, Calls may be open for some geographies and not others. Member States have been asked to inform the Commission whether Call 1 and/or Call 2 should be open for the EDIHs in their country, A third call is also organised for those countries that decide to transfer funds from ERDF to Digital Europe. The funding rate in that call will be up to 100%.

Type of action	Simple grant (funding rate 50%)
Indicative budget	EUR 9 million for EDIHs of countries recently associated to the Digital Europe Programme
Indicative call planning / timing	First set of calls
Indicative duration of the action	36 months
Implementation	Executive Agency HaDEA
Type of beneficiaries	The first set of calls will be open for application to EDIHs that were awarded the Seal of Excellence in the 2024 call for countries recently associated to Digital Europe. Albania, North Macedonia, Turkey and Ukraine will have an allocated budget envelope for the EDIHs on their territory.

[98] This call will be funded using annual instalments.

2.5.3 Digital Transformation Accelerator

Objective

The Digital Transformation Accelerator (DTA) will support the effectiveness and efficiency of the network of European Digital Innovation Hubs, with the core objective to accelerate the digital transformation of the European economy and support the extensive deployment of AI solutions.

Scope

The DTA will provide services to the EDIH network to ensure the effective operation of the network.

In particular, they will support:

- **Community building and training:**
    - Guidance for hubs: this may include guidance to set up new hubs, re-usable support tools (templates, webinars, guidelines, good practices, reusable capacities, etc.), carefully selected good practice cases, twinning programmes, etc.
    - Provisioning of training services and material (e.g. on-line videos / tutorials, physical and on-line workshops) covering the needs of the EDIH. Technological and financial aspects should be covered, e.g. by providing training about InvestEU, Digital Europe Programme, Horizon Europe and other relevant programmes.
    - Organisation of appropriate on-line and physical events to support matchmaking where needs for specific competences are advertised and matching hubs may be found. Such matchmaking should be supported by a digital matchmaking marketplace. Startup Europe and other initiatives may be used to identify startups offering digital capacities and transformation services to SMEs.
    - Coordination and community building events dedicated to groups of EDIHs sharing similar interests (e.g. technology, including AI absorption capacity, geographical area, industry sector), and engaging with DIHs or similar organisations that are not part of the European DIH network. A specific target will be setting up links among EDIHs and DIHs focused on AI technologies, in particular the AI helpdesk.
    - Train the trainer: developing ways to transfer the knowledge on how to access the Digital Capacities (built up under the different Specific Objectives of the Digital Europe Programme) to the EDIHs and vice versa, for instance by organising regular training workshops and providing appropriate training material, and information on the available Digital Capacities. This will allow EDIHs to further diffuse advanced knowledge to their own stakeholders and ensure the widespread use of the digital capacities developed with the support of Digital Europe Programme.
- **Connection to relevant initiatives**: providing to interested EDIH the opportunity to engage with local, regional, national and European policymakers, Startup Europe, the Enterprise Digital Europe Network, the European Digital Government EcoSystem, the Interoperable Europe Portal, the European Innovation Partnership Agricultural Productivity and Sustainability (EIP-AGRI), CASSINI network, Open Innovation Test Beds, Hubs for Circularity, Horizon Europe projects related to the Adaptation and Smart Cities mission, Regional Innovation Valleys and any other relevant initiative, including the AI Factories established in Member States. The DTA will help hubs to get in touch with the right organisations and people, including e.g. relevant Horizon Europe projects, and will provide information and support as needed, also to national and regional policy makers. They will

also be the first contact point for international collaboration between the EDIHs and relevant organisations from third countries and can e.g. advise on study visits.

- **Impact assessment and road mapping**: these services cover the collection and analysis of the KPIs defined for the EDIH. The DTA will help EDIHs in the yearly collection of the relevant data, including by providing the needed IT tools and support. As a result of the impact assessment, the DTA will provide a yearly summary report identifying the needed improvements in the EDIH network, defining a roadmap for the future actions. A specific set of KPIs will be developed to measure the effectiveness of the EDIH network in supporting the take-up of Artificial Intelligence applications for their customers.

- **Online presence, external communication, tools and support**: the DTA will be the first online point of contact for all the information related to the EDIHs. It will provide a curated multilingual web portal with links to all the relevant online resources, continuously updated, including e.g. success stories of digital transformation; training courses supported by advanced digital skills pillar of Digital Europe Programme. The DTA will take care of external communications and media presence for the network of EDIH and will support individual EDIH in communication activities when needed. The DTA will manage the interactive catalogue of European Digital Innovation Hubs and will make available the appropriate IT tools to support online activities related to the services provided. This may include, e.g., collaboration and teleconferencing tools, secure storage, online training tools, etc. In general, the DTA will provide the IT support needed for common activities involving several EDIH and relevant stakeholders.

Deliverables

As a result of this action, the network of European Digital Innovation Hubs will efficiently deliver digital transformation services to the European SME, mid-caps and to the public sector. The following specific impacts are expected:

- A very dynamic network of EDIHs where all stakeholders obtain the best possible support and new European value chains are created and consolidated.
- A set of training and networking events, both on-line and physical, improving the capacity of each EDIH and ability to widely diffuse the digital capacities build up through the Digital Europe Programme.
- Broad availability of collaboration tools for common activities.
- Availability of high quality KPIs and additional impact indicators, including AI services monitoring, for the EDIH network; this can involve tracking the adoption and integration of AI technologies across various sectors, assessing the impact of AI on operational efficiency, innovation and competitiveness.
- A fully functional interactive catalogue of EDIH, Digital Speed Test tool for self-assessment of companies and an open Digital Maturity Assessment
- A recognizable online presence, including easy availability and accessibility of public information relevant for the EDIH network and related European initiatives.

Type of action	Procurement
Indicative budget	EUR 4 million
Indicative call planning / timing	2025
Indicative duration of the action	48 months
Implementation	European Commission

Type of beneficiaries	Not applicable

3. Cybersecurity

Cybersecurity is fundamental to the EU's digital transformation and the Digital Europe Programme has been instrumental in raising the level of protection of our citizens and organisations and improving the security of digital products and services throughout the whole supply chain. Among others, solutions may also cover the surveillance and protection of critical undersea infrastructure, such as submarine cables, and the detection of malicious activities around them, to improve the resilience and security of this infrastructure, which is critical for global communications. Activities in previous WPs under Specific Objective 3 on Cybersecurity and Trust (Main and Cybersecurity WPs) aimed to strengthen the EU's response and reporting to cyber threats and incidents while at the same time raising preparedness level. Building the capacities of Security Operation Centres (SOCs), including National SOCs and Cross-Border SOC platforms contributed to the threat detection and cyber incident analysis ecosystem.

As in previous years, the bulk of cybersecurity related activities will be described and funded through the dedicated Digital Europe Programme Cyber WP, which is designed and implemented by the Cybersecurity Industrial, Technology and Research Competence Centre (ECCC)[108] and the Network of National Coordination Centres (NCCs), as foreseen in the ECCC Regulation and in Article 6(2) of Regulation (EU) 2021/694.

For the 2025-2027 period, Specific Objective 3 major investments amounting to EUR 353 million[99], channelled through the **ECCC**, will be devoted to the following activities:

- **European Cybersecurity Alert System**: the deployment of **Security Operation Centres**/Cyber Hubs and Cross-Border Cyber Hubs in line with the recently agreed Cyber Solidarity Act, to support detection and build enhanced awareness regarding cybersecurity threats.
- **Preparedness actions**: support preparedness actions of Member States, in the context of the **Cyber Solidarity Act**, such as coordinated preparedness testing of entities operating in sectors of high criticality.
- **AI for Cyber:** take-up of AI, including **generative AI**, and other key digital technologies for Cyber applications, as well as for improving and expanding the Cyber Hubs capabilities, will also contribute to strengthening European Cyber Resilience.
- **Post Quantum Encryption**: transition to adopt Post Quantum Encryption technologies for industry and public administrations will play an important role in preparing for a post quantum world.
- **Other actions**: support to the implementation of European Cyber Legislation, such as for the Cyber Resilience Act, aiming at providing SMEs the tools to comply with regulatory requirements.

This WP will cover activities that are still implemented by the Commission through contribution agreements with ENISA and CERT-EU. More specifically, actions include:

- Establishment of an EU Cybersecurity Reserve (as per the Cyber Solidarity Act[100]) to help address significant or large-scale cybersecurity incidents. The Reserve can be deployed at the request of Member States, Union Institutions, bodies, and agencies and third countries associated to DIGITAL if their association agreement to DIGITAL provides for it.

[99] Operational budget, including indicative amount for EEA EFTA contributions.
[100] The Cyber Solidarity Act was published in the Official Journal on 15.01.2025.

- Development and operation of a Cyber Resilience Act single reporting platform which will be managed and maintained by ENISA.
- Running of the Cyber Situation and Analysis Centre.

The budget for the topics included in this chapter is EUR 45.6 million.

Cybersecurity is a broad challenge that extends beyond the Digital Europe Programme. These activities/projects may complement actions funded under the Horizon Europe programme, particularly under Cluster 3, Destination "Increased Cybersecurity." This aims to bolster EU cybersecurity capabilities by addressing security issues and creating innovative solutions to safeguard cybersecurity infrastructures and tools across the EU for public administrations, businesses, and individuals. Funding under DIGITAL will also complement existing funding streams, such as those under the Digital CEF Programme, by supporting, in particular, Member States and operators of submarine critical infrastructures in acquiring and implementing the cyber and digital tools necessary to monitor and protect our submarine cable infrastructure and, where possible, leveraging on the possibilities offered by Cyber Hubs.

3.1 EU Cybersecurity Reserve

Objective

Creation of an EU Cybersecurity Reserve (as per Regulation (EU) 2025/38, the Cyber Solidarity Act), consisting of incident response services from private service providers, that can be deployed at the request of Member States, Union Institutions, bodies, and agencies and third countries associated to Digital Europe Programme for the purposes of using specifically the EU Cybersecurity Reserve, to help them address significant or large-scale cybersecurity incidents. This mechanism aims to complement and not duplicate efforts by Member States, and third countries associated to DIGITAL for using the Reserve to improve their capability to respond to significant and large-scale cybersecurity incidents, including by providing them with knowledge and expertise in key sectors.

Scope

The support of cybersecurity incident response shall include the following activities: Set up of the EU Cybersecurity Reserve with cybersecurity incident response services from trusted private providers to provide relevant services to respond to and to mitigate the impact of significant and large-scale cybersecurity incidents. Such services would support incident response and initial recovery and/or restore the functioning of essential services, as well as identification and preservation of digital evidence. Actions to set up the EU Cybersecurity Reserve could include:

- Technical assistance with Incident management.
- Information Security Incident Analysis and Crisis Communications as a retainer type of service.
- Artefact and Forensic Evidence collection and analysis preserving the chain of custody.
- Information Security Incident Coordination.
- Comprehensive reporting including scope, recommendations, remediation and findings.

The procured services shall be convertible into preparedness services related to incident prevention and response where those procured services are not used for incident response during the time for which those services are pre-committed.

Deliverables

- EU Cybersecurity Reserve as foreseen in the Regulation (EU) 2025/38 (Cyber Solidarity Act)

Type of action	Contribution agreement
Indicative budget	EUR 36 million
Indicative call planning / timing	2025-2027
Indicative duration of the action	36 months
Implementation	ENISA
Eligibility and security	Action restricted on the basis of Article 12(5) of the Regulation (EU) 2021/694. Subject to participation restrictions for the protection of European digital infrastructures, communication and information systems, and related supply chains, as described in Appendix 4 of this Work Programme.

All actions under this topic aim at services intended specifically for protection against criminal and/or politically motivated cyber threats, including in particular supply-chain attacks. The EU Cybersecurity Reserve could play an important role in supporting Member States, Union institutions, bodies, offices and agencies, as well as DIGITAL-associated third countries in accordance with Article 19 of Regulation (EU) 2025/38 (Cyber Solidarity Act), in responding to and mitigating the impacts of significant incidents, large-scale cybersecurity incidents, and large-scale equivalent cybersecurity incidents. The EU Cybersecurity Reserve will consist of incident response services procured from the trusted managed security service providers.

Pursuant to Article 12(5b) of the Cyber Solidarity Act that amends Article 12 of Regulation (EU) 2021/694, Article 12(5) of the Regulation (EU) 2021/694 shall not apply if the conditions stipulated in Article 12(5b) are cumulatively met. The assessment of these conditions should take into account the results of the mapping of the availability of services for the EU Cybersecurity Reserve to be carried out by ENISA pursuant to Article 14(6) of the Cyber Solidarity Act.

At the moment, ENISA is still in the process of conducting this mapping. Until the mapping is completed and in line with the relevant provisions of the Cyber Solidarity Act, participation to the calls funded under this topic will be therefore subject to the restrictions of Article 12(5), as specified in Appendix 3 of this Work Programme. Calls for proposals and calls for tenders shall be restricted to legal entities established or deemed to be established in Member States and controlled by Member States or by nationals of Member States. EEA EFTA countries are fully associated to the Digital Europe Programme and benefit from a status equivalent to that of the Member States.

These security conditions may be later amended taking into account the results of the final mapping of services carried out by ENISA pursuant to Article 14(6) of the Cyber Solidarity Act.

3.2 Cyber Resilience Act reporting platform

Objective

Development and operation of a Cyber Resilience Act single reporting platform, which would allow manufacturers to securely report cybersecurity vulnerabilities and incidents. The reporting will

contribute significantly to raising the level of security for anyone using such products, including critical infrastructures, industry, public administrations and consumers.

Manufacturers should notify simultaneously via the single reporting platform both the Computer Security Incident Response Team (CSIRT) designated as coordinator as well as ENISA of actively exploited vulnerabilities contained in products with digital elements, as well as severe incidents having an impact on the security of those products.

The architecture of the single reporting platform shall allow Member States and ENISA to put in place their own electronic notification end-points.

The establishment, management, and maintenance of day-to-day operations of the single reporting platform should be done by ENISA. The single reporting platform should be designed in such a way that it ensures the confidentiality of notifications, in particular as regards vulnerabilities for which a security update is not yet available.

In addition, ENISA should put in place procedures to handle information in a secure and confidential manner. ENISA should take appropriate and proportionate technical, operational and organisational measures to manage the risks posed to the security of the single reporting platform and the information submitted or disseminated via the single reporting platform.

Scope

The establishment, management, and maintenance of day-to-day operations of the single reporting platform by ENISA, shall include the following activities:

ENISA, in cooperation with the CSIRTs network, shall provide and implement specifications on the technical, operational and organisational measures regarding the establishment, maintenance and secure operation of the single reporting platform.

When establishing the single reporting platform referred to in this Regulation, ENISA should take into account the possibility for the national electronic notification end-points referred to in this Regulation to be integrated into national single entry points that may also integrate other notifications required under Union law.

ENISA should prepare a biennial technical report on emerging trends regarding cybersecurity risks in products with digital elements and submit it to the Cooperation Group established pursuant to Article 14 of Directive (EU) 2022/2555.

The platform should take into account the implementing acts specifying further the format and procedures of the notifications, and delegated acts specifying the terms and conditions for applying the cybersecurity related grounds in relation to delaying the dissemination of notifications.

While the implementation requirements still need to be discussed with the relevant stakeholders, the actions could include the following:

- Study/identification/mapping of possible specifications on the technical, operational and organisational measures regarding the establishment, maintenance and secure operation of the single reporting platform.
- Consultations with Member States, and other relevant stakeholders, including EU institutions, bodies and agencies that are managing platforms or databases subject to stringent security requirements, as well as industry.
- CSIRT Network formal consultations.

- Procurement of a service provider to develop the platform.
- Platform implementation, certification, testing.
- Management of the platform.
- Maintenance of the platform.
- Other related actions regarding the implementation of the Cyber Resilience Act linked to the establishment, maintenance and secure operation of the Single Reporting Platform.

Deliverables

- A functioning and secure Cyber Resilience Act single reporting platform with the architecture allowing for the relevant electronic notification end-points, including the end-point for ENISA.
- Day-to-day management of the Cyber Resilience Act single reporting platform
- Maintenance of the Cyber Resilience Act single reporting platform.

Type of action	Contribution Agreement
Indicative budget	EUR 8.1 million
Indicative call planning / timing	2025- 2027
Indicative duration of the action	36 months
Implementation	ENISA
Eligibility and security	Action restricted on the basis of Article 12(5) of the Regulation (EU) 2021/694. Subject to participation restrictions for the protection of European digital infrastructures, communication and information systems, and related supply chains, as described in Appendix 4 of this Work Programme.

All actions under this topic aim at services intended specifically for protection against criminal and/or politically motivated cyber threats, including in particular supply-chain attacks. This action involves the handling of sensitive information such as cybersecurity vulnerabilities detected in products used by EU infrastructures, industry, public administrations, and consumers. The participation of non-EU entities (that is, entities not established in the EU, or established in the EU but not controlled by a Member State or national from of a Member State) in this action could lead to this highly sensitive information about cybersecurity risks and incidents being subject to legislation that obliges the non-EU parties to provide this information to non-EU governments. In addition, non-EU participants could be more susceptible to pressure from non-EU governments to divulge such information.

In order to protect the essential security interests of the Union, the implementation of the Cyber Resilience Act reporting platform should depend on legal entities (e.g., providers) established or deemed to be established in Member States and controlled by Member States or by nationals of Member States. Participation to the calls funded under this topic will therefore be subject to the provisions of Article 12(5) of the Regulation (EU) 2021/694. Calls for proposals and calls for tenders shall be restricted to legal entities established or deemed to be established in Member States and controlled by Member States or by nationals of Member States. EEA EFTA countries are fully associated to the Digital Europe Programme and benefit from a status equivalent to that of the Member States.

3.3 Cyber Situation and Analysis Centre

Objective

In order to complement existing efforts as much as possible, the Commission has formally agreed with ENISA and CERT-EU to collaborate in the operation of the situation centre in full respect of their respective mandates and competences. For the provision of services provided by CERT EU and ENISA under these agreements the Commission will contribute to the functioning of CERT-EU and ENISA.[101]

Scope

Contribute to up-to-date and strategic-level situation analysis, risk scenarios and overviews of the threat landscape (customisation of Cyber Threat Intelligence - CTI).

The Commission is developing a Cyber Situation and Analysis Centre to assist in fulfilling the Commission's responsibilities with regard to crisis management, and to reinforce the analytical products currently available to EU institutions, bodies and agencies (EUIBAs).

This includes supporting coordination across and between sectors, many of which have specific mechanisms for crisis management. Significant cybersecurity incidents have the potential to cause real world or 'kinetic' disruption to people's lives, to businesses, to the environment and to critical infrastructure. Equally, incidents affecting critical infrastructure, such as undersea communications cables, can severely disrupt digital services and constitute a cybersecurity incident. This should also help the EU and its Member States achieve a coordinated EU response, including among EUIBAs, at the operational and strategic level to crises arising from cyber incidents at EU level, supporting informed decision-making on policy, and assisting the coordination and alignment of public communication.

The situation centre will be part of DG CONNECT and the Commission.

CERT-EU's contribution to the Cyber Situation and Analysis Centre is performed through a number of services included in the CERT-EU's catalogue - threat memos, cyber briefs, threat landscape reports, 1-1 constituent engagement, unified portal, CTI watchtower, threat alerts, major attack assistance, communication support.

ENISA will support the Cyber Situation and Analysis Centre with the following tasks: advising on the customisation of the dashboards and reports to be provided by the consortium as part of the implementation of the 'virtual situation centre'; contributing to the reports of the Cyber Crisis Task Force; contributing to the development of risk evaluation and risk scenarios; ad hoc reports.

Deliverables

- Regular reports analysis to hierarchy of EU entities on the cybersecurity situation in the EU using the customised cyber threat intelligence platform, also providing input to MS notably through participation in EU-CyCLONe
- Supporting coordination with other Commission services, EU entities (such as Europol Cybercrime Centre) and of responses to serious cyber incidents, particularly in the context of the implementation of the Cyber Reserve under the Cyber Solidarity Act

[101] In the case of CERT-EU, this contribution takes the form of an annual lump sum under a Service Level Agreement. In the case of ENISA, as part of the Contribution Agreement between the Commission and ENISA foreseen by the Digital Europe Main Work Programme 2023-2024, the Commission compensates ENISA to enable its contribution of an equivalent to three full-time CTI experts.

- Participating on behalf of the Commission in cyber exercises
- Carrying out, or supporting MS in carrying out, EU-level risk assessments from a cybersecurity perspective

Type of action	Contribution agreement
Indicative budget	EUR 0.67 million
Indicative call planning / timing	Not applicable
Indicative duration of the action	36 months
Implementation	ENISA
Eligibility and security	Action restricted on the basis of Article 12(5) of the Regulation (EU) 2021/694. Subject to participation restrictions for the protection of European digital infrastructures, communication and information systems, and related supply chains, as described in Appendix 4 of this Work Programme.

Type of action	Other type of action - Service level agreement between DG CONNECT and DG DIGIT (on behalf of CERT-EU)
Indicative budget	EUR 0.87 million
Indicative call planning / timing	Not applicable
Indicative duration of the action	Until 2027
Implementation	European Commission
Eligibility and security	Action restricted on the basis of Article 12(5) of the Regulation (EU) 2021/694. Subject to participation restrictions for the protection of European digital infrastructures, communication and information systems, and related supply chains, as described in Appendix 4 of this Work Programme.

All actions under this topic aim at services intended specifically for protection against criminal and/or politically motivated cyber threats, including in particular supply-chain attacks. The Cyber Situation and Analysis Centre will handle sensitive information in the form of for example threat reports, cyber briefs or risk assessments. The participation of non-EU entities could lead to the highly sensitive information about security risks and incidents that the Centre will manage being subject to legislation that obliges the non-EU parties to provide this information to non-EU governments. Also, non-EU participants could be more susceptible to pressure from non-EU governments to divulge such information.

In order to protect the essential security interests of the Union, the implementation of this action should depend on legal entities (e.g., providers) established or deemed to be established in Member States and controlled by Member States or by nationals of Member States. Participation to the calls funded under this topic will therefore be subject to the provisions of Article 12(5) of the Regulation (EU) 2021/694. Calls for proposals and calls for tenders shall be restricted to legal entities established or deemed to be established in Member States and controlled by Member States or by nationals of Member States. EEA EFTA countries are fully associated to the Digital Europe Programme and benefit from a status equivalent to that of the Member States.

4. Advanced Digital Skills

Europe needs people with advanced digital skills to develop, deploy and use cutting edge digital technologies and infrastructures that support its competitiveness, digital sovereignty and digital and green transition. The target set in the Digital Decade Policy Programme is 20 million ICT specialists employed in Europe by 2030, while promoting the access of women to this field and increasing the number of ICT graduates. Moreover, tackling the digital skills gaps is crucial to boost Europe's competitiveness. The actions of the work programme (WP) will contribute to the Competitiveness Compass by improving the conditions for creating the necessary pool of skilled digital experts as well as to the establishment of a Union of Skills, focused on investment, adult and lifelong learning, skill retention and circulation.

The actions under Specific Objective 4 (SO4) on Advanced Digital Skills aim to contribute to reaching the above targets, by boosting, among others, the excellence of EU education and training institutions in key digital technology areas and in close cooperation with industry and research. They build on complementarities and synergies with actions from other EU programmes like Erasmus+, in particular with initiatives such as European Universities Alliances, Alliances for Excellence and Alliances for Innovation. They also contribute to the Deep Tech Talent Initiative[102], to the New European Innovation Agenda[103] and to the Large-Scale Partnerships under the Pact for Skills[104]. Finally, SO4 actions also reinforce the uptake of the two Council Recommendations on digital education and skills[105] adopted in November 2023, as well as contributing to the implementation of the Digital Education Action Plan (2021-2027)[106].

This work programme supports the creation and operation of vertical digital skills academies in high priority areas concerning the EU's strategic needs and technological sovereignty. They will focus on the industrial needs in those areas and on the scale up of relevant digital education and training offers in close coordination with industry. The WP will also continue to support excellence in and inclusiveness of higher education and training programmes in related digital areas. It will additionally provide funding for the skills needed for the further uptake and development of applied technologies needed in key priority domains of the EU, such as digital health and Destination Earth. All supported actions will be coordinated at European level by an umbrella initiative to establish a cohesive advanced digital skills ecosystem. These efforts will be complemented by actions that strengthen the pipeline of ICT specialists among young people, attract more women to the field and reinforce the European educational technology (EdTech) sector.

[102] The Deep Tech Talent initiative is run by the European Institute of Innovation and Technology (EIT). It aims to train 1 million talents in deep tech areas (incl. AI, cybersecurity, Augmented Reality, blockchain) by 2025 and will be implemented both directly by the Knowledge and Innovation Communities (KICs) of the EIT and through pledges from stakeholders.

[103] The Commission adopted a New European Innovation Agenda to position Europe at the forefront of the new wave of deep tech innovation and start-ups. It will help Europe to develop new technologies to address the most pressing societal challenges, and to bring them on the market. The New European Innovation Agenda is designed to position Europe as a leading player on the global innovation scene.

[104] Pact for Skills

[105] C/2024/1115 and C/2024/1030

[106] Digital Education Action Plan (2021-2027)

The main SO4 work strands are:

- Establishing **digital skills academies** in four key digital areas: quantum, artificial intelligence, semiconductors and virtual worlds. They will address the unique skills needs of each specific digital area, ranging from developing higher education programmes to different targeted and modular short-term training and hands-on experiences.
- Supporting the delivery of **higher education and training programmes** in some additional key digital areas such as data analytics, advanced communication networks (5G/ 6G), cybersecurity, internet of things, robotics, edge and cloud computing and software engineering, and skills for the development and uptake of applied technologies such as digital health and Destination Earth.
- An **umbrella action** at European level will federate all actions funded in the different key digital areas and strategic sectors, foster synergies and cooperation among them, and create a cohesive advanced digital skills ecosystem.
- The European Advanced Digital Skills Competitions will engage young people in cutting edge digital technologies.
- Further supporting and expanding four existing actions: i) **attracting and keeping skilled women in tech**; ii) the **EU Code week initiative**; iii) the **Digital Skills and Jobs Platform** and iv) the **Cybersecurity skills academy**.
- Reinforcing the **European educational technology ecosystem** by supporting startups and SMEs to offer highly innovative educational solutions that are in line with the EU values and legislation.

The budget for the SO4 topics included in this WP is EUR 125 million.

4.1 Sectoral digital skills academies

Objective

This topic aims to establish sectoral academies in four key digital areas: quantum, artificial intelligence, semiconductors and virtual worlds. The objective of such academies is to complement the existing actions and initiatives in these digital areas and leverage industry to close the talent gap[107] and strengthen the pool of specialists.

The academies will identify gaps in existing academic and training offers, develop new ones, scale up successful ones and create sectoral ecosystems to improve the capacity to nurture and attract digital talent. They will thus tackle both the supply side of the training offer by proposing up-to date and flexible education and training pathways to reinforce the number of specialists in specific sectors and the demand side by promoting the uptake of trainings.

[107] The DIGITAL coordination and support action LEADS performed a skills demand analysis, programme and courses mapping, and a gap analysis of the advance digital skills in Europe, and its findings show high current and future demands for specialist in key digital areas (for more information see the DEMAND FORECAST DASHBOARD, LEADS Final ADS Demand and Forecast Report and LEADS Gap Analysis).

The academies will act as catalysts for industry to promote careers, including by promoting the access of women, in the four key digital areas.

These academies will closely collaborate with the EU-funded umbrella action[108] that will coordinate and foster collaboration among sectoral academies and initiatives, and the individual projects in these digital areas funded under the different topics of SO4[109] as well as other EU programmes.

The academies will support and strengthen EU's strategic needs and technological sovereignty in the following four areas:

Quantum Digital Skills Academy

Quantum technologies have the potential to accelerate the creation of imminent solutions to global societal challenges and drive economic growth. In order to position the EU as a global leader in the development of quantum technologies and to stimulate their industrial applications, interdisciplinary training is needed, especially for domain professionals who do not necessarily have an education in quantum physics and engineering.

The Quantum Digital Skills Academy will serve as a single, central entity providing specialised quantum technologies training and hands on experience at different levels and will play an important role in contributing to the objectives of the European Declaration on Quantum Technologies in the domain of quantum skills development and training.[110]

Digital Skills Academy in GenAI and AI Factories (The "AI Skills Academy")

While European AI start-ups, key industrial players and public authorities acknowledge the transformative potential of GenAI, most of these large AI models are currently built outside of the European Union, where companies have easier access to high amounts of computing power, large datasets, and the skills needed to develop and train the underlying algorithms. Furthermore, most EU professionals are still not familiar with the use and impact of this technology in their work environment. Understanding and adopting AI and GenAI technologies is of paramount importance for achieving the digital transformation across the EU.

The AI Skills Academy will contribute to the objectives of the AI Innovation package launched in January 2024[111] and support the upcoming Apply AI Strategy part of the Political Guidelines of the President of the European Commission[112]. It will empower undergraduate, graduate, and post-graduate students, as well as current and future sector and ICT specialists in SMEs, startups, and the public sector with basic and advanced skills for developing, deploying and applying AI models and applications in their field. The academy will work in close coordination with and further support the work of t**he AI**

[108] See topic 4.3 of this section.
[109] In particular awarded projects of the topics Specialised Education Programmes in key capacity areas (2021-2024), Short-term training courses in key capacity areas (2022) and the Advanced digital skills analysis (2023).
[110] European Declaration on Quantum Technologies
[111] Commission launches AI innovation package. Part of the package is the AI Factories initiative. The EU AI Start-Up and Innovation Communication outlines additional key activities, including the GenAI4EU initiative, which aims to boost the uptake of GenAI solutions across key economic sectors in the Union.
[112] Political Guidelines 2024-2029 | European Commission p.10.

Factories. The AI Factories initiative will deploy an AI-focused, tailor-made supercomputing service infrastructure aimed at further developing the innovation capabilities and skills of the AI ecosystem[113].

Digital Skill Academy in semiconductors (The "Chips Skills Academy")

Reinforcing the semiconductor value chain in the EU reduces vulnerability to disruptions in the global market, ensures access to critical components, and increases the resilience of the sector. Boosted by the EU Chips Act[114] and the relevant investment plans, the European workforce in the semiconductor sector is expected to require over 200 000 additional workers by 2030.

The Chips Academy will strengthen the network of relevant stakeholders to increase the visibility and impact of training opportunities, support the growth of teaching staff and attract and increase the number of students and workers within the sector. It will build on and continue the efforts of the action awarded under the 2023 call for the topic Reinforcing skills in semiconductors[115] and the Erasmus+ Alliances for Sectoral Cooperation on Skills action[116].

Virtual Worlds Skills Academy

Virtual worlds blend physical and digital worlds in real-time for a variety of purposes such as designing new prototypes, virtualising entire cities or for different types of simulations. Virtual worlds are a fast-evolving technology, gaining ground in more and more areas of our lives. The recently adopted "EU initiative on Web 4.0 and virtual worlds: a head start in the next technological transition"[117] presents all the various opportunities virtual worlds can bring to many industrial and societal sectors and citizens in their daily lives.

The Virtual Worlds Skills Academy will reinforce the talent pool needed to achieve the aspirations of the EU to pioneer the development of the various building blocks of virtual worlds, such as extended reality, 3D graphics, content creation, computer vision, AI, interactive media, modelling and industrial applications (digital twins), digital identity, data privacy and big data.

Scope

The academies will be implemented through separate work strands.

The four digital academies will follow a common approach in terms of design and delivery. Their activities will be centred around three main pillars:

[113] The European High Performance Computing Joint Undertaking (EuroHPC JU regulation) regulation will be amendment to set up AI Factories, a new pillar for the EU's supercomputers Joint Undertaking activities. This includes: i) Acquiring, upgrading and operating AI-dedicated supercomputers to enable fast machine learning and training of large General Purpose AI (GPAI) models; ii) Facilitating access to the AI dedicated supercomputers, contributing to the widening of the use of AI to a large number of public and private users, including startups and SMEs; iii) Offering a one-stop shop for startups and innovators, supporting the AI startup and research ecosystem in algorithmic development, testing evaluation and validation of large-scale AI models, providing supercomputer-friendly programming facilities and other AI enabling services; and iv) Enabling the development of a variety of emerging AI applications based on General Purpose AI models.

[114] European Chips Act

[115] DIGITAL-2023-SKILLS-04-SEMICONDUCTORS

[116] European Chips Skills Academy

[117] An EU initiative on virtual worlds: a head start in the next technological transition

i) Knowledge, education and training:

Under this pillar, the academies will collaborate with academia, the research community and industry partners to design and deliver higher education programmes and learning materials and pilot modular training courses that address existing training and skills gaps in the EU in each digital area. The training will be aimed at both students and professionals from different sectors, start-ups and SMEs as well as the public sector, including public administrators and education professionals. The training offer will use the European Credit Transfer and Accumulation System (ECTS) (i.e. higher education programmes) or take into account the European Approach to Microcredentials[118], as well as it will consider the Blueprint for a European Degree[119].

Additional activities initiated under this pilar will include the development of common curricula, especially at the level of the Master's degree, and their wide dissemination and promotion in the main European Universities and Technological Institutes of the respective digital areas, as well as facilitating and promoting practical experience, such as internships, fellowships, work placements, laboratory experiences or twinning opportunities. Furthermore, the academies will engage the education ecosystem to scale up existing education and training offers (for example the higher education programmes funded under DIGITAL) and make them available throughout Europe. Active collaboration and inputs from industry must be sought for all activities.

ii) Building the ecosystem:

An important aspect of the academies will be to create and nurture the ecosystem of stakeholders in the respective digital areas. Focus will be on serving as a catalyst for industry to attract talent to the field, including through awareness, communication and dissemination activities to promote career paths and increase their visibility. Special attention will be put on attracting more women to the field, as well as retaining them, e.g. through facilitating the provision of scholarships and returnship[120] schemes by industry. The academies are also encouraged to devise international partnerships to attract foreign talent.

The academies will build close collaboration with the action awarded under the topic "ELEVATE: European League of Advanced Digital Skills Academies" (see topic 4.3 below) and other individual projects funded under the different topics of SO4[121]. The digital academies will also be encouraged to build synergies and complementarities with other EU funding programmes and existing education and training initiatives such as the EIT Campus, the EIT Community AI and the Deep Tech Talent Initiative (DTTI), the Erasmus+ European Universities Alliances, Alliances for Innovation and Centres of Vocational Excellence, and their possible follow-up initiatives, as well as the Large-Scale Partnerships under the Pact for Skills.

[118] A European approach to micro-credentials - European Education Area

[119] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions a blueprint for a European degree

[120] Returnship programmes support the re-entering to the workforce after an extended career break.

[121] In particular awarded projects of the topics Specialised Education Programmes in key capacity areas (2021-2024), Short-term training courses in key capacity areas (2022) and the Advanced digital skills analysis (2023).

Additionally, the academies will closely collaborate with the topic "European Advanced Digital Skills Competitions" (see topic 4.4 below) to support the respective challenge design and managing and running the competition.

The academies will each manage a dedicated landing page integrated in the Digital Skills and Jobs Platform (DSJP), where they will disseminate their activities, events and initiatives. In line with the one-stop-shop approach of the DSJP, the pages will serve as the place for showcasing all existing and forthcoming education, training and funding opportunities, and other community building activities and events in the specific digital areas.

iii) Measuring progress:

The academies will each develop a robust methodology to monitor the evolution of the labour market and the progress achieved in closing the respective skills gaps. Activities could include the definition and monitoring of relevant indicators to better address the needs and directed funds towards achieving them. EU measurement frameworks such as the Reports on the Digital Decade[63] will be taken into account, as well as relevant data infrastructures such as the Common European Data Space for Skills[64]. Based on this close progress monitoring, the academies should suggest and implement adjustments of their activities accordingly.

Each academy will tailor the activities of the above listed three pillars to the needs of their respective digital area. Additional focus will be given to the following:

The Quantum Skills Digital Academy

The Quantum Digital Academy will offer tailored training opportunities at different levels that **bridge the gap between traditional disciplines and quantum technologies**. It will organise tutorials and hands-on activities for non-quantum experts to gain practical experience on a quantum computer and develop activities like summer schools that enable students from neighbouring areas to acquire specialised knowledge in quantum technologies. Furthermore, it will provide support for education and training activities of research and development projects in quantum computing, quantum simulation, quantum communication, and quantum sensing and metrology[122] and accelerate its knowledge transfer to industry.

The AI Skills Academy

The AI Skills Academy will set up a one-stop-shop for a range of activities supporting or developing educational and training schemes in two main focus areas: (1) skills related to **the AI Factories facilities**, complementing the work of the EuroHPC Virtual Training Academy, and (2) skills for the **uptake and deployment of AI and, in particular, GenAI in key economic sectors**.

Under the two above focus areas, the academy will develop and implement learning modules and short-term trainings on AI foundation model development but also AI inference processes, data science, AI and GenAI deployment and the use of supercomputers for AI that can be integrated into academic curricula at various levels and for various target groups. The academy could conduct

[122] Update for the European Competence Framework for Quantum Technologies: Version 2.0 | Quantum Flagship (qt.eu)

additional activities on educating the general public on how to use AI and in particular GenAI technologies safely and responsibly[123].

The academy will cooperate with existing initiatives, among others, the AI-on-Demand Platform, the Networks of Excellence in AI, the European Digital Innovation Hubs, and all the EuroHPC Factories, including for the use of their services and facilities for the proposed training activities.

The Chips Skills Academy

Building on and continuing the efforts of the action awarded under the call for the topic Reinforcing skills in semiconductors[124] and the Erasmus+ Alliances for Sectoral Cooperation on Skills action[125], the Chips Skills Academy will develop and implement education curricula, mainly for Bachelor of Science and/or Master of Science levels with a focus on microelectronics, photonics, as well as chips manufacturing and packaging. In addition, it will develop modular short-term training curricula and modules for current workers that address the skills needs of the semiconductors industry and pilot their delivery at regional or local level. The academy will design and pilot training for teaching staff and develop initiatives to promote the mobility of industry staff to teach courses at universities.

Virtual Worlds Skills Academy

Virtual worlds require a highly interdisciplinary approach, bringing together various technologies and disciplines. In order to generate high-level expertise, one focus of the academy will be to cover education and trainings that encompass all necessary **technological blocks of virtual worlds** (such as extended reality, blockchain, AI, data, edge computing, high-performance computing, 3D graphics, interactive media, content creation, computer vision, modelling and industrial applications (digital twins), digital identity, data privacy and big data) **as well as creative designs and/or other related disciplines (law, ethics, design, etc.)**. In addition, the academy will offer training for sector specialists (e.g. in the automotive industry, healthcare, education, cultural and creative sectors and industries) to equip them with the necessary knowledge to deploy virtual worlds in their sectors and realise its benefits. Furthermore, the Virtual Worlds Academy will also develop training for the basic understanding of virtual worlds technologies to empower citizens and raise awareness of the opportunities and risks of virtual worlds in daily life.

Deliverables

All four academies will produce the following set of deliverables:

- Comprehensive academic curricula designed across different levels and for different target groups, implemented at European level (curricula encompass complete academic programmes or consist of smaller modules to be injected into larger programmes).
- Modular short-term training curricula for sector specialists designed and piloted trough relevant training courses at regional or local levels, including targeted training for SMEs and public sector.
- Partnerships and collaboration frameworks established between academia, industry (including SMEs) and research institutions to facilitate and promote the large-scale European-wide roll-

[123] For complimentary activities related to the ethical and effective use of generative Artificial Intelligence systems in education and training, see the upcoming Erasmus+ WP 2025.
[124] DIGITAL-2023-SKILLS-04-SEMICONDUCTORS
[125] European Chips Skills Academy

out of the academic programmes and short-term trainings. Facilitated joint (practical) educational initiatives and events with industry and research institutions, such as on-the-job experiences in companies' premises, and laboratories, mentorship schemes, internship programmes, summer schools, bootcamps, visits to facilities, career days.

- Support, integration, and visibility schemes implemented, with particular attention aimed at the participation of female students and female professionals in education and training activities, as well as talented young people from disadvantaged backgrounds and people with disabilities.
- Training initiatives addressing teaching staff, such as "Teach-the-teacher" training modules targeted at university, VET and secondary-education teachers.
- Different communication and awareness-raising activities carried out, e.g. through social media, including career orientation activities or "technology deep dive sessions" targeted at secondary education students and the general public.
- A dedicated landing page integrated in the Digital Skills and Jobs Platform, where all activities, events and initiatives of the academy are disseminated.
- Reports on the impact of the academies' activities, based on a KPI assessment scheme, and recommendations for policy and investments.
- Additional deliverables specific to individual academies' activities

Type of action	Lump sum grants
Indicative budget	EUR 44 million (Quantum EUR 10 m, Virtual Worlds EUR 10 m, Semiconductors EUR 10 m, GenAI EUR 7 mil and AI factories EUR 7 mil)
Indicative call planning / timing	First set of calls (Quantum, GenAI and Virtual Worlds), Second set of calls (AI factories) Fourth set of calls (Semiconductors)
Indicative duration of the action	24 to 48 months
Implementation	Executive Agency HaDEA
Type of beneficiaries	Higher education institutions, vocational education and training (VET) institutions, research organisations, businesses, national and regional governments, social partners, industrial associations, education service providers and other relevant related organisations.

4.2 Excellence in higher education and training programmes in key digital areas and applied technologies

Objective

While the academic offer of both bachelor's and master's programmes in the EU has increased from year to year in the area of advanced digital technologies, the EU is still lagging behind other regions of

the world such as the United Kingdom or the United States[126]. Furthermore, apart from delivering excellent programmes in specific digital technologies, there is also a growing demand for interdisciplinary programmes to equip sector specialists with the digital skills to deploy and use advanced digital technologies.

The actions under this topic aim at tackling the lack of academic training offer in advanced digital skills in key digital areas, while triggering a new way of delivering education programmes and training, building partnerships between education and training providers, businesses and research across the EU, and supporting the digital skills necessary for the deployment of digital technologies in strategic sectors.

Scope

The objective of this topic will be carried out via two separate work strands (and sub-strands for the second work strand), called for in separately calls. The first work strand will be called in 2027 and the second in 2026:

1. Academic excellence in selected key digital areas:

This work strand covers key digital technology areas other than those covered by the sectoral academies (topic 4.1) or work strand 2 of this topic, such as data science and data analytics, Internet of Things, robotics, blockchain, advanced communication networks (5G/ 6G), edge and cloud computing and software engineering (including where appropriate open-source management). This work strand could also cover relevant inter-, trans- or multi-disciplinary areas, and their applications in strategic sectors such as, for example, video games, agriculture or autonomous mobility. Multidisciplinary programmes that include aspects of the digital areas covered under topic 4.1 (digital skills academies) can be funded but have to ensure cooperation with the actions awarded under that topic.

In the above mentioned digital areas, this work strand will support the design and delivery of higher degree education programme(s) (at International Standard Classification of Education (ISCED) levels 5 (Short-cycle tertiary education), at ISCED levels 6 (Bachelor's or equivalent level), 7 (Master's or equivalent level) or 8 (doctoral or equivalent level) – referred hereafter as "education programmes" - and to develop related self-standing modules and other training opportunities – referred hereafter as "training" - in selected key digital areas and for the acquisition of advanced digital skills in specific strategic sectors.

Besides the design and delivery of new educational programmes and training, the selected projects can cover activities to attract qualified teaching staff, scholarships and internships for students, the purchase or leasing costs for equipment, and different activities to establish partnership between education and training providers, industry and research centres. The selected projects will bring a clear EU added-value to the proposed education and training activities (such as cross-border collaborations, networks and exchange of ideas).

The call will also support possible cooperation in the context of ongoing international cooperation related to digital topics (e.g. digital partnerships, trade and technology councils, policy dialogues), e.g.

[126] This represents an increase of 8% in the number of bachelor programmes and an increase of 14% in the number of master programmes in the area of advanced digital skills. The dataset by the Joint Research Centre on the 'Academic offer of advanced digital technologies 2022-2023' is available here.

by supporting students from those countries with financial support (e.g. via scholarships, fee waivers, or others) to participate in the education programmes and training including promoting female students' participation.

2: Digital skills development in key strategic sectors: digital health and digital twins of the Earth.

Advanced Digital Skills for Digital Health

This topic aims to expand the offer of education and training in digital health jointly designed between higher education and training institutions, research organisations and industry. The content will reflect the latest developments in and applications of digital health technologies and the European Health Data Space[127], including but not limited to genomics and other omics, personalised medicine, applied bioinformatics, AI and ML for healthcare, AI in medical imaging, virtual human twins, in silico drug development, data interoperability in healthcare and cybersecurity in health systems. The target audience is students (medical, health sciences, pharmaceutical science, computer science) and healthcare professionals, including computer and data scientists, programmers, and software developers working in the healthcare sector. Trainings will vary in depth and technical complexity to accommodate different levels of expertise and learning preferences. The proposed project(s) should seek cooperation with European health data infrastructures and the European Health Data Space, such as MyHealth@EU, HealthData@EU, health data access bodies, the Genomic Data Infrastructure, Cancer Image Europe, the European Virtual Human Twin Initiative, ICU data space, EOSC Life, EMBL, and health related ERICs.

Advanced Digital Skills for Destination Earth

This topic aims to expand the offer of education and training in technologies related to Destination Earth, jointly designed between higher education and training institutions, research organisations and industry. The proposed project(s) should identify specific skill gaps of both expert and non-expert users (in particular, public-sector users) of Destination Earth and offer relevant education, training and capacity building to boost their skills base in using the Destination Earth system. The training offer will address both active users of the Destination Earth system[128] and/or future users. Potential areas of training include, but are not limited to, machine learning for data analytics and predictive modelling for extreme weather events and climate adaptation in the related impact sectors, i.e. agriculture, food security, energy, health, water management or disaster risk reduction. The training offer will complement and/or amplify the training material and activities foreseen by the Destination Earth implementing entities (in particular the ECMWF) and relevant training institutes, and be showcased to the extent possible, also on the Destination Earth service platform.

Projects funded under both work strands of this topic are encouraged to build synergies and complementarities with actions on technology deployment supported by other pillars of the programme as well as links and synergies with programmes and initiatives like Erasmus+ European Universities Alliances and Alliances for Innovation, the EIT Campus and EIT Community AI, the EIT Deep Tech Talent Initiative (DTTI) or its possible follow-up initiatives, as well as the Large Scale Partnerships under the Pact for Skills.

[127] European Health Data Space: Council and Parliament strike deal;
European Health Data Space
[128] DestinE Platform

Deliverables

First work strand: Academic excellence in selected key digital areas:

- Designed and delivered education programmes and training in the area of advanced digital skills for developers, deployers and users of advanced digital technologies, jointly by higher education institutions, Vocational and Educational Training (VET) providers, research organisations, businesses and other relevant stakeholders.
- Initiatives implemented for teaching staff to provide them with the adequate knowledge and skills to deliver programmes and trainings, and to attract qualified teaching staff (academic and industry specialists) to offer lectures, seminars and hands on experiences.
- Initiatives implemented for students, to provide financial and other support measures (for example scholarships) for participating in the programmes, training and different hands-on experiences (for example by enabling laboratory experiences, cooperative education (co-ops), and other immersive on-the-job training opportunities or internships), including initiatives targeted at attracting female students as well as talented young people from disadvantaged backgrounds and people with disabilities. Upgraded digital solutions, equipment and infrastructure of higher education institutions, VET providers, with a special focus on interoperability of IT systems, supporting the delivered education and training process.
- Established structural and sustainable partnerships between members of the consortium.

Second work strand: Digital skills development in key strategic sectors

Advanced Digital Skills for Digital Health

- Education programmes and training in the area of advanced digital skills for digital health designed and delivered jointly by higher education institutions, VET providers, research organisations, businesses and other stakeholders in digital health and using European health data infrastructures.
- Initiatives implemented for teaching staff to provide them with the adequate knowledge and skills to deliver programmes and trainings in digital health, and to attract qualified teaching staff (academic and industry specialists) to offer lectures, seminars and hands on experiences.
- Final analysis of the completed training and the achievement level reached in improved skills.
- A landing page integrated into the Digital Skills and Jobs Platform, showcasing existing and forthcoming education and training initiatives and promoting training offers to the relevant audience.

Advanced Digital Skills for Destination Earth

- Analysis of the existing skills gap and training offer for users of the Destination Earth system.
- Education programmes and training in the area of advanced digital skills for Destination Earth related technologies. These will be designed and delivered jointly by higher education institutions, VET providers, research organisations, businesses and other stakeholders and using Destination Earth infrastructures.
- Final analysis of the completed training and the achievement level reached in improved skills.
- A landing page integrated into the Digital Skills and Jobs Platform, showcasing existing and forthcoming education and training initiatives and promoting training offers to the relevant audience.

First work strand: Academic excellence in selected key digital areas and specific sectors

Type of action	Lump sum grants
Indicative budget	EUR 31 million
Indicative call planning / timing	Fourth set of calls
Indicative duration of the action	48 months
Implementation	Executive Agency HaDEA
Type of beneficiaries	Higher education institutions, vocational education and training institutions, research organisations, businesses and other relevant related organisations and social partners

***Second work strand: Skills development for the application of specific technologies in key strategic* sectors**

Type of action	Lump Sum Grants
Indicative budget	EUR 14 million (Digital Health up to EUR 9 million, Destination Earth up to EUR 5 million)
Indicative call planning / timing	Third set of calls
Indicative duration of the action	48 months
Implementation	Executive Agency HaDEA
Type of beneficiaries	Higher education institutions, vocational training providers, research organisations, businesses, national and regional governments social partners, industrial associations, education service providers and other relevant organisations

4.3 ELEVATE: European League of Advanced Digital Skills Academies

Objective

The Commission has set ambitious targets in the Digital Decade Policy Programme of reaching 20 million ICT professionals employed in Europe, while promoting access of women to this field, by 2030. Effective collaboration among stakeholders in advanced digital skills is crucial for this investment to bear fruit and to reach the Digital Decade target. An **umbrella action at European level**, the European League of Advanced Digital Skills Academies, will spearhead this effort by **federating existing sectoral initiatives** (e.g. the Cybersecurity Skills Academy and the EuroHPC Virtual Training Academy), the newly created sectoral digital skills academies (see topic 4.1) and other **EU-funded projects** focusing on advanced digital skills (notably the DIGITAL-funded higher (specialised) education programmes), fostering synergies with related initiatives like the **Digital Largescale Partnership under the New Pact**

for Skills and the **European Digital Education Hub**. It will leverage platforms such as the **Digital Skills and Jobs Platform** to create a cohesive **ecosystem**. ELEVATE's vision is to empower stakeholders through **coordination**, **capacity building, communication, and market analysis**, driving collective achievement in advanced digital skills.

A special emphasis of the League will be on the development and piloting of a **mechanism** to provide a seal of quality/accreditation of excellence for training modules offered by existing or upcoming sectoral academies and initiatives.

Scope

Initiatives such as the Cybersecurity Skills Academy and the four academies (see topic 4.1) tackle the shortage of ICT specialists in a specific area, highlighting critical issues. The League aims to enhance coordination and collaboration among sectoral initiatives and projects, fostering synergies and a collective approach to minimize fragmentation risks.

The European League of Advanced Digital Skills Academies will be structured around four pillars:

1. **Coordination and collaboration among sectoral academies, sectoral initiatives and individual projects** in advanced digital skills aimed at pooling resources and expertise. Using the Digital Skills and Jobs Platform, this effort will lead to (a) improved sharing of information and best practices, facilitating mutual learning and staying updated of developments, (b) enhanced stakeholder collaboration, including seeking partnerships and advocating for policy changes, (c) unified advocacy for systemic improvements, such as the provision of European joint degrees and micro-credentials in advanced digital skills and (d) strengthened networking and community building, fostering a sense of shared identity among initiatives.

2. **Capacity building activities will complement the training offer of the sectoral academies and sectoral initiatives,** for example through implementing cross-sectoral mentoring programmes. Furthermore, the League will help developing a framework for a certification mechanism of modular learning credentials for advanced digital skills and support the sectoral academies/initiatives in implementing it. The certification of other existing trainings at European level through the League will be explored, closely with Member States, in line with the 2022 Council Recommendation on a European approach to micro-credentials[129]. The League is expected to leverage the Digital Skills and Jobs Platform to **offer access to diverse learning materials and courses** from various training institutions as well as the newly developed modules. It will also support the Digital Skills and Jobs Platform's matchmaking tool, facilitating collaboration between industry representatives and education and training providers. Additionally, the League will collaborate with the Data Space for Skills, promoting community engagement and uptake and facilitating the implementation of use cases.

3. **Communication and awareness efforts** aimed at boosting visibility and credibility of career paths in ICT. The League will also support the promotion of the European advanced digital skills competitions (see topic 4.4.).

[129] Council Recommendation of 16 June 2022 on a European approach to micro-credentials for lifelong learning and employability 2022/C 243/02

In addition, the League will seek collaboration with Member States and industry to explore further initiatives to boost the engagement of the public with advanced digital skills in innovative manners.

4. **Market analysis and impact assessment** by leveraging the League's broad networking activities and existing data/information, including produced by past or recent EU funded coordination and support actions in the field of digital skills and education, to provide more insights into the existing education and training offers in the area of advanced digital skills and to what extent the current offers match the needs of the current and future labour market.

Deliverables

1. A seal of quality/accreditation of excellence developed and piloted by the European League of Advanced Digital Skills Academies for training modules offered by existing or upcoming sectoral academies and initiatives;
2. Capacity building activities such as cross-sectoral mentoring programmes;
3. Collaboration established with the Digital Skills and Jobs Platform and **learning resources and material** provided to the Digital Skills and Jobs Platform **catalogue/repository** by adding resources/material in the area of advanced digital skills developed by the sectoral academies/initiatives and other EU-funded projects in the area of advanced digital skills (notably the DEP-funded specialised education programmes);
4. A sustainable **multi-stakeholder governance structure**, fully aligned to the existing and upcoming sectoral academies/initiatives and other initiatives funded by the EU;
5. **Networking activities and events** to enhance stakeholder collaboration and strengthen community building by creating a community of practice in the area of advanced digital skills and by sharing best practices;
6. **Communication, dissemination and outreach activities** carried out supporting the four pillars of activities described under scope;
7. Detailed **market analyses and impact assessments,** providing further insights into the existing education and training offers and related gaps in the area of advanced digital skills (not sufficiently covered by other studies) and **foresight studies** provided in close collaboration with the selected proposal of the call DIGITAL-2023-SKILLS-05-SPECIAL-PROGEDU - Advanced digital skills analysis and the Digital Skills and Jobs Platform.

Type of action	Coordination and support action grant
Indicative budget	EUR 8 million[130]
Indicative call planning / timing	Second set of calls
Indicative duration of the action	48 months
Implementation	Executive Agency HaDEA
Type of beneficiaries	Higher education institutions, vocational and training institutions, other education and training providers, research institutes, centres of excellence, public

[130] This call will be funded using annual instalments.

	administrations and/or governmental bodies, human resources organisations and employment agencies, IT developers, industry partners, trade and industry associations, alliances, social partners and NGOs, etc.

4.4 European Advanced Digital Skills Competitions

Objective

The European Advanced Digital Skills Competitions will serve as catalysts for engaging young European people in cutting edge digital technologies. They will support their creativity, exposing them to project-based research and training, and connect them to the wider community of research organisations and industry players. Each competition will centre around a challenge addressing a highly relevant societal or industrial challenge that has been developed by a consortium of Europe's most prestigious research institutes and industry partners. The consortia will work in close cooperation with the respective Sectoral digital skills academies and Initiatives to ensure buy in and support from the relevant stakeholders in the ecosystem.

The competitions will take place in the EU. To launch the competitions, teams of students will compete in six digital areas, represented by the newly established Sectoral digital skills academies, the Destination Earth initiative and an additional area to be chosen by the consortium. Furthermore, it is expected that the competitions will lead to greater innovation, which will allow to measure and compare progress towards the ambitious goals set under each challenge.

Scope

The scope of this topic is to develop six challenges for the European Digital Skills Competitions in the four digital areas corresponding to the Sectoral digital skills academies (Quantum, GenAI, Chips, Virtual Worlds), the Destination Earth Initiative (see topic 4.2) and one additional area to be developed by the consortium.

The challenges will be designed to target three clear objectives: each will address a European societal-, technological or industrial-relevant challenge, attract a large participation of students and help them develop their skills, and raise their awareness and understanding of team and project-based work as well as applied research and innovation in the respective digital technologies. Special attention will also be given to design local and major tournaments. The consortium will also design attractive prize schemes and award for the best challenges from the six areas.

The selected project will cooperate closely with the Sectoral digital skills academies, the Destination Earth sectoral Initiative and the respective industrial communities for the design of the competitions. It will as well collaborate with the European League of Advanced Digital Skills Academies (see section 4.3) for dissemination, communication and public relations purposes concerning these competitions. Synergies should also be sought with other relevant initiatives, e.g. the Digital Education Hackathon.

Deliverables

- Well defined, up to date and relevant challenges that will serve as the challenges for the European Advanced Digital Skills Competitions
- Competitions rule book for participants and jury
- Competitions implementation roadmap

- Implementation and roll-out of the six competitions
- Sustainability plans for the proposed competitions after the end of the project

Type of action	Coordination and support action grant (one project to be awarded)
Indicative budget	EUR 8 million[131]
Indicative call planning / timing	Second set of calls
Indicative duration of the action	24 to 36 months
Implementation	Executive Agency HaDEA
Type of beneficiaries	Higher education institutions, vocational education and training institutions, other education and training providers, industry partners, research institutes, centres of excellence, public administrations and/or governmental bodies, IT developers.

4.5 EU Code week

Objective

EU Code Week started as a grassroots initiative in 2013 that aims to spread algorithmic thinking, coding, and related digital skills to young people, in particular pre-school, primary and high school students.

EU Code Week activities take place throughout the year with a peak around the main event celebrating coding in October. They are implemented by a community of volunteers – EU Code Week ambassadors and teachers – from around the world. The activities aim to lower the barriers to integrate programming and technology in everyday teaching practices. Moreover, they aim to support more young people to discover and master digital skills and increase their interest in pursuing studies and careers in Information Technology or Science, Technology, Engineering & Mathematics (STEM).

EU Code Week aligns with the objectives outlined in the Digital Education Action Plan, aiming to significantly reduce the number of 13-14 year-olds who underperform in computing and digital literacy. Furthermore, it also contributes to the digital skills targets of the Pathway to the Digital Decade to equip 80% of the population with at least basic digital skills, as well as to increase the number of ICT specialists to 20 million by 2030.

The aim of this topic is to sustain and expand EU Code Week, amplifying its reach and impact by engaging teachers and schools across Europe. This topic will also support strengthening the grassroots nature of EU Code Week, ensuring that its core values[132] are at the heart of the project.

Scope

This topic covers:

[131] This call will be funded using annual instalments.
[132] EU Code Week – Our values

- **Community building,** including managing and strengthening the international network of volunteer ambassadors, as well as leading teachers and coordinators at the education ministries or other educational authorities and managing the wider community of coding enthusiasts as well as managing relations with partners;
- **Education & pedagogy,** by training teachers, school leaders and coding enthusiasts via activities such as Massive Open Online Courses (MOOCs), webinars, holiday camps, etc.;
- **Event management,** by organising large events, such as student competitions, coding hackathons, festivals, career days or study guidance events;
- **Communication and awareness raising,** by running year-round, innovative campaigns at European and national level;
- **Information system development and management**.

Deliverables

1. EU Code week trainings for teachers delivered and learning materials provided;
2. Online and physical community meetings with ambassadors, leading teachers and coordinators at the education ministries or other educational authorities organised;
3. Large-scale events, such as student competitions and hackathons carried out;
4. Initiatives implemented to increase the registration of activities on the EU Code Week map;
5. Initiatives implemented to increase the number of followers on EU Code Week existing social media channels and to boost their active participation;
6. Active volunteer community of EU Code Week and leading teachers expanded;
7. Promotional material produced and distributed;
8. The EU Code Week website developed and maintained.

Type of action	Procurement
Indicative budget	EUR 6 million
Indicative call planning / timing	2025
Indicative duration of the action	36 months
Implementation	European Commission
Type of beneficiaries	Not applicable

4.6 Advancing Girls and Women in Digital

Objective

The EU faces severe challenges in **attracting girls and women into the information and communications technology (ICT) sector.** In 2023, less than one in five ICT specialists employed in the Union were female[133], and in 2022 just 21.4% of all ICT graduates were women[134]. There remains a lack of girls entering STEM fields, which can be linked to misconceptions about the accessibility and

[133] ICT specialists in employment - Statistics Explained

[134] Source: Eurostat (database educ_uoe_grad10)

attractiveness of ICT careers and a lack of diverse role models. Retaining women who have already embarked on an ICT career also remains challenging: over half of women working in tech leave the industry by the midpoint of their career; this is more than double the rate of men, which results in many fewer women reaching leadership roles[135]. This initiative addresses the relevant Digital Decade target, by supporting activities that actively tackle the under-representation of girls and women in the ICT sector in the EU.

Scope

This action will build on and further develop the work initiated by the new CSA 'Girls and Women in Digital'[136], funded under the DIGITAL work programme 2023-2024[137]. It will support community building and cross-fertilisation across the EU, by promoting and supporting the sectoral academies' work in this area, scaling up the exchange of good practices, data gathering, outreach and awareness raising activities across the MS, and by creating a dedicated repository on the Digital Skills and Jobs Platform.

This action will include the following activities:

- Work closely with the new sectoral academies in the four key digital areas: quantum, artificial intelligence, semiconductors and virtual worlds, and other existing sectoral initiatives such as the Cybersecurity Skills Academy and the EuroHPC Virtual Training Academy. This cooperation has two essential aspects: to promote and communicate the offers and opportunities for women and girls made available by the academies, and to advise and support the academies with their design of education and training programmes and initiatives targeting women and girls.
- Upscaling of the network and community set up by the CSA 'Girls and Women in Digital' to become more diverse and engaged by increasing its capacity, visibility, and impact. Using its forum[138], the network/community should take and apply an interdisciplinary approach to increasing girls' and women's representation in ICT. Furthermore, sub-networks pertaining to specific areas of 'Women in Digital', for example on AI and on virtual worlds (see topic 4.1), in liaison with the sectoral digital skills academies, will be created.
- Support the sharing of best practices (such as mother/daughter coding sessions[139]) to increase the number of girls and women in ICT across the Member States and stimulate cross-border sharing of initiatives, including through experimentation.
- Continue exploring opportunities for strategic partnerships with other organisations, institutions, or initiatives that share similar goals or objectives to amplify the impact of the network/community and expand its reach and influence.

[135] McKinsey Digital (2023): Women in tech: the best bet to solve Europe's talent shortage
[136] Cf. Girls and Women in Digital, DIGITAL-2024-ADVANCED-SKILLS-06-WOMEN.
[137] Cf. DIGITAL Europe Amended Work Programme 2023-2024.
[138] The 'Girls and Women in Digital' call (see footnote 1) defines '*forum*' as: '[…] *a platform, where the network of expertise and community of stakeholders presented above can interact and bring gender convergence to the fore*.'
[139] See example of workshop in Luxembourg in June 2024

- Keep an up-to-date knowledge base on both persistent and newer trends and/or factors impacting girls' and women's representation in ICT, positively and/or negatively. This will include updating the 'Women in Digital Scoreboard'[140] or equivalent for monitoring progress in the MS.
- Set up a database of best practices taking into account the work and results of the previous CSA, the annual Digital Decade Country Reports and other relevant sources.
- Cooperate with the Digital Skills and Jobs Platform to conceptualise and manage a landing page dedicated to 'Women in Digital' to gather and display opportunities for girls and women in ICT in Europe.

The action should ensure links and synergies with the Girls Go Circular initiative (and its possible follow-up)[141] and other relevant initiatives at EU and national level, such as the EU STEM Coalition[142], STEM national platforms and the coordinator of the National Coalitions for Digital Skills and Jobs[143].

Deliverables

The awarded projects are expected to deliver:

- Outreach activities, including social media campaigns, to promote the offers and opportunities for girls and women provided by the academies.
- Consultancy services to the academies to advise and support them with the design of their education and training programmes and initiatives targeting women and girls.
- Attractive and appealing audiovisual and other material on European female role models in ICT, to be made available in all 24 EU official languages, to the MS, the academies and other relevant stakeholders. Such material could be used as posters for classrooms, postcards for open days etc as well as in social media activities.
- Expansion of the forum previously established under the 'Girls and Women in Digital' CSA.
- Updated knowledge bases (on limiting factors and on best practices), including the updated 'Women in Digital Scoreboards' or equivalent for monitoring progress in the MS, as in the 'Girls and Women in Digital' CSA.
- Targeted workshops and events to address the general issue of female underrepresentation, as well as for the sub-networks created in the different digital areas, in liaison with the sectoral academies.
- At least one high level hybrid event per year, such as a symposium, to promote identified best practices for the relevant sector. At least one such event should focus on women's careers in the ICT sector, addressing industry players; one on encouraging girls and women into/in academic ICT studies, and one on vocational education and training (VET) for ICT.
- A landing page dedicated to women in digital, integrated into the Digital Skills and Jobs Platform, showcasing existing and forthcoming initiatives existing in this field and promoting them to the relevant audience.

[140] Women in Digital | Shaping Europe's digital future
[141] Girls Go Circular | Digital and Entrepreneurial Skills for the Circular Economy
[142] EU STEM Coalition
[143] Call: DIGITAL-2024-ADVANCED-DIGITAL-06-SKILLS

Type of action	Procurement
Indicative budget	EUR 4 million
Indicative call planning / timing	2026
Indicative duration of the action	36 months
Implementation	European Commission
Type of beneficiaries	Not applicable

4.7 Digital Skills and Jobs Platform

Objective

The Digital Skills and Jobs Platform provides a single point of information related to digital skills in Europe. At EU level, the Platform gathers all relevant information and funding opportunities for stakeholders to benefit from. At national level, it connects to National Coalition websites, establishing a mutually enriching exchange with relevant content and data on digital skills and jobs. In 2024, 22 national websites are connected to the Platform. Additional Member States websites will be connected by the ongoing project on National Coalitions for Digital Skills and Jobs[144] by 2026. The Platform also hosts the Cyber Security Skills Academy and will host other relevant sectoral academies and initiatives.

The objective of this topic is to consolidate and uphold the operation of the Digital Skills and Jobs Platform, including corrective and adaptive maintenance. This topic will also sustain and extend the activities related to the Digital Skills and Jobs Coalition, as well as deepening the exchange between the National Coalition websites and the core Platform. This topic aims to further increase the number of National Coalitions, to get existing and new National Coalitions to be more active and engaged, and to increase the number of members of the Digital Skills and Jobs Coalition. Synergies should be sought with the EIT Campus, EIT Digital's (d)Academy Skills Passport Platform, the EIT Deep Tech Talent Initiative (DTTI) and other relevant initiatives.

Scope

The work will be implemented through two main work strands.

First work strand: the Digital Skills and Jobs Platform:

The selected project under this work strand will further populate and maintain the Digital Skills and Jobs Platform in line with EU political priorities and showcase in an accessible and inclusive manner all opportunities available for digital skills development from relevant sources.

Services will cover digital skills training offers/traineeships, learning recommendations, good practices, skills intelligence/data, skills strategies, training resources, funding opportunities, news, and events. The Platform will leverage the smart functionalities, based on user profiles, interoperable with external data sources and spaces.

Activities under the first work strand will:

[144] Project selected under the call DIGITAL-2024-ADVANCED-DIGITAL-06-SKILLS.

- Maintain, actively operate and populate the existing Digital Skills and Jobs Platform with relevant content that addresses the needs of the European Digital Skills and Jobs Coalition and the digital skills gap in Europe.
- Ensure that the Platform is user-centric, accessible, and provides a top-quality personalized user experience, capitalising on the smart functionalities and their evolution.
- Re-publish relevant information on digital skills, selected and post-edited by the national websites interconnected to the core Platform.
- Ensure support and "customer service" to the National Coalition websites, consultations on content, editorial plans, assistance with interoperability.
- Organise regular webinars and workshops to stimulate collaboration and exchange of good practices among the wider stakeholder community and the National Coalition websites managers.
- Expand, engage and manage an international stakeholder community.
- Develop and implement a communication plan to reach new audiences with the Platform services and content.
- Provide landing pages for relevant sectoral academies, including the Quantum Digital Skills Academy, the AI Skills Academy, the Chips Skills Academy, the Virtual Worlds Skills Academy (section 4.1) as well as for initiatives in key strategic sectors, including the actions on digital health and Destination Earth (section 4.2) and girls and women in digital (section 4.6).
- Analyse the possible evolution of the Platform and suggest new functionalities to improve user experience and offer new services.

Second work strand: the national Coalitions for Digital Skills and Jobs:

The action under this work-strand will aim to further extend the activities of National Coalitions' websites established under CEF calls in 2019 and 2020 and DIGITAL call of 2024, as well as support the creation of new websites in Member States who do not have any National Coalition or website yet.

Activities under the second work strand will:

- Develop and connect the infrastructures (websites) of National Coalitions that are not yet connected to the Core Platform through interoperable interconnections, integrating and enabling exchanges with the Core Platform components.
- Provide access to national/regional/local actors and practices, building interoperable links to provide services relevant to the local context.
- Expand and engage National Coalitions that are already connected to the Core Platform.

Deliverables

First work strand:

- A functioning platform providing content relevant to closing the digital skills gap in Europe.

Second work strand:

- Connected National Coalitions for Digital Skills and Jobs to the Core Platform.

First work strand: **Digital Skills and Jobs Platform**

Type of action	Procurement
Indicative budget	EUR 4 million

Indicative call planning / timing	2026
Indicative duration of the action	24 to 36 months
Implementation	Executive Agency HaDEA
Type of beneficiaries	Not applicable

Second work strand: **National Coalitions for Digital Skills and Jobs**

Type of action	Coordination and support action grant
Indicative budget	EUR 2 million
Indicative call planning / timing	Third set of calls
Indicative duration of the action	24 to 36 months
Implementation	Executive Agency HaDEA
Type of beneficiaries	Existing Digital Skills and Jobs National Coalitions, industry, civil society, training providers, social partners, public authorities and other relevant organisations who are contributing to reducing the digital skills gap in Member States

4.8 EdTech accelerator

Objective

During recent years, the education and training landscape has been significantly impacted by rapid technological advancements. Innovations like generative artificial intelligence (GenAI), robotics, or extended Reality, to name a few examples, have significant power to reshape the way we teach and learn. There is a crucial need to support the Education Technology (EdTech) sector in Europe, and in particular European start-ups and SMEs, to develop innovative solutions and technologies meeting European values in terms of **ethics, inclusion, accessibility, privacy, security and strong pedagogical foundations**. This is particularly crucial given the fast-developing technological landscape. This topic is expected to contribute to the nurturing of an EdTech ecosystem in Europe that drives innovation, creates jobs, and fuels economic growth, while also ensuring pedagogically driven solutions that reach clear educational outcomes. The purpose of this topic is therefore to assist European EdTech startups and SMEs in transforming concepts for educational solutions into products ready for the market. This topic will also help support the effective and ethical application of GenAI technologies to education and training, in alignment with the objectives of the GENAI4EU initiative.[145]

This call will contribute to the Digital Education Action Plan (2021-2027) and in particular its objective to support the private actors in the digital education ecosystem. This action should also take into consideration previous work done by the Digital Education Hub Accelerator.

[145] The 'GenAI4EU' initiative aims to support the development of novel use cases and emerging applications in Europe's 14 industrial ecosystems, as well as the public sector. Application areas include robotics, health, biotech, manufacturing, mobility, climate and virtual worlds (Commission launches AI innovation package).

Scope

The scope is to encompass the establishment of an EdTech-specific environment for nurturing and accelerating growth, providing both business guidance and access to markets for chosen startups and SMEs. Additionally, the scope involves streamlining the integration of the supported solutions into the educational and/or training landscape, which includes schools, universities, training facilities, and other informal learning environments. This integration is crucial for empowering end-users, particularly teachers/trainers and students, along with other stakeholders, in the development and application of educational solutions. Furthermore, testing of these solutions in real educational or training settings should be included for obtaining impact assessment data through short-cycle piloting.

Deliverables

The action should provide at minimum:

- Three open calls (at least one call per year) launched and managed providing financial support to third parties to at least 20 EdTech start-ups/SMEs per year from across Europe (a minimum of 60% of the total budget should be spent on Financial Support for Third Parties (FSTP));
- Developed and implemented a yearly 12-months incubation and acceleration programme providing a mix of mentoring, networking services, consultancy, training and/or business and access-to-market support to the selected companies;
- Short pilots implemented in real education and training environments to gather impact assessment data of the selected solutions. Human-centric design methods involving users and strong linkages with learning design methodologies are recommended for the piloting phase.
- European-wide communication and awareness raising activities;
- At least one big event per year organised to reach a large number of investors, market partners, ministries of education (or other ministries), education establishments, learning content providers, training providers, and other stakeholders in the field.

Type of action	Coordination and support action grant
Indicative budget	EUR 3 million
Indicative call planning / timing	Third set of calls
Indicative duration of the action	36 months
Implementation	Executive Agency HaDEA
Type of beneficiaries	Non-governmental organisations, higher education institutions, venture capitalists, companies, educational and training institutions

4.9 Supporting the coordination of the Cybersecurity Skills Academy

Objective

To overcome the challenge of addressing cybersecurity skills and closing the labour market gap, the Commission has implemented a Cybersecurity Skills Academy[146] (the Academy) under the WP 23-24, which acts as an overarching initiative integrating various activities in the area of cybersecurity education and training for professionals. To ensure the effective delivery of the objectives of the Academy, this topic aims to help the Academy to create added value by linking relevant projects, initiatives and stakeholders active in the cybersecurity, training and education fields.

Scope

Building on the action funded under Activity 2 of the DIGITAL call DIGITAL-2023-SKILLS-05-CYBERACADEMY[147], this coordination and support action will bring together various actors and stakeholders to develop synergies and exchanges with the aim of reinforcing and optimising cooperation. To this end, the action is expected to carry out the following:

- Carry out capacity building activities (workshops, training sessions, peer learning activities) to foster collaboration between stakeholders (public authorities, policy-makers, experts and researchers from education and training fields and other stakeholders from industry, social partners and beyond) and support the exchange of best practices in the area of cybersecurity skills on various topics including: identifying skills needs and gaps, designing and implementation of training and apprenticeship programmes, curriculum design, development of micro-credentials, setting up cyber campuses or creating train the trainers programmes.
- Communicate and disseminate the results of the capacity building activities and their contribution to the implementation of the academy, including via the Digital Skills and Jobs Platform.
- Promote exchanges between the Cybersecurity European Digital Infrastructure Consortium (EDIC), Member States (e.g., via National Coordination Centres (NCCs)), ECCC, ENISA and other stakeholders with the aim of creating synergies and boosting partnerships.
- Support the European Commission in the monitoring and implementation of the academy by assessing progress, providing recommendations and drawing lessons for policymaking.

Deliverables

- Event reports summarising key discussion points, best practices identified, and any action plans developed, policy recommendations.
- Coordination actions such as: building repositories of training material and certificate schemes.

Type of action	Coordination and support action (one project to be awarded)
Indicative budget	EUR 1 million
Indicative call planning / timing	Fourth set of calls

[146] Communication of the Commission to the European Parliament and the Council "Closing the cybersecurity talent gap to boost the EU's competitiveness, growth, and resilience" [COM (2023) 207 final]
[147] DIGITAL-2023-SKILLS-05-CYBERACADEMY - Cybersecurity Skills Academy

Indicative duration of the action	24 months
Implementation	Executive Agency HaDEA
Type of beneficiaries	National authorities, higher education institutions, vocational education and training institutions, research organisations, businesses, national cybersecurity competence centres, EDIC (European Digital Infrastructure Consortium)

5. Accelerating the Best Use of Technologies

The roll-out and best use of digital capacities will focus on priority areas such as the support the SMEs and public authorities in their digital transformation and will also provide resources to activities started in previous programmes, for which the continuation of funding is essential to avoid disruption.

The activities in this chapter will cover several work strands:

- European Digital Government Ecosystem including the EU Digital Identity Wallet architecture and its European Trust Infrastructure and the Once Only Technical System
- Interoperable Europe
- Justice and consumers
- Confidence in digital transformation

EU Digital Identity Wallet: 4 large-scale pilot projects involving over 360 public authorities and private entities across almost all member states, as well as Norway, Iceland and Ukraine, have begun piloting the EU Digital Identity Wallet across 11 use-cases including identification for government services and bank account opening, payments, mobile driving licences and electronic signatures.

Over the period 2025-2027, the priority is to complete the transition from the current digital service infrastructure to the new European Digital Identity Framework. This includes activities such as implementing the EU Digital Identity Wallet architecture and its European Trust Infrastructure, and the promotion of its adoption by all the Member States as well as in new domains, with a focus on business applications. This will help implement the Digital Decade goal of providing 100% of European citizens with access to digital identification.

By providing continued support for the development of the **EU Digital Identity Wallet**, eSignature, the eIDAS Dashboard[148], eIDAS nodes and eDelivery, and the Once Only Technical System, Digital Europe is supporting the Digital Decade goal of providing 100% of key public services online.

The **Once Only Technical System** will enable the cross-border automated exchange of evidence (documents and data) between public administrations in the EU under the control of the user, effectively forming an EU cross-domain and cross-sectorial data space where citizens and businesses will no longer have to supply the same data to public authorities more than once. **eProcurement and eInvoicing**: public procurement represents 13.6% of the GDP (around EUR 2 trillion per year) in Europe. Digital Europe is funding eProcurement actions to make public procurement and all its phases more efficient and eInvoicing actions to harmonise national policies and technical solutions.

Since the beginning, Digital Europe has supported the **Interoperable Europe policy**. With the **Interoperable Europe Act** entering into force in 2024, the coming years will focus on capacity building in the Member States: running a structured cooperation framework, operationalising the interoperability assessments, putting in place a revised **European Interoperability Framework** and monitoring progress. Support will also be provided to implement the objectives of the yearly **Interoperable Europe Agendas**, to the creation of reusable interoperability solutions, including through a multi-country project, GovTech and open-source collaboration, piloting, sandboxing and other means. These would help pave the way towards a new phase in digital government transformation that is data-driven, user-centric and AI-enabled, fit for the coherent digital

[148] eIDAS Dashboard

implementation of EU policies, for informed decision-making and seamless, proactive cross-border digital public services.

Trans-European Services for Telematics between Administrations (TESTA) network and communications services support sensitive pan-European information exchanges between public authorities by providing a highly available and secure cross border interoperable communication infrastructure. Digital Europe funding will ensure TESTA business continuity.

Digitalisation of Justice: activities in this area contribute to improving access to justice and to legal information and electronic communication in a pan-European context, as well as ensuring consumer protection in the digital transition. For example, Digital Europe supports the e-Evidence Digital Exchange System to enable electronic interactions and support the digitalisation of further legal instruments on cross-border judicial cooperation, the Business Registers Interconnection System (BRIS) and the Beneficial Ownership Registers Interconnection System (BORIS), as well as a crypto-tool to enable the exchange of encrypted files between Member State authorities at every European Parliament election. Digital Europe funds the development of the decentralised IT system established in the context of the Service of Documents and Taking of Evidence regulations, the technical work and development foreseen in the context of the Digitalisation Regulation, supporting judicial cooperation and access to justice in cross-border civil, commercial and criminal matters, the maintenance of the EU eLab central platform and support activities to consumer protection and product safety market surveillance authorities, and the development of the joint investigation teams collaboration platform, where JITs are one of the most successful tools for cross-border investigations and prosecutions in the EU.

The **Better Internet for Kids (BIK+)** strategy provides a safer and more secure online environment for children and young people through promoting safe and age-appropriate digital experiences, fostering digital literacy and critical thinking, supporting parents and educators, collaboration with governments, industry, researchers, civil society and young people themselves. At the backbone of BIK+ there are the 25 Safer Internet Centres (SIC), co-funded under the Digital Europe Programme and coordinated at EU level by the BIK portal. They provide safety information, educational resources, public awareness tools as well as counselling and reporting services. The SIC also support the implementation of the Digital Services Act and of the EU Digital Rights and Principles, in respect to child and youth protection and empowerment.

The **European Digital Media Observatory (EDMO)**, a network of 14 national and multinational hubs covering all EU Member States, supports and coordinates fact-checkers, researchers and media practitioners across the EU. EDMO has become a core pillar of the European strategy to tackle disinformation and to foster media literacy. EDMO and its community play an important role in the implementation of the Digital Services Act (DSA), for example, by providing information to platforms on disinformation threats during the elections and offering expertise on monitoring the implementation of the Codes of Conduct under the DSA. EDMO will be complemented by a **European Network of Fact-Checkers**, supporting activities aiming at increasing fact-checking capacity and coverage across the EU.

The **European Democracy Shield** will bring together independent entities and existing EU-level initiatives and activities to enhance the EU's capacity to detect and counter disinformation, including foreign interference.

A separate action will facilitate the implementation of Multi-Country projects including where the European Digital Infrastructure Consortia (EDICs)[149] have been chosen as implementation mechanism. In addition to actions continued from the previous WP, under this chapter programme will also support the development of Bank Account Registers' Interconnection System.

The budget for the topics included in this chapter is EUR 352.3 million.

5.1 Deployment of public services

5.1.1 European Digital Government Ecosystem

5.1.1.1 European Digital Identity and Trust EcoSystem

Objective

In spring 2024, the Regulation establishing the European Digital Identity Framework has been adopted, introducing a step change in the cross-border application of Digital Identity ushered in by the introduction of the EU Digital Identity Wallet in all Member States by the end of 2026. Over the period 2025-2027, the priority is to complete the transition from the current organizational and technical infrastructure to the new European Digital Identity Framework.

The Commission will facilitate the new EU Digital Identity Wallet architecture and its European Trust Infrastructure, as well as promote its adoption by eco-system participants in all the Member States as well as in new domains, with a focus on business applications. This will help implement the Digital Decade goal of providing 100% of European citizens with access to digital identification. The work will build on the existing technical specifications and reference implementation, and the results of the first round of Large Scale Pilots and aim to maintain the success of the eDelivery, eSignature and eID Building Blocks which have been taken up by Public Administrations (notably flagship applications of the Commission like the Import Control System, Business Registers Interconnection System, e-Justice, EU Sign, and the Once Only Technical System (OOTS)), helping provide 100% of key public services online (another Digital Decade goal) and the Private Sector (notably providers of electronic signatures) - both as Standards and through re-use of the reference implementations. In addition, the action should contribute to other relevant policy initiatives at EU level. Supported digital service infrastructures to facilitate European cross-border digital transactions include:

1. **European Digital Identity and Trust Services Ecosystem Gateways**: These trust infrastructures allow companies, citizens, and administrations to validate European qualified trust service

[149] EDICs are a new instrument for the deployment and operation of MCPs that should allow for large-scale intervention in key areas necessary for the achievement of the objectives and digital targets set out in Digital Decade Policy Programme (DDPP) decision, such as developing secure, resilient, performant and sustainable digital infrastructures. They shall also aim to achieve one or more specific goals outlined in the DDPP, including increasing the availability, and promoting the best use, of safe digital solutions in areas of public interest and the private sector. The EDICs are meant to facilitate the deployment of such large-scale projects and facilitate the digital transformation of the Union. The EDICs should involve several Member States to achieve the necessary scale and have a long-term perspective to provide for sustainability of the projects. Decision (EU) 2022/2481 of the European Parliament and of the Council of 14 December 2022 establishing the Digital Decade Policy Programme 2030, https://eur-lex.europa.eu/eli/dec/2022/2481/oj

providers as well as the participants of the EU Digital Identity Wallet Ecosystem and support the governance of the regulatory system.

2. **eID Component**: Ensuring legal, organizational, semantic, and technical interoperability for secure digital operations that require cross-border identity recognition.
3. **EU Digital Identity Wallet**: Services and infrastructure for storing and sharing identity data for natural or legal persons as well as other electronic attestation of attributes, with a focus on business applications.
4. **eDelivery**: A standards-based solution for safe and cryptographically secured data exchange over the internet, which ensures secure data and documents exchange (C2C, B2C, B2B).
5. **eSignature**: standards-based approach for secure communication of intent in digital transactions, with the electronic signature library being reused by multiple European trust services.

These infrastructures will be defined, developed, adjusted, and maintained in collaboration with Member States. Their purpose is to enhance digital solutions across various policy domains, promote "interoperability by design," and ensure accessibility for individuals with disabilities and older persons.

The action aims to:

- Facilitate effective implementation of the European Digital Identity Regulation.
- Provision by Member States of a harmonized EU Digital Identity Wallet by the end of 2026, delivering on their legal obligation under the European Digital Identity Regulation and on the Digital Decade Target.
- Rapid adoption of the EU Digital Identity Wallet by citizens, public institutions and businesses.
- Showcase the EU Digital Identity Wallet as a global benchmark and provide funding for countries associated to the Digital Europe Programme to implement Wallets based on the EU Digital Identity Wallet technical specifications. This funding will support international acceptance of the EU Digital Identity Wallet, particularly in areas such as travel.

Scope

The support will be provided via two separate work strands:

The first work strand will cover the *procurement* of services to support the implementation of the digital service infrastructures and their governance for the European Digital Identity and Trust Ecosystem. This will include advisory, technical and security consultancy services for digital identity and trust services, solution design and implementation, interoperability and conformance tests, certification, hosting and support services as well as ad-hoc services.

- Completion and evolutive maintenance of the Architecture and Reference Framework including its related technical specifications and the Reference Implementation of the EU Digital Identity Wallet along with necessary central components maintained by the Commission, complementing it with an EU Digital Identity Wallet for Business (helping Member States to fulfil their obligation to allow e.g. for the verification of titles, public permits and licenses; financial and company data; meeting reporting obligations).

- Enhancement of the trust infrastructures hosted by the Commission allowing companies, citizens and administrations to validate participants connecting to the EU Digital Identity Wallet and other qualified trust service providers and supporting the governance of the EU Digital Identity and Trust Regulatory Framework. Evolutive Maintenance of eIDAS Nodes (based on Commission IR 2015/1501) as well as eDelivery and eSignature standards and software.
- Advancing international cooperation preparing mutual recognition of Digital Identity and Trust Services.

The second work strand will be implemented using grants and focuses on pilot implementations of the EU Digital Identity Wallet and its ecosystem by public and private sector service providers validating technical references, standards, components and solutions, with regards to new use cases, with a particular focus on business related applications of the EU Digital Identity Wallet for exchanging digital attestations of attributes and credentials by means of a wallet. These new use cases shall contribute to the development of relevant services in relevant policy areas.

Projects may seek collaboration with ongoing Horizon Europe projects funded for instance under the topic: HORIZON-CL3-2021-FCT-01-12: Online identity theft is countered.

Deliverables

First work strand: For the EU Digital Identity Wallet, the European Digital Identity and Trust Ecosystem Gateways, eID, eSignature and eDelivery,

- technical references, standards, components and solutions;
- updates of specifications, profiles, documentation and support and updated versions of sample software implementation;
- user manuals and release notes, implementation guidelines, governance and business models;
- stakeholder and community engagement strategies including communication via web pages, social media and events for the promotion and advancement of the services;
- support to implementers across Member States (guidelines, webinars etc.) as well as necessary communication efforts;
- piloting and testing in relevant policy areas.

Second work strand: In line with the objectives of the Digital Europe Programme, a new set of Large-Scale Pilots to boost the deployment of the EU Digital Identity Wallet in priority use cases, such as travel and business deploying the EU Digital Identity Wallet in cross-border trust circles involving multiple Member States and countries associated to the Digital Europe Programme.

The new wave of grants should help enhance technical specifications and implementation guidelines and encourage adoption of the EU Digital Identity Wallet and its eco-system in a new range of use cases, enabling it to support interaction with a wide range of public and private services and related attestations.

Type of action	Procurement
Indicative budget	EUR 57 million
Indicative call planning / timing	EUR 11 million in 2025

	EUR 23 million in 2026 EUR 23 million in 2027
Indicative duration of the action	40 months
Implementation	European Commission
Type of beneficiaries	Not applicable
Eligibility and security	Subject to participation restrictions for the protection of European digital infrastructures, communication and information systems, and related supply chains, as described in Appendix 4 of this Work Programme.

Type of action	Simple grant
Indicative budget	EUR 20 million
Indicative call planning / timing	Third set of calls
Indicative duration of the action	24 months
Implementation	Executive Agency HaDEA
Type of beneficiaries	Private persons, private companies, public bodies, EDIC
Eligibility and security	Subject to participation restrictions for the protection of European digital infrastructures, communication and information systems, and related supply chains, as described in Appendix 4 of this Work Programme.

5.1.1.2 Support to the implementation of the Once Only Technical System under the Single Digital Gateway Regulation

Objective

The objective of the topic is to support the implementation, operation and evolution of the Once Only Technical System (OOTS) referred to in the **Single Digital Gateway Regulation (EU) 2018/1724** (SDGR)[150]. The objective of the OOTS is to enable the cross-border automated exchange of evidence (documents and data) between public administrations in the EU under the control of the user, effectively forming an EU cross-border and cross-sectorial data space where citizens and businesses will no longer have to supply the same data to public authorities more than once.

The Commission adopted the technical specifications of the OOTS on 5 August 2022 according to which the OOTS has to be implemented as a distributed collection of systems enabling the sharing of information between the Online Portals of Member States with the authentic data sources from all other Member States. As such, supporting Member States in adapting and connecting their portals

[150] Regulation (EU) 2018/1724 of the European Parliament and of the Council of 2 October 2018 establishing a single digital gateway to provide access to information, to procedures and to assistance and problem-solving services and amending Regulation (EU) No 1024/2012

with the OOTS is integral to the work – in addition to creating the common services required for the mapping of evidence between Member States and the identification of the appropriate data source in each Member State.

The OOTS reuses and is tightly linked to the Building Blocks funded by the Digital Europe Programme, in particular eID, eDelivery and eSignature. The use of these Building Blocks is a specific requirement to the integration of Member States' systems into the OOTS.

In December 2023 the core infrastructure of the system had a successful go-live consisting of the following Common Services that are currently managed and operated by the European Commission:

- Evidence Broker, to answer the question: "What evidence can I request?" (having a major source of inspiration the work carried out by the Commission on eCertis for the eProcurement domain).
- Data Service Directory, to answer the question: "From where I can get the evidence from?".
- Semantic Repository, to answer the question: "Which semantic agreement should I respect?". The Semantic Repository is associated with Article 14 of Regulation (EU) 2018/1724 in terms of providing access to data models, metadata schemata and data formats relevant for the different evidence types that can be requested in the OOTS.

After delivering the technological backbone and the necessary security and operational framework, the focus is moving to the onboarding of circa 80 000 EU national competent authorities what have to connect themselves to the system, which later on will allow final users (citizens and businesses, incl. SMEs) to fully benefit from it.

Scope

The action will build on the requirements stemming from the SDGR and its Commission Implementing Regulation (EU) 2022/1463. The support will be provided using procurement and will cover a range of activities enabling the large-scale rollout across the Union including implementation, operation and evolution of the OOTS and its core, Commission-provided services, as well as services targeted to support Member States.

The following four work strands can be described as following:

(1) Evolution of Once-Only specifications

- Evolution of OOTS technical and operational specifications
- Interoperability between SDG back-office and the OOTS

(2) Operations of Once-Only Common Services

- Operations of Common Services (including multi-Cloud Infrastructure)
- Maintenance and monitoring of Commons Services
- Common Services support and training (including on-call support)

(3) Reuse and enhancement of Once-Only Common Services

- Implementation of the Service Metadata Publisher (SMP) as a new Common Service
- Explore use of AI for machine translation of evidence as a new Common Service
- Implementation of EUDI synergies related to the reuse of the Common Services

(4) Support to Member States national implementation

- Onboarding services for Member States
- Testing services for Member States including the organisation large scale events like Projectathons and Accelerators
- Technical support to Member States

Deliverables

- New version(s) of the Technical Design Documents (TDDs) of Once-Only and summary reports of expert groups
- Common Services dashboards and progress reports
- New version of the Common Services
- Onboarding dashboards and progress reports

Type of action	Procurement
Indicative budget 2023	17 million
Indicative call planning / timing	EUR 3.5 million in 2025 EUR 5.5 million in 2026 EUR 8 million in 2027
Indicative duration of the action	36 months
Implementation	European Commission
Type of beneficiaries	Not applicable

5.1.1.3 eProcurement and eInvoicing

Objective

For eProcurement:

With 13.6% of the EU GDP (around €2 trillion per year), the procurement power of European public administration is unparalleled. Public buyers are key to make purchases more economical, ecological, innovative, and social, and the digital transformation public procurement will enable them to fulfil that role. This action on digital public procurement (eProcurement) is necessary to continue making public procurement and all its phases more efficient and interoperable. The introduction of eForms at the end of 2023, an EU legislative open standard for publishing public procurement notices, introduced a more data driven approach in public procurement. eForms are therefore at the core of the digital transformation of public procurement in the EU. This action will:

- Continue to assess and support the implementation of digital public procurement in Member States, both pre-award and post-award;
- Enhance certain tools and initiatives like eForms and eCertis, organise workshops with the various user communities and elaborate guidelines;
- Support the overall interoperability in eProcurement and especially the standardization request that is implemented by CEN TC 440;

- Ensure alignment with EU key policies such as the Green Deal and other EU policies to be defined during the next Commission's mandate;
- Monitor the overall development of Digital Procurement in the EU and non-EU countries.

For eInvoicing:

eInvoicing is a very important aspect of digital procurement and it becomes a key component for the digitisation of businesses and industries. While important progress was made for take-up of eInvoicing in the EU, the situation in the different Member states is still varied and the key objective of the EU policy remains the mass adoption of eInvoicing. This is due mainly to the high potential for innovation of eInvoicing as it can be the base layer for several innovative applications as: value added tax (VAT) reporting (in the current VAT in the Digital Age upcoming EU legislation). In 2023 the Commission published a Report on the evolution of eInvoicing in the digital age[151], including a selection of case studies for the use of eInvoicing in other domains, (such as Sustainability Reporting, Access to Finance, Tax prediction, etc.), combined with the use of artificial intelligence and blockchain.

The Directive 2014/55/EU on eInvoicing in public procurement marked a significant milestone for cross-border interoperability, with the adoption of the common European Standard for eInvoicing of 2017.In 2024, the European Commission published a Report to European Parliament and Council and the Evaluation of the impact of Directive 2014/55/EU on the internal market and the adoption of eInvoicing[2]. The findings indicate progress only in certain Member States since 2014, with widespread usage of eInvoicing in Business-to-Government (B2G) transactions and a slow uptake of the European standard. Nonetheless, obstacles persist in Member States where the submission of eInvoices by suppliers to the public sector is not mandated, and interoperability challenges persist at the transmission level. Conversely, the European eInvoicing standard has gained global traction, with numerous governments adopting solutions based on it. Countries such as Japan, Singapore, Australia, New Zealand, Malaysia, United Arab Emirates and others have adopted or are preparing to adopt the European standard.

In the light of these changes, the high-level objectives at EU level are the mass adoption, the use of invoice data for innovative applications to reduce the administrative burden for companies and harmonisation of national policies and technical solutions; the future actions and initiatives to be put in place in order to reach these objectives will be outlined in an upcoming EU eInvoicing Strategy.

Scope

For eProcurement:

- Bilateral meetings with Member States to assess and support them in the domain of Digital Procurement;
- Workshops on topics like eForms and eCertis to enhance cooperation between and with Member States and to address their needs;
- Support the evolutive maintenance of the toolset used in public procurement to achieve better interoperability (such as Certis and eForms) and elaborate guidelines.

For eInvoicing:

- Support the new developments of the EU eInvoicing policy and ensure that the eInvoicing legislation is fully up to date and fit for the future

[151] EU publishes comprehensive Report on eInvoicing Directive implementation

- Building synergies with relevant EU policies and initiatives, including but not limited to Late Payments, Access to Finance, Sustainability Reporting and the Digital Euro.
- Foster the development of innovative solutions that leverage the use of invoice data, artificial intelligence and blockchain.
- Support the evolution of the EU eInvoicing standard, aiming to ensure alignment with other European Commission policies on eInvoicing, such as the 'VAT in the Digital Age'.
- Monitoring and assisting Member States in their transition to eInvoicing taking into account its wider applications and the use of emerging technologies to foster innovative and integrated solutions that would deliver higher efficiencies.

Deliverables

For eProcurement:

- Updated documentation on all Member States on how Digital Procurement is implemented.
- Documentation on workshops (mainly EXEP, eCertis and eForms).
- Better integration of eCertis, ESPD and eForms.

For eInvoicing:

- Studies and analyses to ensure that the EU policy and legislation are fit for the future
- Support Member States by organising workshops and webinars in EU Member States to assess the national developments and foster policy coherence, and tackle obstacles hindering adoption, thereby facilitating the enhancement of digital capabilities within Member States.
- Impact upcoming EU policies and initiatives linked to eInvoicing and that can use eInvoicing as a building block, building on previous studies and activities.
- Explore the feasibility of pilot initiatives aimed at utilizing invoice data for pioneering applications, aiming to reduce the administrative burden on companies and encourage innovative solutions grounded on EU standards, leveraging AI and blockchain.
- Foster the integration of eInvoicing functionalities based on the European standard into ERP and accounting software for SMEs in all Member States.

Type of action	Procurement
Indicative budget	EUR 9 million
Indicative call planning / timing	EUR 5.5 million in 2025 EUR 3.5 million in 2027
Indicative duration of the action	48 months
Implementation	European Commission
Type of beneficiaries	Not applicable

5.1.2 Interoperable Europe – Interoperability for the public sector

A new phase towards a digital government that is data-driven, user-centric and AI-enabled is gaining momentum; a digital government that is fully equipped to provide seamless, proactive cross-border digital public services, ready to digitally implement EU policies and capable to boost efficiency, innovation and competitiveness.

The Interoperable Europe Act[152] is an important prerequisite in this endeavour. The Act supports the digital transformation of the public sector in Europe, removes barriers to cross-border data flows and helps develop user-centric digital public services, with positive spillovers on the overall competitiveness in the EU and on unleashing the full potential of the Digital Single Market.

5.1.2.1 Interoperable Europe policy support

The chapter will step up efforts to effectively implement the Interoperable Europe Act and to further develop some of its key elements, such as digital-ready policymaking and streamlining of regulatory reporting, implementation of interoperability assessments and re-usable interoperability solutions, as well as innovation and policy experimentation for the public sector.

Objective

The overall objective is to equip public sector bodies in the Member States at all levels (national, regional and local) as well as the Commission and other Union Institutions, bodies and agencies with the necessary tools, solutions, skills and other enablers, to ensure cross-border interoperability of public services in the EU. This shall ultimately enable swift cross-border data flows and access for citizens and businesses to information, faster procedures and services and the reduction of administrative obstacles, making public services function seamlessly in the Single Market.

The activities shall also create the ground for effectively implementing the legal obligations stemming from the Interoperable Europe Act through a coherent approach.

Scope

Interoperable Europe governance and monitoring: this work strand will support the setup and the smooth functioning of the multi-level governance framework for cross-border interoperability, as put forward by the Interoperable Europe Act. This governance allows Member States and the Commission to agree on and jointly develop common interoperability solutions and set the strategic agenda for digital government at large. At the centre, the Interoperable Europe Board aims to facilitate strategic cooperation and provides the general direction for developing cross-border interoperability in the EU. Furthermore, an important role within the governance is retained by the Interoperable Europe Community, which should help to channel feedback and operational needs for interoperability cooperation.

The Interoperable Europe Act provides the basis to revamp the monitoring mechanism related to cross-border interoperability of digital public services. Via monitoring, we will collect meaningful interoperability-related steering data for evidence-based policymaking and actions needed in the Union, while reducing reporting obligations on the Member States.

[152] Regulation (EU) 2024/903 of the European Parliament and of the Council of 13 March 2024 laying down measures for a high level of public sector interoperability across the Union (Interoperable Europe Act)

Finally, this work stream will seek to foster international cooperation on cross-border interoperability matters in the public sector, particularly with regards to the alignment of candidate countries with the Interoperable Europe Act.

Digital-ready policymaking and interoperability assessments: this work strand will concentrate on a strengthened digital-ready policy making as an integral component of public sector interoperability. Implementation becomes simpler for policies crafted with digital-by-default and interoperable-by-design principles at their core and right from the outset. Such policies are better fit for the changing conditions and technology landscape. Beneficial effects are expected to be derived from this effort on the regulatory reporting burden as well. This work strand will support interoperable-by-design public services by assisting the public administrations in carrying out the interoperability assessments introduced by the Interoperable Europe Act, through which cross-border interoperability aspects are addressed before developing digital public services and the related systems.

European Interoperability enablers: this work strand aims to further develop an integrated ecosystem of interoperability enablers for user-centric digital public services that work seamlessly across borders. At the core stands the development and scaling up of common interoperability solutions, including technical specifications, frameworks and standards and the so-called Interoperable Europe Solutions - building on the SEMIC portfolio and other interoperability solutions, the Interoperable Europe Portal (JOINUP), as well as the next generation of the European Interoperability Framework (EIF).

Knowledge and support for an innovative Interoperable Europe: This work strand lays the ground for further action in the area of capacity building and innovation in the public sector, while leveraging on open-source technologies and fostering a collaborative digital approach for governments.

In addition, new investments are foreseen for policy implementation support projects, a novel interoperability instrument introduced by the Interoperable Europe Act, which is intended to support public sector bodies in the digital implementation of Union policies once they have been adopted in the form of legal acts and should serve as reference implementation on a needs-driven basis. These policy implementation support projects will be based on the opportunities of the EU Digital Identity Wallets including for B2B, B2G and G2G exchanges as well as on other initiatives (e.g., Artificial Intelligence for the public sector), where relevant.

As well, given the growing number of EU policy initiatives involving the development of IT systems with a cross-border interoperable component – e.g. European Student Card Initiative, Europass, Short-Term Rentals, Digital Product Passport, Digital Travel Documents, etc., there is a pressing need for know-how and hands-on support in this regard. Therefore, the policy support actions may be enhanced through the delivery of training material and tailored know-how. Possible on-demand pilots should be carried out in coordination with the EU Digital Identity Wallet Framework (European Digital Identity and Trust Ecosystem). Further activities include:

- Promote the sharing and reuse of interoperability solutions between Union entities and public sector bodies and provide necessary guidelines as well as further improve code.europa.eu (the code repository for open-source projects for all European Institutions) in order to boost its readiness to support the increasing demand in terms of users, content and features;
- Foster regulatory learning for responsible innovation through the implementation of interoperability regulatory sandboxes, and further facilitate the development and roll-out of innovative digital interoperability solutions for public services;

- Enhance the knowledge base of public sector employees around interoperability, through training materials and courses under the Interoperable Europe Academy, as well as through learning processes, such as peer review and other peer learning exercises;
- Promote the development of a certification programme on interoperability matters.

These activities will be based on other workstreams in this work programme, such as the EU Digital Identity Wallet, where relevant, to exploit synergies.

Deliverables

Governance and monitoring:

- Setup and functioning of the EU-wide structured governance framework for cross-border interoperability (Interoperable Europe Board, Working Groups and any task forces that the Board establishes, assistance to the Board for the fulfilment of its tasks and responsibilities);
- The yearly EU-wide strategic roadmap on cross-border interoperability – the Interoperable Europe Agenda, including an annual strategic work plan of the Interoperable Europe Board;
- A vibrant Interoperable Europe Community, equipped with the necessary tools to cater for an effective fulfilment of its activities;
- A revised monitoring mechanism allowing for an effective and streamlined monitoring of the implementation of the Interoperable Europe Act on the ground; analysis of interoperability assessment reports;
- Publication of the data resulting from monitoring, including the annual report on interoperability in the Union and the Digital Public Administration factsheets.
- Alignment with the Interoperable Europe Act, digital skills, capacity building for candidate countries, including advancing necessary actions, in order to strengthen the digital government ecosystem in Europe; collection of data and production of country knowledge factsheets in the area of public administrations in candidate countries;

Digital-ready policy making and interoperability assessments:

- Guidelines, best practices and learning offers, aiming to assist public administrations in the Member States, the EU institutions, bodies and agencies in performing interoperability assessments, including the continuous collection of feedback on those guidelines for their fit-for-purpose evolution during the first years of implementation;
- Semantical and technical tools to support the interoperability assessments, including an online tool for drawing not only machine readable but also semantically interoperable reports outlining the outcome of interoperability assessments and online tools that facilitate the production, linking and publication of these reports;
- Digital-ready policy-making processes and tools (digital checks, micro-guidance, digital statements) to help identify the digital implications and reporting obligations associated to a policy; pave the way towards the integration of the digital-ready principle in the EU policy development process in order to foster a digitally coherent legislative framework in the Union and support the streamlining of regulatory reporting.

European Interoperability enablers, including SEMIC:

- Further development and scaling up of common, reusable interoperability solutions, including technical specifications and models, frameworks and standards, as well as of the so-called **Interoperable Europe Solutions,** building in particular on the semantic interoperability community (SEMIC) portfolio (e.g. existing specifications such as Core Vocabularies, DCAT-AP, CSPV-AP, Base

Registries, AKN4EU, and new specifications)), tools like European Interoperability Reference Architecture, conformance testing – TestBed;

- Interoperability, in particular semantic interoperability tools to design and support the deployment of data spaces, making possible to find data models for specific implementation scenarios;
- A concrete set of criteria and a needs assessment for the development of interoperability solutions for labelling certain interoperability solutions as **'Interoperable Europe Solutions'**; dissemination of these solutions on the Interoperable Europe Portal;
- The development and adoption of the next generation of the **European Interoperability Framework** that will serve as a model for developing and deploying effective interoperable digital services across the Union; support towards the development of specialised interoperability frameworks;
- Development of an **EU-wide registry of semantic data models** enhanced with AI capabilities. The registry will allow to find relevant data models to specific implementation scenarios, as well as promote their re-use and further extension;
- Further development of the **Interoperable Europe portal (JOINUP)** and constant improvement of the latter according to evolving needs.

Knowledge and support for an innovative Interoperable Europe:

- Establishment and maintenance of the framework for **Interoperability regulatory sandboxes**, including the development, testing and rolling out of a lean governance, standard procedures, guidance and tools for all actors and the provision of a single interface accessible through the Interoperable Europe portal to provide all related information and facilitate the administration of the sandboxes;
- Guidelines on the **sharing and re-use** of interoperability solutions;
- An improved and robust code.europa.eu platform capable to handle the increasing demand in the years to come; **Open source** is a key enabler for interoperability, and an increasing number of flagship projects pertaining to interoperability (e.g. Simpl, OOTS) are publishing their code on code.europa.eu;
- Expansion of the **Open-Source Observatory** and the open source programme offices (OSPO) network;
- An enhanced policy support action, underpinned by **policy implementation support projects**, as well as by other types of support such as training material, tailored know-how and prospective on-demand pilots;
- Expanded training materials and courses on cross-border interoperability through further development of the **Interoperable Europe Academy**; development of a certification programme on interoperability matters helping public sector employees transform knowledge into verifiable skills;
- Maintenance and further development of the Public Sector Tech Watch
- Guidelines on the methodology and content of peer reviews.

Type of action	Procurement
Indicative budget	EUR 67 million
Indicative call planning / timing	2025-2027
Indicative duration of the action	36 months
Implementation	European Commission

Type of beneficiaries	Not applicable

5.1.2.2 Public Administrations' collaboration projects on interoperability and digital government

5.1.2.2.1 GovTech

Objective

The main objective is to enhance public sector innovation and to foster the creation of innovative interoperability solutions. Building on the European GovTech incubator's (GovTech4All[153]) Framework Partnership Agreement (FPA) and the two Specific Grant Agreements (SGAs), the action aims at interconnecting a large number of national GovTech innovation labs. Following the establishment of a framework for experimentation on innovative interoperability solutions and lessons learned, the action will include the further development of existing and new pilots with focus on the use of emerging technology solutions (e.g., AI, Virtual Reality, etc.) with the involvement of more partners. The work will focus on:

- Further interconnection of national / regional / local GovTech labs and actors;
- Continue enhancing synergies among GovTech initiatives at European level;
- Creating a European catalogue of GovTech labs, SMEs and startups (with the collaboration of EDIHs and other initiatives);
- Further developing and improving the landscape of GovTech initiatives[154];
- Assisting the scale up and reuse of existing solutions by other public administrations;
- Identifying European GovTech unicorns;
- Helping the Interoperable Europe Act monitoring on GovTech.

Scope

The action will aim to provide an environment to ensure continuous support to experimentation for the public sector and to open the public sector's technology market to ensure that governments use the best solutions that support cross-border interoperability supported by emerging technologies in Europe.

It will focus on a broad spectrum of emerging technologies, such as Internet of Things, quantum computing, neural networks and machine learning, deep learning, AI and generative AI, virtual worlds and metaverse, but also more mature applications such as interoperability building blocks. The pilots will be open to various stages of development and will include different tools that are more suitable for specific level of technology readiness. The common requirements for all pilots are innovation and cross-border interoperability. No pilot will include the simple implementation of existing solutions.

Deliverables

- Development of a European catalogue of GovTech labs, SMEs and startups;
- New pilots using emerging technologies in the public administrations;
- Guidelines for reuse and deployment of pilots developed under the GovTech4All FPA by other public administrations;
- Guidelines and support for reusing other GovTech solutions developed for public administrations;

[153] GovTech4All

[154] Catalogue of GovTech initiatives

- Development of a framework for monitoring GovTech performance in Europe;

Type of action	Specific Grant Agreement
Indicative budget	EUR 4 million
Indicative call planning / timing	Second set of calls
Indicative duration of the action	36 months
Implementation	European Commission
Type of beneficiaries	The selected consortium of the GovTech4All FPA

5.1.2.2.2 MCP on Innovative and Connected Public Administrations

Objective

While the Interoperable Europe Board will be setting political objectives and strategic decisions, a collaboration between Member States on operational level is also needed, to effectively progress in developing and testing elements necessary for cross-border digital public services. Building on the Coordination and Support Action for 'Innovative and Connected Public Administrations' under the Digital Europe Work Programme 2023-2024 and the initiative of several Member States to set up an EDIC on 'Innovative Massive Public Administration Interconnected Transformation Services' (IMPACTS), the objective of the action is to allow Member States to work together, jointly identify needs and develop interoperability assets needed for cross-border digital public services. Such a collaboration will leverage their collective resources and expertise and facilitate achieving an impact that no single entity could achieve alone.

Scope

Citizens' expectations are rising for user-centric, multi-channel, inclusive, proactive, cross-border digital public services. They also call for reassurance that AI is deployed in the safest possible way, and in full respect of European values and human rights. Administrations themselves need to become more data-driven, effectively produce new policies, make smarter decisions and embrace the so-called 'whole-of-government' approach to reduce boundaries between public sector domains and government bodies.

The scope of collaboration projects could cover, *inter alia*, one or more of the following:

- Creating a platform for piloting (i.e. co-creation of cross-border, cross-domain) public services;
- Developing new generation of cross border public services that may result in new, re-usable interoperability solutions, based on open and scalable standards and thus be destined for large-scale roll-out in the EU;
- Supporting governments to implement Data Spaces, by creating awareness and internal capabilities, both technical and procedural;
- Launching cross-border pilots for the Interoperability Regulatory Sandbox, exploring innovative solutions such as the use of augmented reality/virtual reality (AR/VR) (in preparation for the virtual worlds).

Deliverables

The multi-country project will work on pilots, including a minimum set of public administrations from Member States and will result in, inter alia:

- Putting in place enablers for cross-border public services (e.g. platform, architecture, data exchange mechanism, etc.);
- Open and collaborative digital approach for governments;
- Validated pilots for new interoperability solutions.

Type of action	Simple grant
Indicative budget	EUR 6 million
Indicative call planning / timing	Second set of calls
Indicative duration of the action	36 months
Implementation	European Commission
Type of beneficiaries	EDIC, public and private entities such as (but not limited to): public administrations (national, regional, and local level), economic actors (SMEs, large organizations) and others

5.1.3 Trans-European Services for Telematics between Administrations (TESTA)

Objective

This action aims to ensure service continuity of the TESTA communication network.

Those trans-European network services aim to support sensitive cross-border information exchanges between public authorities and administrations by providing a highly available and secure underlying interoperable communication infrastructure. The Commission centrally regulates TESTA and manages the Eurodomain. Other relevant stakeholders are EU-LISA (for Schengen Information System - SIS, a governmental database used by 31 European Countries and was proposed to improve security across the Schengen regions and for Visa Information System (VIS), an information system allowing Schengen states to exchange information about visas) and Europol (using network connectivity to exchange sensitive information with 14 member states).

Today, the TESTA EuroDomain has connections with all existing national networks in the Member States as well as EFTA countries and candidate countries. The Eurodomain services contribute to the Union's political priorities by providing secure and reliable communication infrastructure to information systems supporting the implementation of EU policies (for example European Criminal Records Information Systems (ECRIS), Cross border police cooperation combating terrorism and cross border crime (Prüm), Eurodac/Dublinet biometric database for comparing fingerprints of asylum applicants, Money laundering with the Financial Intelligence Network (fiuNET), the Common Emergency Communication and Information System (CECIS), the European car and driving license Information System (EUCARIS), EUCEG which is the EU Common Entry Gate for reporting of information on tobacco products, etc.)

Results of the TESTA project and access to its critical infrastructures are restricted to EU public administration and eligible third parties stakeholders (i.e. non-EU administrations participating to the DIGITAL programme, e.g. EFTA countries, EU acceding countries).

Projects may seek collaboration where and if possible with ongoing Horizon Europe projects funded for instance under the topics HORIZON-CL3-2021-FCT-01-04: Improved access to fighting crime and terrorism research data, HORIZON-CL3-2023-FCT-01-01: Processing of large, complex and unstructured datasets resulting from criminal investigations, while reconciling big data analysis and data protection, and HORIZON-CL3-2021-INFRA-01-01: European infrastructures and their autonomy safeguarded against systemic risks.

Scope

For TESTA network services, this action covers the service continuity, i.e. the delivery of core services, and the core backbone to serve the 27 EU Member States, 3 EFTA Countries and 3 acceding countries, all European Institutions, European Agencies and Joint Undertakings.

Deliverables

TESTA-ng

- Operations, maintenance, monitoring, upgrade and reporting of the secure and reliable communication infrastructure and central generic services.
- Support to the TESTA stakeholders.
- Preparation of the transformation of actual TESTA network and migration of current stakeholders into its evolution, EU-IXP[155], by end of 2027.

Type of action	Procurement
Indicative budget	EUR 21 million
Indicative call planning / timing	2025-2027
Indicative duration of the action	36 months
Implementation	European Commission
Type of beneficiaries	Eurodomain Services

5.1.4 Justice and Consumers

5.1.4.1 Core EU justice and consumers IT systems

Objective

In 2025-2027, the objective is to continue ensuring the maintenance and evolutive development of the core EU IT systems in the justice and consumers area. In particular, this would cover the European Central Platform (ECP) as a component of the Business Registers Interconnection System (BRIS)[156] and

[155] European Union Interconnectivity and eXchange platform (EU-IXP) – "From TESTA to EU-IXP" strategy available on European Commission website.

[156] Directive 2012/17/EU, now codified in Directive 2017/1132, requires the Commission to operate BRIS. The system provides two main functionalities: the exchange of messages between business registers related to cross-border branches and cross-border operations, and the provision of company information through BRIS for the users of the European e-Justice Portal. Directive (EU) 2019/1151 and Directive (EU) 2019/2121 require BRIS to provide additional company information free of charge (e.g., on cross-border operations), and to allow further exchanges of information between registers, e.g. on cross-border conversions and divisions.

the Beneficial Ownership Registers Interconnection System (BORIS)[157] IT systems, the online dispute resolution (ODR) system, and the crypto tool used in the context of European elections (actions already financed under WP 2021-2022 and WP 2023-2024).

Scope

Financing from the Digital Europe Programme will ensure the sustainability of the ECP in 2025-2027. In particular, the programme will ensure the operation and evolutive maintenance of the ECP as a component of the BRIS and BORIS IT systems. Among the new functionalities that will start being developed for BRIS are those required by Directive (EU) 2025/25 on further expanding and upgrading the use of digital tools and processes in company law[158]. These include the application of the once-only principle in company law when registering a subsidiary or a branch, linking BRIS with BORIS and the Insolvency register Interconnection, and new information on groups of companies and partnerships. Among the new functionalities that will be developed for BORIS are those required by the Directive on the mechanisms to be put in place by Member States for the prevention of the use of the financial system for the purposes of money laundering or terrorist financing[159] with transposition deadlines relevant for BORIS in 2026 and 2027. Funding will also cover further communication and stakeholder engagement activities, where needed.

The Regulation (EU) 2024/3228 of the European Parliament and of the Council of 19 December 2024 repealing Regulation (EU) No 524/2013 and amending Regulations (EU) 2017/2394 and (EU) 2018/1724 with regard to the discontinuation of the European Online Dispute Resolution Platform, was adopted on 17 December 2024. The ODR digital service infrastructure will therefore be maintained until the end of the transition period, that is, until 20 July 2025. Meanwhile, the Commission will deploy an information website with user-friendly functionalities to direct the consumers to appropriate dispute resolution tools. Where applicable (for example, potential use of chatbots for consumer information), compliance with the AI Act will be ensured.

The Crypto tool for Elections to the European Parliament will be maintained and supported in 2025-2027. The tool will be subject to test campaigns and updates in the view of preparation of the release that will be used in the 2029 European Parliament elections.

Deliverables

- Analytical and design activities;
- Operational management, corrective and evolutive maintenance;

[157] Directive (EU) 2015/849, as amended by Directive (EU) 2018/843, requires the Commission, by 10 March 2021 to ensure the EU-wide interconnection of national beneficial ownership registers for corporate and other legal entities; Central registers should be interconnected via the European Central Platform and certain types of information contained therein should be accessible to members of the general public. Due to unforeseeable delays the date for the interconnection of national beneficial ownership registers for corporate and other legal entities has been extended until 31 October 2021. Further complications were caused by the ECJ's Sovim judgment in November 2022. The interconnection process is nonetheless ongoing.

[158] Directive (EU) 2025/25 of the European Parliament and of the Council of 19 December 2024 amending Directives 2009/102/EC and (EU) 2017/1132 as regards further expanding and upgrading the use of digital tools and processes in company law

[159] Directive (EU) 2024/1640 of the European Parliament and of the Council of 31 May 2024 on the mechanisms to be put in place by Member States for the prevention of the use of the financial system for the purposes of money laundering or terrorist financing, amending Directive(EU) 2019/1937, and amending and repealing Directive (EU) 2015/849

- Stakeholder management and outreach activities;
- Software outputs and source code;
- Implementation documentation (e.g. interface specifications, data models, use cases, architectural documents…);
- Other project artefacts;
- End-user documentation and support.

Type of action	Procurement
Indicative budget	EUR 7.8 million
Indicative time	2025-2027
Indicative duration of the action	36 months
Implementation	European Commission
Type of beneficiaries	Not applicable

5.1.4.2 The Justice Digital Exchange System (JUDEX)

The JUDEX system[160] will be maintained and supported during 2025-2027 with regard to the use cases it already enables (digital exchange of European Investigation Orders (EIOs) and Mutual Legal Assistance (MLA) requests and documents). Moreover, the system will support the Service of documents and Taking of evidence procedures in civil and commercial matters, the procedures in the area of EU cross-border civil, commercial and criminal matters[161] covered by the Digitalisation Regulation, (e.g. the European Arrest Warrant, European Order for payment - twenty-four legal acts in total), as well as communication under the e-evidence Regulation and the Regulation on the transfer of proceedings in criminal matters. Horizontal needs and improvements to the system in these contexts will fall within the scope of this action.

5.1.4.2.1 Digitalisation of Service of Documents and Taking of Evidence in civil and commercial matters

Objective

The objective is to ensure the development of the decentralised IT system established in the context of Service of Documents[162] and Taking of Evidence[163] (recast) regulations (action started under WP 21-

[160] JUDEX refers to the common technical platform serving the needs of the decentralised IT systems referred to in the specific measures described in this section.
[161] Cf. sub-topic "Digitalisation of judicial cooperation in civil, commercial and criminal matters".
[162] Regulation (EU) 2020/1784 of the European Parliament and of the Council of 25 November 2020 on the service in the Member States of judicial and extrajudicial documents in civil or commercial matters (service of documents) (recast).
[163] Regulation (EU) 2020/1783 of the European Parliament and of the Council of 25 November 2020 on cooperation between the courts of the Member States in the taking of evidence in civil or commercial matters (taking of evidence) (recast).

22 and continued with WP 2023-2024). This means in practice the extension of the Justice Digital Exchange System (JUDEX) to support the cross-border communication and the judicial workflows in the context of these two regulations.

Scope

Complete the development of a first version of the system (focussed on critical functionality and main workflows) for the Member States to provide feedback on, and account for the upcoming change requests and system improvements during 2023, with the goal of having a mature system ready by the end of 2024.

Deliverables

- Software outputs and source code;
- Implementation documentation (e.g. interface specifications, data models, use cases, architectural documents…);
- Other project artefacts;
- End-user documentation and support.

Type of action	Procurement
Indicative budget	EUR 3 million
Indicative time	2025-2027
Indicative duration of the action	36 months
Implementation	European Commission
Type of beneficiaries	Not applicable

5.1.4.2.2 Digitalisation of Judicial Cooperation and Access to Justice in civil, commercial and criminal matters

Objective

Regulation (EU) 2023/2844 on digitalisation of judicial cooperation and access to justice in cross-border civil, commercial and criminal matters[164] (the Digitalisation Regulation) aims to improve the efficiency and resilience of cross-border judicial cooperation and remove barriers to access to justice in a cross-border matters. Inter alia, this will be achieved by: 1) mandating the use of digital communication channel between competent authorities and 2) enabling electronic communication between natural/legal persons and the competent authorities. The digitalisation of judicial cooperation procedures will be implemented progressively in four batches, starting with the digitalisation of a first batch of five legal acts in civil, commercial and criminal matters[165]. The

[164] Regulation (EU) 2023/2844 of the European Parliament and of the Council of 13 December 2023 on the digitalisation of judicial cooperation and access to justice in cross-border civil, commercial and criminal matters, and amending certain acts in the field of judicial cooperation, PE/50/2023/REV/1, OJ L, 2023/2844, 27.12.2023, Regulation - 2023/2844 - EN - EUR-Lex (europa.eu)

[165] These concern the digitalisation of the following instruments: Regulation (EC) No 1896/2006 of the European Parliament and of the Council of 12 December 2006 creating a European order for payment procedure, Regulation (EC) No 861/2007 of the European Parliament and of the Council of 11 July 2007

Commission will further develop the reference implementation software for the procedures under the remaining four[166] legal acts, which Member States may choose to deploy instead of developing their own national back-end systems. The Commission will also develop the European electronic access point (EEAP) that will be used by natural and legal persons to communicate with the competent authorities and to be served and receive documents.

Similarly, Regulation (EU) 2023/1543[167] (the e-evidence Regulation) and the Regulation on transfer of Proceedings in criminal matters[168] mandate the use of JUDEX, as a rule, for statutory electronic communication between the relevant national competent authorities, and with respect to the e-evidence Regulation, with regard to communication between Service Providers and national authorities.

Scope

Under the Digitalisation Regulation, the Commission will adopt the first Implementing acts establishing a decentralised IT system for the exchange of communication between competent authorities falling under the scope of the five legal acts mentioned above and will continue with the second batch legal acts[169]. In this context, in 2025-2027 the programme will continue to finance the elaboration of stakeholder and technical requirements (including on interoperability), setting up the architectural blueprint of the decentralised IT system (including the reference implementation software) and continue software development activities towards the system's establishment. The planned work will also include the development of the European electronic access point (EEAP) allowing citizens and businesses to file claims and communicate with judicial and other competent authorities for the purposes of the relevant second batch legal acts.

With regard to the e-evidence Regulation, the Commission is to define the technical specifications in implementing acts to be adopted by August 2025, following which implementation work on JUDEX will commence in order to support the required workflows and functionalities for the purpose of that instrument towards a 'go live' in 2026. Similarly, following entry into force of the Transfer of

establishing a European Small Claims Procedure, Council Framework Decision 2002/584/JHA of 13 June 2002 on the European arrest warrant and the surrender procedures between Member States, Regulation (EU) 2018/1805 of the European Parliament and of the Council of 14 November 2018 on the mutual recognition of freezing orders and confiscation orders and Directive 2014/41/EU of the European Parliament and of the Council of 3 April 2014 regarding the European Investigation Order in criminal matters.

[166] EIO use case is already implemented and in use based on a pilot project between certain MS

[167] Regulation (EU) 2023/1543 of the European Parliament and of the Council of 12 July 2023 on European Production Orders and European Preservation Orders for electronic evidence in criminal proceedings and for the execution of custodial sentences following criminal proceedings, OJ L 191, 28.7.2023, p. 118.

[168] Agreed by the legislators in 2024, not published in the OJ at this time.

[169] Council Directive 2003/8/EC of 27 January 2003 to improve access to justice in cross-border disputes by establishing minimum common rules relating to legal aid for such disputes. Regulation (EU) No 606/2013 of the European Parliament and of the Council of 12 June 2013 on mutual recognition of protection measures in civil matters. Regulation (EU) No 655/2014 of the European Parliament and of the Council of 15 May 2014 establishing a European Account Preservation Order procedure to facilitate cross-border debt recovery in civil and commercial matters. Regulation (EU) 2015/848 of the European Parliament and of the Council of 20 May 2015 on insolvency proceedings. Council Framework Decision 2008/909/JHA of 27 November 2008 on the application of the principle of mutual recognition to judgments in criminal matters imposing custodial sentences or measures involving deprivation of liberty for the purpose of their enforcement in the European Union. Directive 2011/99/EU of the European Parliament and of the Council of 13 December 2011 on the European protection order.

Proceedings Regulation, the focus of work would be on defining the technical specifications to be supported by JUDEX in view of adoption by the Commission of the required implementing acts.

Deliverables

- In the context of the preparatory work for the implementing acts:
  - Digitalisation Regulation covering the instruments of the first and the second batch mentioned above - defined technical requirements and specifications, including information security objectives and standards;
  - E-evidence Regulation – implementing acts adopted by August 2025;
  - Transfer of proceedings – implementing acts adopted (expected by the end of 2027).
- Reference implementation software (part of JUDEX), supporting the five judicial procedures mentioned above under the Digitalisation and the e-evidence Regulations;
- Providing links to national electronic payment means for electronic payment of fees in the context of the Small Claims and European order for payment procedures on the European e-Justice Portal.

Type of action	Procurement
Indicative budget	EUR 9.5 million
Indicative time	2025-2027
Indicative duration of the action	36 months
Implementation	European Commission
Type of beneficiaries	Not applicable

5.1.4.3 Common platform for online investigations and law enforcement (EU eLab)

Objective

Provide for the maintenance of the EU eLab central platform and support activities to consumer protection and product safety market surveillance authorities (action started under WP 21-22 and continued with the WP 23-24).

Scope

The scope of action in 2025-2027 would be on:

a) Ensuring access to eLab of all participating authorities (onboarding started in 2022);

b) Maintenance of the secure, performant and user-friendly infrastructure, allowing detection of malpractices and collection of evidence to the highest level of integrity;

c) Tools (commercial and open source) to streamline the investigative process and AI-support to detecting malpractices online, in compliance with the AI Act.

d) bespoke tools for digital enforcement (similar to the successful project on automatic detection of misleading price reductions), community development by experts in the national authorities

Deliverables

- Deployment of licenced commercial tools or open-source tools, customisation outputs and custom development, where appropriate;
- Other project artefacts;
- End-user documentation and support.

Type of action	Procurement
Indicative budget	EUR 2.7 million
Indicative time	2025-2027
Indicative duration of the action	36 months
Implementation	European Commission
Type of beneficiaries	Not applicable

5.1.4.4 Joint Investigation Teams collaboration platform (JITs CP)

Objective

This action aims to continue the development and to maintain the joint investigation teams collaboration platform (JITs CP) according to Regulation (EU) 2023/969. As per the Regulation, the platform is being developed by the European Union Agency for the Operational Management of Large-Scale IT Systems in the Area of Freedom, Security and Justice (eu-LISA). Its implementation has commenced in 2024 and the platform should be operational in December 2025.

Scope

The scope of the action in 2025 would be to continue the platform's implementation in order to launch it in December 2025.

The scope of the action in 2026 and 2027 would be to maintain the platform as well as to enhance its functionalities.

Deliverables

In 2025 - 2027, the deliverables will be:

- Acquisition of resources required for the development, testing and maintenance of the platform.
- Acquisition of the necessary infrastructure components for the development and maintenance of the platform, such as hardware, software, network components, etc.

Type of action	Contribution agreement with eu-LISA
Indicative budget	EUR 10.3 million
Indicative time	2025-2027

Indicative duration of the action	36 months
Implementation	eu-LISA
Type of beneficiaries	Not applicable

5.1.5 Bank Account Registers' Interconnection System (BARIS)

Objective

Objective of the action is to launch the preparatory and design activities for the interconnection of the centralised automated mechanisms (centralised bank account registers and electronic data retrieval systems) containing information on payment accounts, bank accounts, securities accounts and crypto-asset accounts. The new (sixth) Anti-money Laundering Directive[170] tasks the Commission with the development and operation of BARIS. The system will have to be up-and-running by mid-2029.

Scope

BARIS will facilitate swift cross-border access to information on holders of bank, payment, securities and crypto-asset accounts; information of fundamental importance for the purposes of combating serious crimes such as money laundering, its predicate offences and terrorist financing. BARIS will be directly accessible by the national Financial Intelligence Units, national AML/CFT supervisory authorities and the future Anti Money Laundering Authority[171] (solely for the purposes of joint analysis and direct supervision) based on the new (sixth) Anti-money Laundering Directive, and by competent authorities, e.g. law enforcement agencies, designated by the Member States based on the revised Directive 2019/1153[172].

BARIS is to be established two years after the Directive's transposition deadline, i.e., the minimum viable product (MVP) will have to be released and the system will have to be deployed in production environment at the latest by 10 July 2029. The implementation of the project in terms of preparatory and development activities, e.g., gathering of business requirements and use-cases and their validation, preliminary preparation of interface specifications, data models and architecture, outreach to stakeholders and the execution of a proof-of-concept should thus commence as soon as possible to be ready to go live in July 2029.

Projects may seek collaboration with ongoing Horizon Europe projects funded for instance under the topics HORIZON-CL3-2021-FCT-01-04: Improved access to fighting crime and terrorism research data, and HORIZON-CL3-2023-FCT-01-01: Processing of large, complex and unstructured datasets resulting from criminal investigations, while reconciling big data analysis and data protection.

Deliverables

- Preparatory, analytical and design activities (e.g., study the ecosystem of IT solutions hosted and managed by the Commission, gathering of business requirements and use cases and their validation);

[170] The co-legislators reached a preliminary political agreement with regard to the 6th AML Directive in January 2024.
[171] The co-legislators reached a preliminary political agreement with regard to the Commission's proposal for a Regulation establishing an Anti-money Laundering Authority (AMLA) in December 2023.
[172] The co-legislators reached a preliminary political agreement in June 2023.

- Preliminary development and outreach activities, e.g., stakeholder management and governance-related matters;
- Project artefacts according to the PM^2 methodology;
- Preliminary preparation and drafts of implementation and end-user documentation (e.g., interface specifications, data models, use cases, architecture);
- Proof-of-Concept (POC) for BARIS.

Type of action	Procurement
Indicative budget	EUR 0.85 million
Indicative time	2026-2027
Indicative duration of the action	24 months
Implementation	European Commission
Type of beneficiaries	Not applicable

5.1.6 Building capacity to deploy the EEHRxF and digital health services and systems to support the rights of citizens and reuse of health data under EHDS

Objective

The European Health Data Space (EHDS)[173] reinforces the rights for citizens to access their health data and sets out the European Electronic exchange Format (EEHRxF) as the main building block for ensuring interoperability across Europe. These rights include, among others, the right of natural persons or their representatives to access their personal electronic health data through electronic health data access services, the right to insert information in their own electronic health record (EHR), the right to rectification, the right to portability and the right to restrict access to their electronic health data.

Implementing these rights under the EHDS requires concrete action to support the digital health community, particularly public authorities, healthcare providers, data holders, and service providers, particularly SMEs, in the large-scale deployment of digital health services and systems that support these rights and that adopt the format. Additionally, the EHDS requires data holders, including public authorities and healthcare providers, to create and maintain a dataset description, following the Health DCAT-AP[174] specifications (currently under development), and the corresponding labelling for data quality and utility. These datasets descriptions will need to be made available in the datasets catalogue of health data access bodies (HDABs).

The action is divided in **three objectives**, each to be achieved through a separate work strand:

a) to build capacity of public authorities, healthcare providers to deploy, at a large-scale, services and systems that support the rights of natural persons foreseen under the European Health Data Space (EHDS);

[173] European Health Data Space Regulation (EHDS)
[174] SEMIC Support Centre

b) to build capacity of data holders to improve quality of data, create the datasets description and label for electronic health data they hold and that is within the scope of the EHDS for secondary uses;
c) to support service providers, particularly Small and Medium-sized Enterprises (SMEs), to be trained to support public authorities, healthcare providers and data holders in the EHDS.

These objectives will be implemented through three work strands by a single project that will provide cascading funding to the third parties through a single call.

This action will foster a more efficient and interconnected healthcare ecosystem, involving at least the above-mentioned stakeholders to advance the implementation of the EHDS.

Scope

The selected project will manage a portfolio of projects selected by cascading funding mechanism. The project consortium will be responsible for coordinating and monitoring the portfolio of cascaded grants and will ensure the necessary interlinkages between them to ensure their coherent execution in line with the objectives, scope and deliverables defined in this work programme. Therefore, the consortium must demonstrate the ability to manage this type of funding mechanism by involving participants with profound previous experience in this field.

The work of these projects will be implemented through three main work strands:

a) **Work strand 1:** It will provide guidance for public authorities and healthcare providers to deploy and operate digital health services and systems that support the rights of citizens and fulfil their obligations under the EHDS. It will support, through the cascading funding mechanism, activities of public authorities and healthcare providers (e.g. hospitals, clinics, healthcare providers) to deploy large-scale digital health services and systems that support the rights of citizens included in the EHDS and the adoption of the EEHRxF, as well as to convert electronic health data into the EEHRxF. This also includes capacity building activities such as training for staff **or** reengineering processes.
b) **Work strand 2:** It will develop a toolbox for data holders for health data management to facilitate secondary uses of health data in alignment with the EHDS. Through the cascading funding mechanism, it will support data holders to create datasets descriptions and data quality and utility labelling, as well as support them improve data quality of the electronic health data they hold and that is in scope of the EHDS. This strand will support the integration of these datasets in the datasets catalogues of health data access bodies. This strand includes, among others, data cleaning, processing and management, conversion of electronic health data to a standardised format, IT deployment, trainings for staff and reengineering of processes.
c) **Work strand 3:** It will develop a training framework and conduct trainings for service providers to prepare them to support public authorities and healthcare providers to deploy digital health services and systems that support the rights of citizens included in the EHDS. It will also prepare them to convert health data held by public authorities and healthcare providers from various formats to the EEHRxF and vice-versa, and/or to deploy processes and services to enable such conversions, and to create and maintain dataset descriptions and the corresponding labelling for data quality and utility as foreseen in the EHDS for secondary uses of data.

All three work strands shall be designed and executed in a complementary and coherent manner, in such a way that, for example, the service providers trained as part of Work strand 3 can support public authorities, healthcare providers and other data holders carrying out the projects under Work strand 1 and 2. Data holders participating in Work strand 2 can be public authorities or healthcare providers participating in Work strand 1.

This action is aimed at providing the necessary support, tools, and incentives in complementarity with other associated projects under Digital Europe Programme, EU4Health and Horizon Europe. It should cover a **large number of Member States** and be deployed in a large variety of electronic health record systems. The action contributes to the Digital Decade Policy programme through the implementation of EHR systems and digital health services and systems enabling access of citizens to their EHRs as well as contributing to the implementation of the Data Strategy by increasing data discoverability and improved data quality.

Deliverables

Expected outcomes and deliverables of these three working strands are:

a) Work strand 1:
   a. Guidance for public authorities and healthcare providers to deploy and operate digital health services and systems that support the rights of citizens and fulfil their obligations under the EHDS.
   b. Establishment of a community of public authorities and healthcare providers based on common guidance for services and systems aligned with the objectives of the EHDS.
   c. Large-scale deployment of and/or capacity building for digital health services and systems that support the EEHRxF and the rights of citizens included in the EHDS.

b) Work strand 2:
   a. A toolbox for data holders for health data management to facilitate secondary uses of health data in alignment with the EHDS.
   b. Establishment of a community of data holders using a common toolbox for creating and maintaining datasets descriptions and data quality and utility labels.
   c. Creation of dataset descriptions and data quality and utility labelling by data holders, such as public authorities and healthcare providers.
   d. Integration of datasets descriptions in the datasets catalogues of health data access bodies.

c) Work strand 3:
   a. A training framework and trainings to prepare service providers to support public authorities, healthcare providers and data holders in the implementation of the EHDS as described above.
   b. A business model, including the uptake strategy, for service providers that can support the adoption of the EEHRxF, the uptake of services and systems compatible with the EHDS and the creation and maintenance of dataset descriptions and data quality and utility labels.
   c. A community of service providers trained to support public authorities, healthcare providers and data holders in fulfilling requirements of the EHDS.

Type of action	Grant for financial support to third parties
Indicative budget	EUR 16 million Within the open call for cascading grants, the selected project should ensure that at least 85% of the budget is allocated to the cascading funding. At least 40% should be allocated to cascading funding in Work strand 1; and at least 25% to Work strand 2.
Indicative call planning / timing	Third set of calls
Indicative duration of the action	48 months

Type of beneficiaries	The consortium can include public and private entities such as (but not limited to): public administrations and Member State authorities (e.g. national contact points for eHealth, ministries of health digital health authorities); hospitals, medical centres and other healthcare providers; industry (e.g. developers of EHR systems, IT consulting firms) and SMEs; research institutions and academia; end-users and not-for-profit organisations (such as patients and healthcare professionals organisations). The consortium must include at least one organisation that can demonstrate profound previous experience of managing financial support to third parties.
Implementation	European Commission
Eligibility and security	In line with the general conditions laid down in Article 18(1) of the Regulation (EU) 2021/694, participation in the implementation of this action is open to the legal entities established in the Member States and Associated Countries as well as to international organisations of European interest and other legal entities created under Union law. Subject to participation restrictions for the protection of European digital infrastructures, communication and information systems, and related supply chains, as described in Appendix 4 of this Work Programme. Further justification for participation restriction is provided in Table 11 in Appendix 4.

5.1.7 European Cybersecurity Support Centre for hospitals and healthcare providers

Objective

An effective, reliable healthcare system is a cornerstone of the EU's social model and an essential public service for European citizens. In the past years, cybersecurity incidents have caused significant financial costs for healthcare entities, as well as compromised sensitive patient data, undermining trust in public institutions. It is therefore essential to ensure appropriate resources to support the resilience of European healthcare systems.

The European Cybersecurity Support Centre for hospitals and healthcare providers (as per the European action plan on the resilience of hospitals and healthcare providers of 15/01/2025) should develop a comprehensive service catalogue catering for the needs of hospitals and healthcare providers. It would aim to provide a range of services, including state of the art digital solutions for preparedness, prevention, detection and response.

Working with Member States' authorities and drawing from the experiences of hospitals and healthcare providers, the Support Centre should develop a user-friendly, easy-access repository of all available instruments at European, national and regional levels. In conducting its activities, it should ensure proper coordination with Member States, and support prioritisation and delivery of actions as needed in real time.

Scope

The Support Centre shall provide services for hospitals and healthcare providers that address mainly the following:

- Preventing cybersecurity incidents
- Rapid response and recovery
- European capabilities for detecting cyber threats against the health sector
- Implementing and monitoring the European action plan on the resilience of hospitals and healthcare providers

Deliverables

- The set-up and operation of the European Cybersecurity Support Centre for hospitals and healthcare providers as foreseen in the European action plan on the cybersecurity of hospitals and healthcare providers.

Type of action	Contribution agreement
Indicative budget	EUR 6 million
Indicative call planning / timing	2025-2027
Indicative duration of the action	36 months
Implementation	ENISA
Type of beneficiaries	Not applicable

5.2 Confidence in Digital transformation

5.2.1 Safer Internet

5.2.1.1 Network of Safer Internet Centres (SICs)

Objective

The objective of the topic is to continue to support national Safer Internet Centres (SICs), which may be composed of one or more NGOs, government bodies/agencies, and/or private sector organisations. SICs provide online safety information, educational resources, public awareness tools and counselling and reporting services (through dedicated helplines and hotlines) for young people, teachers/educators, and parents/carers. The activities performed by the SICs help minors tackle online risks and become media-literate, resilient, digital citizens. The hotline work strand allows the public to anonymously report suspected online child sexual abuse material (CSAM) for assessment and takedown. The Safer Internet Centres also address the needs of children with specific or special needs, including those with disabilities and those hailing from disadvantaged and vulnerable backgrounds, to ensure no child is left behind.

Considering the new role for the Commission as an enforcement body for the Digital Services Act (DSA) and the Digital Services Coordinators (DSCs), the Safer Internet Centres will strategically assist the Commission and cooperate with the DSCs in this role, in particular through data collection in the EU member states.

Scope

The funding will ensure the continuation of the well-established European network of national SICs, by enabling the awarded consortia to provide at least:

- A centre for raising awareness among children, parents/carers, teachers and educators as well as other relevant professionals working with children about online opportunities and risks for the under 18s. The focus will be to identify and address:
    - specific and general known risks (e.g. harmful and illegal content, cyberbullying, age-inappropriate content; sexual extortion, addictive design and manipulation, disinformation);
    - specific and general emerging risks (e.g. new apps, games, online challenges and trends; AI and generative AI, including AI generated pornographic and violent content such as CSAM; virtual, augmented and extended reality; the internet of things and other technological changes raising new social and ethical challenges that impact children);
    - issues such as mental and physical health risks related to the use of technologies (e.g. self-harm, cyberbullying, risky online challenges, promotion of eating disorders, screen addiction, social isolation, exposure to age-inappropriate content online, including pornographic and violent content , and sexual extortion);
    - risks facing children as young consumers (e.g. nudges to spend money, aggressive marketing strategies, lootboxes).
- A helpline to give advice and support to children and adults around them on issues related to children's use of digital technologies and services; to provide assistance on mental health issues relating to the exposure to age-inappropriate content online, including pornographic and violent content; to strengthen support to victims of cyberbullying, close cooperation with the national Child Helpline 116111 service is required.
- A hotline for tackling the spread of online CSAM (i.e., receiving, analysing, and processing reports of such material). Closer cooperation with law enforcement and the private sector should be further explored in the context of the EU strategy for a more effective fight against child sexual abuse, proposed Regulation to prevent and combat child sexual abuse and recast of the Directive 2011/93/EU on child sexual abuse.
- A youth panel to engage directly with children from different demographic groups, including the organisation of regular youth participation activities, allowing them to express their views and pool their knowledge and experience of using online technologies. Adequate turnover, geographic balance and an open selection of participants is required.

SICs shall strengthen their support to children in vulnerable situations (such as children with disabilities, children from a minority, racial or ethnic background, refugee children, children in care, LGBTQI+ children, as well as children from a disadvantaged socio-economic background, who all may face additional challenges in the digital environment). For example, to address the digital divide, they should offer non-formal education and training to these groups and communities.

In addition, SICs will:

- support the monitoring of the impact of the digital transformation on children’s well-being in cooperation with the BIK platform;
- support the implementation of relevant EU strategies and legislation;
- promote the distribution of relevant online training modules (MOOCs) for teachers;

- expand the role of BIK Youth Ambassadors and BIK Youth Panels to support peer-to-peer activities at national, regional and local level;
- provide trustworthy resources for and carry out campaigns targeting children, parents, carers and teachers, educators and other relevant contacts working with children (e.g. sports coaches, club leaders). Training on children's rights online should also be included in these initiatives to create a stronger awareness that children's rights online are the same as offline, as stipulated by UN General Comment No. 25 (2021) on children's rights in relation to the digital environment (CRC/C/GC/25), and as protected under the DSA, as well as awareness of help and reporting resources and pathways;
- act as a one-stop-shop for reliable and age-appropriate information;
- provide digital literacy training in formal and informal education settings (e.g., youth participation activities, workshops, classroom visits, competitions, peer to peer activities).
- support parents, carers, teachers, educators and other professionals working with children to better understand the risks and opportunities of children accessing digital content and services (e.g., information sessions, train the trainers programmes, and online and offline material);
- identify emerging risks through the helpline service, and communicate this promptly to local, national, and European actors;
- support access to resources and services by public authorities, including law enforcement agencies, and exchanges with hotline analysts to develop better preventive measures and to remove online child sexual abuse material (CSAM);
- cooperate with popular platforms and digital services to assist the public, in particular children, when confronted with harmful and illegal content. This will include, but not be limited to, SICs formally recognised as "trusted flaggers" under the DSA.

Deliverables

Provision of the four key elements required of a Safer Internet Centre, namely:

- A **centre for raising awareness** among children, parents/carers, teachers and educators as well as other relevant professionals working with children about online opportunities and risks for the under 18s, producing and promoting localised age-appropriate resources to address current and emerging risks and opportunities.
- A **helpline** to give advice and support to parents and children on issues related to children's use of digital technologies and services; to provide assistance on mental health issues relating to the exposure to age-inappropriate content online, including pornographic and violent content; to strengthen support to victims of cyberbullying, close cooperation with the national Child Helpline 116111 service is required.
- A **hotline** for tackling the spread of online CSAM (i.e., receiving, analysing, and processing reports of such material). Closer cooperation with law enforcement and the private sector should be further explored in the context of the EU strategy for a more effective fight against child sexual abuse and the proposed Regulation to prevent and combat child sexual abuse and recast of the Directive 2011/93/EU on child sexual abuse.
- A **youth panel** to engage directly with children from different demographic groups, including the organisation of regular youth participation activities, allowing them to express their views and pool their knowledge and experience of using online technologies. Adequate turnover, geographic balance and an open selection of participants is required.

Type of action	Simple grant
Indicative budget	EUR 42 million
Indicative call planning / timing	First set of calls
Indicative duration of the action	36 months
Implementation	Executive Agency HaDEA
Type of beneficiaries	All entities

5.2.1.2 Better Internet for Kids (BIK) platform – EU coordination

Objective

This action will continue to coordinate and support at EU level the national child online safety activities of the Safer Internet Centres (SICs) through a central hub: the Better Internet for Kids (BIK) platform. The platform will continue to provide access to a set of online tools, resources and services for the general public and for professionals dealing with child online safety. This action is key to support the implementation of the Better Internet for Kids (BIK+) strategy, and the broader EU legal framework for child online protection and relevant EC priorities, including of the relevant Digital Services Act (DSA) obligations.

Scope

Evolutive maintenance and operation of the BIK platform as central access point to tools, resources, good practices, guidance, and awareness raising services on child online safety. This will include stakeholder management and outreach activities as well as support and coordination of the network of SICs and support to the Commission for the implementation of the BIK+ Strategy. The contract will require capacity building actions, such as the development of tutorials, mentoring schemes and training opportunities for practitioners, including the educational sector and SICs outside the EU. Broad outreach to stakeholders by organising pan-European events, campaigns and meetings involving the private sector, researchers, and NGOs is also expected.

Actions will consider the outcomes of other relevant EU projects.

Deliverables

- A single entry point to online tools, resources and services for SICs to: collaborate on research-based resource development; assess and exchange good practices, materials and services in support of raising awareness of and teaching child online safety; compile statistics at European level to measure the impact of SICs' activities; facilitate and support youth participation by incorporating a safe, dedicated space for youth engagement.
- A central point of access for the general public to multilingual information, guidance and resources, including referrals to quality online content dedicated to children.

Type of action	Procurement
Indicative budget	EUR 6 million
Indicative call planning / timing	2027
Indicative duration of the action	24 months with possibility of one year extension
Implementation	European Commission
Type of beneficiaries	Not applicable

5.2.1.3 IT system supporting the removal of online child sexual abuse material (CSAM)

Objective

The objective of this topic is to tackle the dissemination of online child sexual abuse material (CSAM) through the maintenance of an IT system that enables the cooperation of the network of INHOPE hotlines, thus contributing to the swift removal of such illegal material.

Scope

The funding will cover the maintenance of the IT tool that supports the back-office reporting functionalities of the hotlines hosted by the SICs. The tool also facilitates collaboration with law enforcement agencies and relevant private sector stakeholders (e.g., hosting digital services). The tool must enable a secure environment for gathering, checking, and sharing reports of potential CSAM to support the hotlines' capability and capacity to analyse, identify, and request the removal of illegal online content.

Deliverables

An operational IT tool supporting the INHOPE hotlines to identify, track, and remove CSAM.

Type of action	Coordination and support action grant (100% funding rate) to identified beneficiary according to Article 198(f) of Regulation (EU, Euratom) 2024/2509 INHOPE is the only organisation in the EU that has the competence to manage the IT tool which is used by the national hotlines (supported by DIGITAL grants) to handle reports of potential online child sexual abuse material (CSAM). Legal name and address: "INHOPE – The International Association of Internet Hotlines", Spuistraat 139F, 1012 SV Amsterdam, The Netherlands
Indicative budget	EUR 0.75 million
Indicative call planning / timing	Second set of calls
Indicative duration of the action	36 months
Implementation	European Commission
Type of beneficiaries	Identified beneficiary INHOPE

5.2.2 Supporting community approaches to fight disinformation: European Digital Media Observatory and European network of fact-checkers

Objective

The EU supports the capacity of a multidisciplinary community to understand, monitor and counter disinformation.

The objective of this topic is to maintain and further develop a platform supporting the operations of the European Digital Media Observatory (EDMO), as well as deepening the language coverage and operational capacity of fact-checking in Europe.

In particular, the topic will support the operational cooperation between fact-checkers, researchers and media literacy practitioners across the EU through EDMO and support fact-checkers, with the aim to contribute to the fight against disinformation, to gain further insight on disinformation, monitoring of the disinformation space, debunking disinformation through the network of fact-checkers, and increasing the resilience of media professionals and citizens to disinformation.

Scope

The work will be implemented through two main work strands.

First work strand: the European Digital Media Observatory (EDMO)

The funding will support further consolidation of EDMO's role as a key player in the fight against disinformation in Europe, in particular:

- operation of a platform composed of a set of tools and services responding to the needs of the EDMO community composed of researchers, fact-checkers, media literacy practitioners and other relevant stakeholders, including services and actions to support and protect these communities when carrying out their work;
- fostering and coordinating research activities and open-source investigations on disinformation at European level focused on detecting and analysing, in an agile and practice-oriented way emerging and prominent issues related to the disinformation landscape;
- carrying out activities for monitoring disinformation trends and narratives across the EU, including through pre- and debunking;
- investigating and fostering the development and use of novel tools such as Artificial Intelligence and Generative AI to respond to addressing current challenges in the disinformation landscape, including AI-generated disinformation and deepfakes, and in this respect also collaborate with ongoing Horizon Europe projects working on AI-tools to fight disinformation;
- monitoring and reacting to disinformation threats related to crisis situations and elections – including by pre- and debunking - as well as to emerging disinformation waves, including giving assistance to neighbourhood countries through dedicated actions, targeted communication and awareness raising campaigns;
- supporting targeted activities to facilitate access to data for researchers to allow conducting research activities on disinformation;
- supporting activities related to the implementation of the 2022 Code of Practice on Disinformation;
- coordinating and carrying out tailor-made media literacy activities and campaigns at European level, targeting both the general public and vulnerable groups;
- carrying out proactive communication and outreach activities through various channels (including by traditional and online media, podcasts, social media etc.) to a broad audience, including the general public, to increase societal resilience to disinformation;
- conducting targeted communication campaigns about EDMO's activities.

Second work strand: A European Network of Fact-Checkers

The scope of this work strand is to strengthen the capacity of the European fact-checking community and making fact-checking available in all languages, building on and further expanding activities initially carried out by European Digital Media Observatory (EDMO) and other European fact-checking initiatives like the European Fact-Checking Standards Network (EFCSN). Activities may also cover

candidate and accession countries, associated to the Programme, in view of the specific vulnerabilities to disinformation and Russian interference in this region.

Funded activities, including through financial support to third parties, may include items such as:

- collaboration activities and capacity building for joint investigations;
- peer-to-peer support from established fact-checking organisations to newly created ones;
- technical infrastructure / tools supporting the activities of fact-checkers;
- targeted trainings for fact-checkers and media professionals, with particular emphasis on supporting the emergence of fact-checking in regions and languages that are currently not yet well covered.

To enshrine the independence of fact-checkers, activities funded will build on the independence and transparency standards developed by the European Fact-Checking Standards Network (EFCSN).

Through this dedicated work strand, fact-checkers capacity to play a vital role in the fight against disinformation will be further developed and supported. The funded activities shall also empower European Fact-Checkers to work hand-in-hand with the European Democracy Shield, ensuring full complementarity.

Deliverables

First work strand:

EDMO will continue to maintain and further support a platform for joint activities to analyse and respond to the phenomenon of disinformation. EDMO will be carrying out and coordinating various activities in this field, including investigations, targeted research, monitoring as well as media literacy and communication activities throughout Europe and across the national/multinational research hubs.

Second work strand:

The Network will support activities aiming at increasing fact-checking capacity and coverage across the EU. Such activities will include targeted support for fact-checkers, including collaboration activities, peer-to peer support as well as relevant technical infrastructure and tools to support their work.

First work strand: **European Digital Media Observatory**

Type of action	Procurement
Indicative budget	EUR 2.56 million
Indicative call planning / timing	2025
Indicative duration of the action	24 months
Implementation	European Commission
Type of beneficiaries	Not applicable

Second work strand: **European Network of Fact-Checkers**

Type of action	Grant for financial support
Indicative budget	EUR 5 million

Indicative call planning / timing	First set of calls
Indicative duration of the action	30-36 months
Implementation	Executive Agency HaDEA
Type of beneficiaries	Fact-checking organisations, Civil society organisations, News Media, Academic institutions, Commercial entities

5.2.3 A European Democracy Shield

Objective

This topic will finance the set-up of a Situational Awareness and Operational Centre (SAOC) for disinformation which will build on a network of independent entities in Member States and at European level.

Scope

The European Democracy Shield[175] will bring together independent entities and existing EU-level initiatives and activities to enhance the EU's capacity to detect and counter disinformation, including foreign interference. The Situational Awareness and Operational Centre (SAOC) could facilitate cooperation on evidence-based analysis, situational awareness, and proactive countering of disinformation.
Funded activities could include the acquisition of advanced technology for detection and analysis, including AI-generated disinformation, as well as collaboration with national agencies, civil society, and other stakeholders. It may also build on existing structures, such as the OpenCTI cyber-threat infrastructure, to facilitate real-time monitoring and threat assessment exchange.

The SAOC will inform and be informed by various initiatives, including inputs from the CoP's Rapid Response System, DSA transparency tools such as the DSA Transparency Database, EDMO, EEAS Rapid Alert System and FIMI ISAC, and Horizon Europe research on disinformation.

To achieve the intended scope funded activities could include:

- Leveraging state of the art software (including machine learning techniques) and computing power to improve the detection of malicious activities, and dynamically learning about the changing threat landscape;
- Developing and deploying appropriate tools, platforms and infrastructures to securely share and analyse large data sets;
- Technical integration and synthesis of a diverse range of signals, inputs and monitoring products in the field of disinformation;
- Supporting the increased availability, quality, usability and interoperability of threat intelligence data among SOCs and relevant entities;
- Fostering cooperation between various communities engaged in the fight against disinformation, such as the EDMO network, civil society organisations, researchers from fields such as psychological or network science, industry partners and other relevant actors
- Contracting specific expertise and products from outside sources, such as advisory services, analysis activities, scientific research or communication activities

[175] Political guidelines for the Next European Commission 2024-2029

- Dissemination and communication activities and products, catered both to the public in an awareness raising and media literacy capacity, as well as to policy-making and expert communities in the field of disinformation.

Activities may also cover candidate and accession countries, associated to the Programme, in view of the specific vulnerabilities to disinformation and Russian interference in this region.

Deliverables

The creation and operation of the European Democracy Shield.

Type of action	Procurement
Indicative budget	EUR 14 million
Indicative call planning / timing	2026
Indicative duration of the action	36 months
Implementation	European Commission
Type of beneficiaries	Not applicable

5.3 Support to the implementation of Multi-Country Projects (MCPs)

Objective

Multi-Country Projects (MCPs) are large scale projects facilitating the achievement of the targets for digital transformation of the Union and industrial recovery. They involve at least three Member States (to be understood as EU Members States or EEA EFTA countries) and typically include the Union's and Member States' financing.

The topic is continued from WP23-24. It aims to facilitate the implementation of MCPs including where the European Digital Infrastructure Consortia (EDICs)[176] have been chosen as implementation mechanism. The selected projects should be implemented either by an EDIC or through another mechanism listed in the DDPP Decision, including a consortium which includes at least three Member States[177] .

In addition to this horizontal topic, this Work Programme includes funding for specific MCPs:

- Topic 2.2.1.7 Multi-Country Project in Agri-Food
- Topic 4.9 Support for the coordination of the Cybersecurity Skills Academy
- Topic 5.1.2.2.2 MCP on Innovative and Connected Public Administrations

[176] EDICs are a new instrument for the deployment and operation of MCPs that should allow for large-scale intervention in key areas necessary for the achievement of the objectives and digital targets set out in Digital Decade Policy Programme (DDPP) decision, such as developing secure, resilient, performant and sustainable digital infrastructures. They shall also aim to achieve one or more specific goals outlined in the DDPP, including increasing the availability, and promoting the best use, of safe digital solutions in areas of public interest and the private sector. The EDICs are meant to facilitate the deployment of such large-scale projects and facilitate the digital transformation of the Union. The EDICs should involve several Member States to achieve the necessary scale and have a long-term perspective to provide for sustainability of the projects. Decision (EU) 2022/2481 of the European Parliament and of the Council of 14 December 2022 establishing the Digital Decade Policy Programme 2030, https://eur-lex.europa.eu/eli/dec/2022/2481/oj

[177] Any Member State may be represented by one or more public entities, including regions or private entities with a public service mission.

The projects selected for funding under this topic are expected to:

- address one of the key areas in which the Digital Europe Programme supports critical EU capacity building through large scale deployments;
- represent a high level of engagement from various Member States and a long-term sustainability for the project implemented;
- pool EU, national and/or private resources to achieve progress that no Member State could do on its own;
- reduce digital divides within and between Member States;
- prove a clear EU added value through their impact that no single entity nor Member State could achieve on its own;
- contribute to bridge the gap between large scale piloting and full deployment;
- support the consolidation of an interconnected, interoperable, and secure Single Market, considering to the extent possible the interests of public and private sectors.
- to the extent possible, support interoperability of data and digital infrastructure amongst the MCPs. Digital infrastructure might include data, high-performance computing, quantum computing, AI and connectivity;
- where relevant, support common operating models that promote fair data economy, cross-border services, digital public services, new business models, trust-based ecosystems, digital identity and a high level of personal data protection.

Scope

The awarded proposals are expected to ensure that:

- they contribute to the achievement/pursue one of the operational objectives outlined in the Regulation (EU) 2021/694 (Articles 4-8);
- they have a high potential to contribute to digital priorities of the Union provided for in the Digital Decade Policy Programme. Projects that involve higher number of Member States, either as members of an EDIC, or another MCP implementation mechanism, shall be considered as an indication of higher impact in this regard;
- the level of maturity of the project proposed is ready for deployment, as demonstrated by solid implementation strategies. Projects may include research and innovation activities, provided that they are necessary to the achievement of deployment objectives of the DDPP Decision;
- consolidate available capacities at EU and Member State level by building on existing initiatives and developing widely agreed frameworks and/or tools;
- coordinate between participating partners existing and future initiatives relevant for the project;
- coordinate with other relevant projects funded through Digital Europe Programme (e.g. Data Spaces Support Centre);
- have in place a long-term sustainability plan, which may include the setting up of an EDIC;
- address interoperability concerns that could hamper an EU wide deployment.

The funding can cover the following categories of activities:

- Deployment and use of common EU digital infrastructures, including the underlying technologies, blueprint architecture, standards, tools and applications;
- Deployment and use of advanced EU wide services targeting their large-scale adoption including through industry and/or SMEs, and/or public administrations;
- Use of computing and processing capacities;
- Data generation, collection, aggregation and sharing;
- Creation, optimization of large data models;
- Normalisation and certification of services, digital infrastructures and/or data models;
- Deployment of trustworthy AI capacities and resources;
- Dissemination and exploitation of project results;
- Stakeholder engagement;
- Capacity building, including on legal and competitiveness matters.

Priority will be given to projects that present a broader Member States support, and a higher level of maturity.

Deliverables

Deployment of a few MCPs delivering fully functional digital infrastructure(s) or operational service(s) with a clear a long-term sustainability plan. The projects are expected to prove a clear EU added value through their impact that no single entity or Member State could achieve on its own. The projects shall contribute to the targets of the DDPP Decision.

Type of action	Simple grant
Indicative budget	EUR 25 million
Indicative call planning	Fourth set of calls
Indicative duration of the action	36 months
Implementation	European Commission
Type of beneficiaries	Public and private entities such as (but not limited to): public administrations (national, regional and local level), EDICs, economic actors (SMEs, large organisations), as well as other relevant private and public organisations contributing to the implementation of Multi-Country projects.

6. Programme Support Actions

6.1 Support to Dissemination and Exploitation (D&E) for the Digital Europe Programme

Objective

Maximise the impact of the Digital Europe Programme and the take up of its results through a Dissemination and Exploitation (D&E) operational framework and the implementation of practical actions supported by appropriate tools. The action will leverage programme-level D&E efforts already in place and enhance them.

Scope

The action will address, at least, the following dimensions:

- the overall programme, its Specific Objectives (SO) and areas therein, down to topics and projects where appropriate;
- the capacity building and use strands of Digital Europe Programme;
- the different types of organisations participating in the programme;
- the different stakeholders;
- the stages of the project lifecycle and the reporting obligations;
- the security and strategic autonomy specificities of the programme, including the implications in the use of critical infrastructures and exploitation of results;
- coordination within EU and beyond when relevant, taking into account the policy priorities and initiatives;
    - within the Digital Europe Programme itself, identifying and exploiting complementarities of projects among SO and topics;
    - between the Digital Europe Programme, other EU programmes and national/regional programmes;
    - of the different programme's implementing bodies, e.g. European Commission, Health and Digital Executive Agency (HaDEA), JU and similar bodies, taking into account their specificities in the handling of results resulting from their actions

The action will complement and enrich the D&E activities of the programme's projects. The action will provide means that can help deliver its objective, including leveraging already existing tools, e.g. of other EU programmes, and the use of innovative approaches to D&E. The action will promote the uptake of Digital Europe Programme results beyond the entities directly involved in the programme's projects.

Deliverables

- Optimisation of the operational framework for D&E for the Digital Europe Programme taking into account the elements mentioned under "scope", with solid methodological and practical approaches.
- Support to projects in the preparation and execution of D&E activities.
- A plan to deliver on the operational framework backed by monitoring and evaluation metrics.
- The delivery of actions implementing the operational framework and involving stakeholders as appropriate.
- The means and tools to facilitate the delivery of the operational framework.

- A plan for the sustainability of the operational framework and the actions implemented by the project.

Type of action	Coordination and support action grant
Indicative budget	EUR 2 million
Indicative call planning / timing	Third set of calls
Indicative duration of the action	36 months
Implementation	European Commission
Type of beneficiaries	All entities

6.2 Supporting the Network of National Contact Points (NCPs) of the Digital Europe Programme

Objective

Support the coordination among National Contact Points (NCPs) for the Digital Europe Programme, the preparation and execution of actions that maximise awareness of funding opportunities that can boost the implementation of EU digital policies, the impact of the programme, and the long-term dissemination and exploitation of results.

The selected project will provide support for all specific objectives of Digital Europe Programme.

Scope

Proposals will contribute to the NCPs network for the Digital Europe Programme.

Proposals should facilitate trans-national co-operation amongst NCPs, encouraging cross-border activities, sharing good practices and raising the general standard of support to programme applicants.

The consortium should provide a framework that will support participation in and will maximize overall awareness of the Programme, also facilitating the participation of new applicants. It will provide tailored activities supporting Digital Europe Programme communication (including the organization of info days for stakeholders), dissemination and exploitation activities and related material.

Special attention should be placed on enhancing the competence of NCPs, including helping less experienced NCPs rapidly acquire the know-how built up in other countries. Where relevant, synergies should be sought with existing networks.

Deliverables

The action is expected to contribute to the following outcomes:

- Improved and professionalised NCP services across Europe, leading to:
    - Effective and efficient access to Digital Europe Programme calls.
    - Adapted services to the different Specific Objectives of the programme, including matchmaking activities, online and in-situ meetings as appropriate, and dissemination of information regarding security and ownership control rules in the Digital Europe Programme.

- Better participation of new applicants in the programme.
- Raising the average quality of proposals submitted.
- Dissemination and exploitation of results and promotion of the use of the digital capacities and services emerging from the programme.

Type of action	Coordination and support action grant
Indicative budget	EUR 2 million
Indicative call planning / timing	Second set of calls
Indicative duration of the action	36 months
Implementation	European Commission
Type of beneficiaries	All entities

6.3 Other support actions

Other programme support actions with indicative budget of EUR 20 million are aimed at maximising the impact of the EU intervention and will be implemented through procurement and other means, e.g, administrative arrangement with the JRC. Horizontal actions will cover costs including preparation, evaluation, monitoring and studies. An amount of funding will be set aside to cover awareness and dissemination as it is crucial to effectively communicate about the value and benefits of the Digital Europe Programme. As an indicative list, other programme support actions funded under this WP may cover:

1. External expertise:

- The use of appointed independent experts for the evaluation of the project proposals and where appropriate, the monitoring of running projects.
- The use of independent experts to advise on, or support, the design and implementation of the underpinning policy, including in the areas of AI, Destination Earth, DSA and DMA.

2. Studies, events and publications

- Events, dissemination of Programme results etc.
- Publications
- Communication e.g., about calls and Digital Europe Programme results
- Studies and expertise e.g. through administrative arrangement with the JRC, studies in support of the AI office.[178]

3. Other

- Support to the early implementation measures of the AI Act.

[178] Commission Decision Establishing the European AI Office (C (2024) 390)

7. Financial Instruments

7.1 Chips Fund

The WP 2023-2024 introduced the Chips Fund as a result of the Pillar 1 of the Chips Act[179] that foresees a dedicated investment facility aiming to facilitate access to finance for SMEs and investment in general in the area of semiconductors.

For high-potential start-ups in the area of semiconductor technologies and quantum chips, requiring support to validate their technology and transform it into innovation, a thematic Challenge offering equity and grants is available in the Accelerator programme of the EIC (European Innovation Council) of Horizon Europe.

For SMEs in the area of semiconductor technologies, requiring support to bring their innovation to market, a thematic product offering equity-based financing is offered under the InvestEU programme. The Invest EU guarantee capacity is expanded through a top-up from Digital Europe. The EIB Group, through the European Investment Fund (EIF), will deploy the RID-SME window equity product and will earmark a dedicated, ringfenced budget, matching the top-up with own funds, in effect doubling the EU budget guarantee to facilitate private investments in the area of semiconductors.

The InvestEU programme is expected to leverage EU funding by crowding-in private investment by financial intermediaries, such as venture capital or private equity funds, achieving a multiplier effect in terms of funding for selected final recipients in the area of semiconductors.

The activities being considered for support under the InvestEU thematic product include:

- **Semiconductor technologies and solutions for development and production of microelectronics and photonics components and systems.** Activities may focus in particular on:
    - Analog, digital, mixed-signal and photonic modules, IP, components and systems;
    - Semiconductor solutions contributing to increasing energy efficiency and/or reducing greenhouse gas emissions;
    - Semiconductor materials, wafers, IP, process design kits, design tools, handling and processing tools and equipment, for front-end or back-end manufacturing.
- **Development, production and commercialization of new semiconductor chips for digital applications**. These activities comprise, but are not limited to, design and deployment of electronic and photonic integrated circuits (chips) and integrated systems for applications such as AI, edge computing, IoT, 5G/6G, HPC, quantum computing/sensing/communication, cybersecurity, blockchain/DLT and other digital technologies.

The Chips Funds contributes to the STEP objectives as defined in STEP Regulation.[180]

Type of action	Financial Instrument
Indicative budget	EUR 61.7 million

[179] Regulation (EU) 2023/1781 of the European Parliament and of the Council of 13 September 2023 establishing a framework of measures for strengthening Europe's semiconductor ecosystem and amending Regulation (EU) 2021/694 (Chips Act)

[180] Regulation (EU) 2024/795 establishing the Strategic Technologies for Europe Platform (STEP)

Indicative duration of the action	24 months
Implementation	Indirect management with the European Investment Fund

8. Implementation

This Work Programme uses two main implementation modes: direct management (procurement, administrative arrangement with JRC and grants), as well as indirect management (contribution agreement, European Investment fund).

The different nature and specificities of the actions indicated in the previous chapters require distinctive implementation measures. Each of these will therefore be achieved through various implementation modes.

Proposers are strongly encouraged to follow green public procurement principles and take account of life cycle costs[181].

The implementation of grants is articulated through different types of actions that are indicated for each topic. More details on each type of action are described in Appendix 2.

8.1 Procurement

Procurement actions will be carried out in compliance with the applicable EU public procurement rules. The procedures will be implemented either through direct calls for tenders or by using new and existing framework contracts. IT development and procurement strategy choices will be subject to pre-approval by the European Commission Information Technology and Cybersecurity Board.

8.2 Grants

8.2.1 Evaluation process

The evaluation of proposals will be based on the principles of transparency and equal treatment. It will be carried out by the Commission services and an Executive Agency with the assistance of independent experts.

Admissibility conditions

Proposals must be submitted before the call deadline and only through the means specified in the call for proposals. The call deadline is a deadline for receipt of proposals.

Proposals must be complete and contain all parts and mandatory annexes and supporting documents specified in the call for proposals. Incomplete proposals may be considered as inadmissible.

Eligibility criteria

Proposals will be eligible if they are submitted by entities and/or consortiums compliant with the requirements set out in this Work Programme and the relevant call for proposals. Only proposals meeting the requirements of the eligibility criteria in the call for proposals will be evaluated further.

Exclusion criteria

Applicants which are subject to EU administrative measures under the Early Detection and Exclusion System (EDES) (i.e. exclusion or financial penalty decision)[182] are excluded from participation. Specific exclusion criteria will be listed in the call for proposals.

Financial and operational capacity

[181] Green Public Procurement

[182] See Article 138 of Regulation (EU, Euratom) 2024/2509

Each individual applicant must have stable and sufficient resources as well as the know-how and qualification to successfully implement the projects and contribute their share. Organisations participating in several projects must have sufficient capacity to implement all these projects. Applicants must demonstrate their financial and operational capacity to carry out the proposed action.

Award criteria

The three sets of criteria are listed in Appendix 1 of this Work Programme. Each of the eligible proposals will be evaluated against the award criteria. Proposals responding to a specific topic as defined in the previous chapters of this Work Programme will be evaluated both individually and comparatively. The comparative assessment of proposals will cover all proposals responding to the same topic.

Proposals that achieve a score greater than or equal to the threshold will be ranked within the objective. These rankings will determine the order of priority for funding. Following evaluation of award criteria, the Commission establishes a Selection Decision taking into account the scores and ranking of the proposals, the programme priorities and the available budget.

The coordinators of all submitted proposals will be informed in writing about the outcome of the evaluation for their proposal(s).

8.2.2 Selection of independent experts for evaluation and reviews

The Commission and the Executive Agency will select independent experts to assist with the evaluation of proposals and with the review of project results as well as for other purposes where specific expertise might be required for implementation of the Programme. Experts are invited to register themselves on the Funding & Tender Portal[183] or update their profile in the database with their expertise in the areas funded by the Digital Europe Programme. Experts will be selected from this list on the basis of their ability to perform the tasks assigned to them, taking into account the thematic requirements of the topic, and with consideration of geographical and gender balance as well as the requirement to prevent and manage (potential) conflicts of interest.

8.2.3 Indicative implementation calendar

The indicative calendar for the implementation of the Digital Europe calls for proposals in 2025, 2026 and 2027 is shown in the table below. Four sets of calls with a common deadline are planned to deliver the topics of this Work Programme. Topics are bundled into calls as specified in the respective call document. The table below does not prevent the opening of additional calls if needed. More information about these calls will be available on: Funding & tenders (europa.eu).

Table 10: Tentative call timeline for topics in this WP

Milestones	First set of calls of WP 2025-2027 with common deadline	Second set of calls WP 2025-2027 with common deadline	Third set of calls of WP 2025-2027 with common deadline	Fourth set of calls of WP 2025-2027 with common deadline
Call Opening [184]	Q2 - 2025	Q4 – 2025	Q2 – 2026	Q1 – 2027

[183] EU Funding & Tenders Portal, Work as an expert

[184] The Director-General responsible for the call may delay the publication and opening of the call by up to three months.

Deadline for submission [185]	Q3 - 2025	Q1 – 2026	Q3 – 2026	Q2- 2027
Evaluation	Q4 - 2025	Q1 – 2026	Q3 – 2026	Q2-2027
Information to applicants on the outcome of the call	Q4 - 2025	Q2 – 2026	Q4 – 2026	Q3-2027
Signature of contracts	Q1 - 2026	Q3 - 2026	Q1 - 2027	Q4 - 2027

Topics that will be included in the specific set of calls are listed in tables 6, 7, 8 and 9.

[185] The Director-General responsible for the call may delay this deadline by up to three months.

9. Appendices

9.1 Appendix 1: Award criteria for the calls for proposals

Proposals are evaluated and scored against award criteria set out for each topic in the call document. The general award criteria for the Digital Europe calls are as follows:

Relevance:

- Alignment with the objectives and activities as described in the call for proposals
- Contribution to long-term policy objectives, relevant policies and strategies, and synergies with activities at European and national level
- Extent to which the project would reinforce and secure the digital technology supply chain in the EU*
- Extent to which the project can overcome financial obstacles such as the lack of market finance*

*This might not be applicable to all topics

Implementation

- Maturity of the project
- Soundness of the implementation plan and efficient use of resources
- Capacity of the applicants, and when applicable the consortium as a whole, to carry out the proposed work

Impact

- Extent to which the project will achieve the expected outcomes and deliverables referred to in the call for proposals and, when relevant, the plans to disseminate and communicate project achievements
- Extent to which the project will strengthen competitiveness and bring important benefits for society
- Extent to which the project addresses environmental sustainability and the European Green Deal goals, in terms of direct effects and/or in awareness of environmental effects*

*This might not be applicable to all topics and in only exceptional occasions and for duly justified reasons may not be evaluated (see specific topic conditions in the call for proposals).

9.2 Appendix 2: Types of action to be implemented through grants

The descriptions below of the types of actions to be implemented through grants under the Digital Europe Programme is indicative and should help the (potential) applicants to understand the expectation in each type of action. The call for proposal will define the objectives and scope of the action in more detail.

SIMPLE GRANTS

Description: The Simple Grants are used by a large variety of topics and can cover most activities. The consortium will mostly use personnel costs to implement action tasks, activities with third parties (subcontracting, financial support, purchase) are possible but should be limited.

Funding rate: 50% of total eligible costs for all beneficiaries.

SME SUPPORT ACTIONS

Description: Type of action primarily consisting of activities directly aiming at supporting SMEs involved in building up and the deployment of the digital capacities. This type of action can also be used if an SME needs to be in the consortium and make investments to access the digital capacities.

Funding rate: 50% of total eligible costs except for SMEs where a rate of 75% applies.

COORDINATION AND SUPPORT ACTIONS (CSA):

Description: Small grants with the primary goal to promote cooperation and/or provide support to EU policies. Activities can include coordination between different actors for accompanying measures such as standardisation, dissemination, awareness-raising and communication, networking, coordination or support services, policy dialogues and mutual learning exercises and studies, including design studies for new infrastructure. CSA may also include complementary activities of strategic planning, networking and coordination between programmes in different countries.

Funding rate: 100% of eligible costs.

GRANTS FOR PROCUREMENT

Description: Grants where most of the costs consist of buying goods or services and/or subcontracting tasks. Contrary to the grants for procurement of advanced capacities (PAC grants) (see below), for these there are no specific procurement rules (i.e. usual rules for purchase apply), nor is there a limit to 'contracting authorities/entities'. Personnel costs should be limited in this type of action; they are used to manage the grant, coordinate between the beneficiaries and prepare the procurement.

Funding rate: 50% of total eligible costs for all beneficiaries.

GRANTS FOR PROCUREMENT OF ADVANCED CAPACITIES (PAC)

Description: Grants awarded only to beneficiaries that are "contracting authorities or contracting entities" as defined in the EU public procurement Directives (Directives 2014/24/EU[186], 2014/25/EU[187]

[186] Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC (OJ L 94, 28.3.2014, p. 65–242).

[187] Directive 2014/25/EU of the European Parliament and of the Council of 26 February 2014 on procurement by entities operating in the water, energy, transport and postal services sectors and repealing Directive 2004/17/EC (OJ L 94, 28.3.2014, p. 243–374); Contracting authorities

1. For the purpose of this Directive 'contracting authorities' means State, regional or local authorities, bodies governed by public law or associations formed by one or more such authorities or one or more such bodies governed by public law.

and 2009/81/EC[188]) aiming at buying in innovative digital goods and services (i.e. novel technologies on the way to commercialisation but not yet broadly available).

Funding rate: 50% of total eligible costs.

GRANT FOR FINANCIAL SUPPORT

Description: Grants with a particular focus on providing financial support to third parties. The majority of the grant will be distributed via financial support to third parties with special provisions in the grant agreement, maximum amounts to third parties, multiple pre-financing and reporting obligations.

Annex 5 of the model grant agreements foresees specific rules for this type of action regarding conflict of interest, the principles of transparency, non-discrimination and sound financial management as well as the selection procedure and criteria.

In order to assure the co-financing obligation in the programme, the support to third parties should only cover 50% of third-party costs.

Funding rate: 100% of eligible costs for the consortium, co-financing of 50% of total eligible costs by the supported third party.

FRAMEWORK PARTNERSHIP AGREEMENT (FPA) AND SPECIFIC GRANT AGREEMENT (SGA):

FPAs:

Description: An FPA establishes a long-term cooperation mechanism between the granting authority and the beneficiaries of grants. The FPA specifies the common objectives (action plan), the procedure for awarding specific grants and the rights and obligations of each party under the specific agreements. The specific grants are awarded via identified beneficiary actions (with or without competition).

Funding rate: no funding for FPA.

SGAs:

Description: The SGAs are linked to an FPA and implement the action plan or part of the action plan. They are awarded via an invitation to submit a proposal (identified beneficiary action). The coordinator of the FPA has to be the coordinator of each SGA signed under the FPA and will always take to role of interlocutor with the granting authority. All the other partners of the FPA can participate in any SGA. There is no limit to the number of SGAs signed under one FPA.

Funding rate: 50% of total eligible costs.

LUMP SUM GRANT

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2. 'Regional authorities' includes all authorities of the administrative units, listed non-exhaustively in NUTS 1 and 2, as referred to in Regulation (EC) No 1059/2003 of the European Parliament and of the Council.
3. Local authorities' includes all authorities of the administrative units falling under NUTS 3 and smaller administrative units, as referred to in Regulation (EC) No 1059/2003.
4. Bodies governed by public law' means bodies that have all of the following characteristics:
(a) they are established for the specific purpose of meeting needs in the general interest, not having an industrial or commercial character;
(b) they have legal personality; and
(c) they are financed, for the most part, by the State, regional or local authorities, or by other bodies governed by public law; or are subject to management supervision by those authorities or bodies; or which have an administrative, managerial or supervisory board, more than half of whose members are appointed by the State, regional or local authorities, or by other bodies governed by public law.

[188] Directive 2009/81/EC of the European Parliament and of the Council of 13 July 2009 on the coordination of procedures for the award of certain works contracts, supply contracts and service contracts by contracting authorities or entities in the fields of defence and security, and amending Directives 2004/17/EC and 2004/18/EC (OJ L 216, 20.8.2009, p. 76–136).

Description: Lump Sum Grants reimburse a general lump sum for the entire project and the consortium as a whole. The lump sum is fixed ex-ante (at the latest at grant signature). The granting authority defines a methodology for calculating the amount of the lump sum. There is an overall amount, i.e., the lump sum will cover the beneficiaries' direct and indirect eligible costs. The beneficiaries do not need to report actual costs, they just need to claim the lump sum once the work is done. If the action is not properly implemented only part of the lump sum will be paid.

Funding rate: 50% of total eligible costs.

9.3 Appendix 3: Implementation of Article 12(5) and 12(6)

Implementation of actions subject to Article 12(5) of Regulation (EU) 2021/694

The work programme may provide that legal entities established in associated countries and legal entities that are established in the Union but are controlled from third countries are not eligible to participate in all or some actions under Specific Objective 3 for duly justified security reasons. In such cases, calls for proposals and calls for tenders shall be restricted to legal entities established or deemed to be established in Member States and controlled by Member States or by nationals of Member States.

The actions that are subject to Article 12(5) restrictions and their precise conditions are set out in this Work Programme [section 3] and further detailed in the respective call documents, where applicable.

Eligible countries:

- Member States
- EEA EFTA States (i.e. Iceland, Norway, Liechtenstein).

Eligible legal entities:

Participation in actions restricted under Article 12(5) is currently limited to legal entities that meet the following conditions:

- are established or deemed to be established in an eligible country
  AND
- are controlled by an eligible country, eligible country entity, or by national of eligible countries.

The ownership control assessment will be conducted to determine control. This assessment is part of the eligibility criteria. For this, the participants[189] will be requested to fill in a self-assessment (ownership control declaration), which should be annexed to the application form. They will also be requested to submit supporting documents in order for the Commission to determine that the entities are not controlled by an ineligible country.

In the particular case of section 3.1 (EU Cybersecurity Reserve), exceptionally, when, in order to fulfil the objectives of the Cyber Solidarity Act, it is necessary, for duly justified reasons, to procure the provision of specific incident response services, the contracting authority may allow legal entities established or deemed to be established in Member States and controlled by Member States or by nationals of Member States to use as subcontractors, suppliers established in or controlled by third countries, subject to strict security conditions, in order to ensure sufficient expertise and geographical coverage of the services procured.

Where the contracting authority allows the use of subcontractors who are suppliers that are not EU-controlled, the tendering documents shall set out that the services fulfil requirements that guarantee the protection of the essential security interests of the Union and the Member States and ensure the protection of classified information. Such security conditions must be objective, non-discriminatory and must be duly justified under Union law, including in accordance with the exceptions foreseen in the relevant international agreements.

[189] Including beneficiaries, affiliated entities, associated partners, subcontractors.

Implementation of actions subject to Article 12(6) of Regulation (EU) 2021/694

If duly justified for security reasons, the work programme may also provide that legal entities established in associated countries and legal entities that are established in the Union but are controlled from third countries may be eligible to participate in all or some actions under Specific Objectives 1, 2 and 6 only if they comply with the requirements to be fulfilled by those legal entities to guarantee the protection of the essential security interests of the Union and the Member States and to ensure the protection of classified documents information.

The actions that are subject to Article 12(6) restrictions and their precise conditions are set out in this Work Programme and further detailed in the respective call documents, where applicable.

Eligible countries

- Member States
- EEA EFTA States (i.e. Iceland, Norway, Liechtenstein)
- associated countries that meet specific conditions (eligibility depending on the outcome of the EC assessment of replies to the questionnaire provided by relevant associated countries).

Eligible legal entities:

Participation in actions restricted under Article 12(6) is currently limited to legal entities that meet the following conditions:

- are established or deemed to be established in an eligible country
  AND
- are controlled by an eligible country, eligible country entity, or by national of eligible countries. Legal entities that are controlled by an ineligible country, ineligible country entity, or an ineligible country national may participate in actions under Article 12(6) only if they comply with specific conditions (indicated below) to guarantee the protection of essential security interests of the Union and the Member States.

The ownership control assessment will be conducted to determine control. This assessment is part of the eligibility criteria. For this, the participants[190] will be requested to fill in a self-assessment (ownership control declaration), which should be annexed to the application form. They will also be requested to submit supporting documents in order for the Commission to determine that the entities are not controlled by an ineligible country.

Conditions for foreign controlled entities (guarantees)

The applicants that are established in an eligible country but are controlled by an ineligible country, ineligible country entity, or an ineligible country national shall be required to provide information demonstrating that:

(a) control over the applicant's corporate structure and decision-making process is not exercised in a manner that restrains or restricts in any way its ability to perform and complete the action;

[190] Including beneficiaries, affiliated entities, associated partners, subcontractors.

(b) the access by ineligible third countries or by ineligible third country entities to classified[191] or non-classified sensitive information, such as e.g. know-how and business secrets relating to the action will be prevented;

(c) the persons involved in the action will have national security clearance issued by a Member State where appropriate;

(d) the results of the action shall remain within the beneficiary/contractor and shall not be subject to control or restrictions by ineligible third countries or other ineligible third country entities during the action and for a specified period after its completion.

(e) For applicants established in the EU and controlled from an ineligible third country that they are not subject to export restrictions to EU Member States on results, technologies, services and products developed under the project for at least 4 years after the end of the action, in order to ensure the security of supply.

Such guarantees will need to be approved by the eligible country in which the entity is established. The validity of these guarantees will be later assessed by the European Commission.

More information about this procedure will be detailed in the call documents and applicable guidance documents available in the EU Funding & Tenders Portal.

Additional aspects concerning procurement

Procurement actions will also be subject to these restrictions (Articles 12(5) and 12(6)) and, when applying Article 12(6), will use the same conditions as calls for proposals (a, b, d and e). More information will be published in the Funding and Tenders Portal and in the procurement-related document.

[191] Commission Decision 2015/444/EC, Euratom of 13 March 2015 on the security rules for protecting EU classified information (OJ L 72, 17.3.2015, p. 53).

9.4 Appendix 4: Restrictions for the protection of European digital infrastructures, communication and information systems, and related supply chains

The protection of European communication networks has been identified as an important security interest of the Union and its Member States[192]. In line with the Commission Recommendation on the cybersecurity of 5G networks of 2019[193] and the subsequent report on EU coordinated risk assessment of the cybersecurity of 5G networks of 2019[194], the EU Toolbox on 5G cybersecurity[195], the second report on Member States' progress in implementing the EU toolbox on 5G cybersecurity of 2023[196], and the related Communication on the implementation of the 5G cybersecurity toolbox of 2023[197], the Commission together with the Member States has worked to jointly identify and assess cyberthreats and security risks for 5G networks[198]. The toolbox also recommends adding country-specific information (e.g. threat assessment from national security services, etc.). This work is an essential component of the Security Union Strategy and supports the protection of electronic communications networks and other critical infrastructures.

Entities assessed as "high-risk suppliers", are currently set out in the second report on Member States' progress in implementing the EU toolbox on 5G cybersecurity of 2023[199] and the related Communication on the implementation of the 5G cybersecurity toolbox of 2023[200].

In accordance with Article 136(2) of the Regulation (EU, Euratom) 2024/2509[201], this Work Programme has identified actions that concern strategic assets and interests of the Union or its Member States, for which it sets out specific award procedures aimed at ensuring the protection of the integrity of digital infrastructure, communication and information systems, and related supply chains.

This entails the need to avoid the participation of high-risk supplier entities and the use of non-secure equipment and other goods, works and/or services in the deployment of key digital infrastructures, communication and information systems, and related supply chains to prevent technology transfer and the persistence of dependencies in materials, semiconductor components (including processors), computing resources, software tools and virtualisation technologies, and to preserve the integrity of the concerned systems, including from a cybersecurity perspective.

In order to protect the concerned strategic assets and interests of the Union or its Member States, it is therefore appropriate that the two following additional eligibility criteria apply to the actions listed below and identified in the WP as "subject to restrictions for the protection of European digital infrastructures, communication and information systems, and related supply chains":

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[192] European Council conclusions of 1 and 2 October 2020 (EUCO 13/20), point 11; Council Conclusions on the significance of 5G to the European Economy and the need to mitigate security risks linked to 5G, 14517/19.
[193] Commission Recommendation (EU) 2019/534 of 26 March 2019 Cybersecurity of 5G networks, L 88/42.
[194] NIS Cooperation Group, Report on EU coordinated risk assessment of the cybersecurity of 5G networks, 9 October 2019.
[195] NIS Cooperation Group, EU Toolbox on 5G Cybersecurity, 29 January 2020.
[196] NIS Cooperation Group, Second report on Member States' progress in implementing the EU Toolbox on 5G Cybersecurity, June 2023.
[197] Communication from the Commission: Implementation of the 5g cybersecurity Toolbox, Brussels, 15.6.2023 C(2023) 4049 final.
[198] Within the NIS framework NIS 1 + 2 [Directive - 2022/2555 - EN - EUR-Lex (europa.eu)]
[199] NIS Cooperation Group, Second report on Member States' progress in implementing the EU Toolbox on 5G Cybersecurity, June 2023.
[200] Communication from the Commission: Implementation of the 5G cybersecurity Toolbox, Brussels, 15.6.2023 C(2023) 4049 final
[201] Regulation (EU, Euratom) 2024/2509 of the European Parliament and of the Council of 23 September 2024 on the financial rules applicable to the general budget of the Union

1. Entities that are assessed as high-risk suppliers of mobile network communication equipment (and any entities they own or control) are not eligible to participate in any capacity, including as beneficiaries, affiliated entities, associated partners, third parties giving in-kind contributions, subcontractors or recipients of financial support to third parties (if any).

   The assessment is based on the following criteria:
   - likelihood of interference from a non-associated third country, for example due to:
     - the characteristics of the entity's ownership or governance (e.g. state-owned or controlled, government/party involvement);
     - the characteristics of the entity's business and other conduct (e.g. a strong link to a third country government);
     - the characteristics of the respective third country (e.g. legislation or government practices likely to affect the implementation of the action, including an offensive cyber/intelligence policy, pressure regarding place of manufacturing or access to information).
   - (cyber-)security practices, including security practices throughout the entire supply chain;
   - risks identified in relevant assessments of Member States and third countries as well as other EU institutions, bodies and agencies, if relevant.

2. Equipment and other goods, works and/or services related to 5G/6G mobile network communication equipment, and other technologies linked to the evolution of European communication networks must:
   - not be subject to security requirements by third country that could affect the implementation of the action (e.g. technology restrictions, national security classification limiting the use of the equipment, etc.);
   - comply with (cyber-)security guidance issued by the Commission, in particular communications on the 5G toolbox;
   - apply (cyber-)security requirements throughout the life cycle, including the selection and award procedure and criteria for purchases, the use, and also the related services, including installation, upgrading or maintenance;
   - ensure (cyber-)security by adequately protecting the availability, authenticity, integrity, and confidentiality of stored or transmitted or processed data or the functions or services offered by, or accessible via, that equipment.

Exceptions may be requested from the granting authority and will be assessed case-by-case, taking into account the criteria provided for in the 5G cybersecurity toolbox, the security risks and availability of alternatives in the context of the action.

Below is the list of concerned actions, identified in the WP as "subject to restrictions for the protection of European digital infrastructures, communication and information systems, and related supply chains", and justifications for the application of restrictions. All actions under Article 12(6) of the Regulation (EU) 2021/694 and all actions under Specific Objective 3 - Cybersecurity and Trust also are subject to Appendix 4 restrictions, given the sensitive nature of the concerned activities, duly described and justified for each action in the respective section of the WP.

Table 11: Actions in the WP subject to restrictions

Section	Action title	Justification
2.1.1	Simpl Cloud Federation / Smart Middleware (Simpl)	Cloud computing service providers fall within the scope of Directive (EU) 2016/1148 of the

		European Parliament and of the Council concerning measures for a high common level of security of network and information systems across the Union (NIS Directive)[202]. The revised NIS Directive (Directive (EU) 2022/2555 of the European Parliament and of the Council (NIS 2 Directive)[203] of 14 December 2022 includes among others also data centre service providers in the directive's scope. The NIS 2 Directive highlights the necessity for entities in its scope to address the cybersecurity risks stemming from an entity's supply chain and its relationship with its suppliers, given the prevalence of incidents where entities have fallen victim to cyber-attacks compromising the security of their network and information systems by exploiting vulnerabilities affecting third party products and services.
2.1.2	Reference deployments of European cloud-edge services	Provided in chapter 2.1.2, in the context of the application of Article 12(6) restrictions
2.1.3	Support to the secretariat for the Alliance on Processor and Semiconductor Tech	As detailed in the Alliance' Terms of Reference, some Working Groups of the Alliance will address topics related to defence and security issues, it is thus necessary to exclude high-risk suppliers from providing secretariat support.
2.2.1.4	Data Space for Manufacturing	Provided in chapter 2.2.1.4, in the context of the application of Article 12(6) restrictions
2.2.1.6	Health: Data ingestion capacities and data services for the European Genomic Data Infrastructure in the European Health Data Space	Provided in chapter 2.2.1.6, in the context of the application of Article 12(6) restrictions
2.2.2.1	Data Spaces Support Centre	The operators of the Data Spaces Support Centre come in contact with information related to data spaces in critical sectors such as mobility, energy and health. Such information could be used by individuals, groups or regimes to attempt to compromise the data infrastructures thus compromising the availability of the service and the integrity of information/data used for/within that service. Any interruptions of the service

[202] Directive (EU) 2016/1148 of the European Parliament and of the Council of 6 July 2016 concerning measures for a high common level of security of network and information systems across the Union (OJ L 194, 19.7.2016, p. 1–30).

[203] Directive (EU) 2022/2555 of the European Parliament and of the Council of 14 December 2022 on measures for a high common level of cybersecurity across the Union, amending Regulation (EU) No 910/2014 and Directive (EU) 2018/1972, and repealing Directive (EU) 2016/1148 (NIS 2 Directive) (OJ L 333, 27.12.2022, p. 80–152).

		might cause disruptions and affect security or public safety.
2.2.2.3	A European Data Altruism Consent Form	The management tool developed may be used to obtain consent for accessing sensitive personal data, such as health or mobility information. This data could reveal details like an individual's health status or precise location, making it sensitive for both the person's security and the broader security interests of the EU.
2.2.2.4	Digital solutions for regulatory compliance through data	The data exchanged through this digital infrastructure may contain sensitive information. In addition, the technical infrastructure will provide access to public administrations. In certain cases, such institutions could be critical for the security of the EU.
2.2.2.5	Data and technology for reducing reporting burden and automate compliance in financial services	The data exchanged through this digital infrastructure may contain sensitive information, specifically in the financial services sector. In addition, the technical infrastructure will provide access to public administrations. In certain cases, such institutions could be critical for the security of the EU.
2.2.1.1	Data Spaces for Cultural Heritage	All Common European Data Spaces (including the Once-Only-Technical-System) represent strategic assets that are crucial to the security and economy of the Union and its MS[204]. Protecting the integrity of all data spaces and their trust mechanisms reduces risks associated with the use of common infrastructures and tools and increases trust and security when combining data from different data spaces. The associated risks and mitigation measures are described in more detail in Section 2.2 of this WP
2.2.1.2	Data Space for Tourism	
2.2.1.3	Data Space for Skills	
2.2.1.5	Data Space for Public Procurement	
2.2.2.2	Open Data Portal	
2.2.2.6	Digital Finance Platform	
2.2.2.7	EU Language Technology Tools	
5.1.1.2	Once-Only-Technical-System	
2.3.1.1	Testing genAI4EU application at scale and under real-world condition	AI and robotics qualify as critical technologies and dual use items under Article 2(1) of Council Regulation (EC) No 428/2009 and as factors that may be taken into consideration by Member States or the Commission for screening foreign direct investment under EU foreign investment regulation (EU 2019/452). In particular, the TEFs outputs, validated AI solutions, ready to be deployed, will be made available to any type of users, including public authorities, providing public services, or private sector, including those working in

[204] Staff Working Document on Common European Data Spaces

		security sensitive areas (energy, mobility, some security sensitive manufacturing sectors), or areas with an impact on public order (e.g. healthcare, food supply chain, internal security & law enforcement) therefore the highest level of trust and security of the TEF process and output must be ensured.
2.3.1.2	Apply AI: GenAI for the Public Administration	Provided in chapter 2.3.1.2, in the context of the application of Article 12(6) restrictions
2.3.3.1.	Deployment of cutting-edge multi-modal AI-based solutions in medical imaging	Provided in chapter 2.3.2.1, in the context of the application of Article 12(6) restrictions
2.3.3.2.	Virtual Human Twins and Artificial Intelligence in health	Provided in chapter 2.3.3.2, in the context of the application of Article 12(6) restrictions.
2.3.3.3	Apply AI: Piloting AI-based image screening in medical centres	Provided in chapter 2.3.3.3, in the context of the application of Article 12(6) restrictions
2.3.2	Virtual worlds test beds	Virtual Worlds test beds represent strategic assets of the Union and its MS. It is necessary to protect the integrity of this digital infrastructure, given that each test bed will cover critical sectors of the European economy and society, will investigate and provide support on legal and ethical issues and will explore the possibility to support the creation of regulatory sandboxes around the envisaged facilities.
2.4	Destination Earth	Destination Earth is a flagship initiative of the Union and will play a role in anticipating environmental disasters, adapting to climate change, improving our urban development, renewable energy management, agriculture planning etc. It is essential to preserve the integrity and security of this digital infrastructure.
3.1	EU Cybersecurity Reserve	Provided in chapter 3.1, in the context of the future application of security restrictions
3.2	Cyber Resilience Act reporting platform	Provided in chapter 3.2, in the context of the application of Article 12(5) restrictions
3.3	Cyber Situation and Analysis Centre	Provided in chapter 3.3, in the context of the application of Article 12(5) restrictions
5.1.1.1	European Digital Identity and Trust EcoSystem	The European Digital Identity and Trust EcoSystem represents a strategic asset of the Union and its MS. It is necessary to protect the integrity, security and trust in this infrastructure given the important use cases piloted and the use of personal data.
5.1.6	Building capacity to deploy the EEHRxF and digital health services and systems to support the rights of	The European Electronic Health Records and digital health services and systems handle sensitive personal data. It is essential to protect the integrity and security of this

	citizens and reuse of health data under EHDS	digital infrastructure and to preserve the trust in the management, access and use of health data in Europe, to support the rights of citizens and the principles of the European Health Data Space initiative.

9.5 Appendix 5: The initial list of areas of activity for Multi-Country projects, as per Path to the Digital Decade Policy Programme Annex

Non-exhaustive areas of activity:

(a) European common data infrastructure and services;

(b) Endowing the Union with the next generation of low-power trusted processors;

(c) Developing the pan-European deployment of 5G corridors;

(d) Acquiring supercomputers and quantum computers, connected with the EuroHPC;

(e) Developing and deploying an ultra-secure quantum and space-based communication infrastructures;

(f) Deploying a network of security operations centres;

(g) Connected public administration;

(h) European blockchain services infrastructure;

(i) European digital innovation hubs;

(j) High-tech partnerships for digital skills through the Pact for Skills;

(k) Skills and training in cybersecurity;

(l) Other projects which meet all the criteria of Article 12 of this Decision and which become necessary to the achievement of the objectives of the Digital Decade policy programme over time due to emerging social, economic or environmental developments.

9.6 Appendix 6: State Aid

Disclaimer: This annex constitutes non-exhaustive guidance regarding co-financing of DIGITAL funded projects, focusing on key issues to pay attention to, by Member States, when carrying out the State aid assessment of Member States' support for such projects. It is the responsibility of the Member States to design State aid measures which are compatible with Union's State aid rules, including the GBER, when the latter is applicable.

Granting authorities should collaborate closely with national authorities/contact points dealing with State aid matters when designing measures on the basis of which State aid would be granted to the competence centres and their users.

General considerations

The Digital Europe Programme (DIGITAL) supports several actions: some are implemented by means of multiannual work programmes under direct management by the European Commission and a supportive Executive Agency while others are under indirect management by Joint Undertakings and Competence Centres.

DIGITAL foresees cooperation with Member States in achieving its objectives. This cooperation includes joint funding of DIGITAL financing with national co-funding in the form of own budgetary resources and funds under shared management. In this respect, most actions in the Digital Europe Programme require co-investments from Member States and/or the private sector. The modes of these co-investments are described in the relevant parts of the various work programmes.

If the financing of the project involves State resources (budgetary resources from Member States or EU funds under shared management), on top of DEP/private funding, there is a need to assess whether it constitutes State aid falling within the scope of Article 107(1) TFEU. Funding in full compliance with the general **de minimis regulation**[205] or fulfilling other conditions could exclude the presence of aid (e.g. Member States acting as market operators, support provided for non-economic activities[206]).

In those cases where the assessment confirms that the financing constitutes State aid, its compatibility with the TFEU will have to be ensured. In many cases, Member State funding constituting State aid may still fall under the **General Block Exemption Regulation (GBER**). State aid which complies with the general and specific conditions of the GBER does not need to be notified to the Commission prior to its implementation. It is the responsibility of the Member State to ensure that such block exempted State aid is implemented in compliance with the GBER. If State aid is not covered by the GBER, Member States must submit a notification pursuant to Article 108(3) TFEU to the Commission and State aid cannot be granted by the Member State before the Commission adopts its decision.

Any State aid relevant questions should be addressed to the national authorities or contact points dealing with State aid matters who, besides already being able to provide the additional guidance that is sought, if necessary, can address interpretation questions to DG Competition on the dedicated eState aid Wiki platform or, in especially challenging situations, could initiate a direct contact with the services of DG Competition

The purpose of this Annex is to facilitate the State aid assessment of Member States' co-financing of

[205] Commission Regulation (EU) 2023/2831 of 13 December 2023 on the application of Articles 107 and 108 of the Treaty on the Functioning of the European Union to de minimis aid, *OJ L, 2023/2831, 15.12.2023*

[206] For further guidance on the existence of State aid please refer to Commission Notice on the notion of State aid as referred to in Article 107 (10) of the Treaty on the Functioning of the European Union

DIGITAL actions. It is without prejudice to Union's legislation and authoritative guidance.

State aid rules applicable to Member States' contribution: de minimis Regulation

The 'de minimis' Regulation is ideal for smaller grants to undertakings (in particular to SMEs) and does not require a notification pursuant to article 108 TFEU.

- Measures that fulfil the criteria of the de minimis Regulation do not constitute "State aid" within the meaning of Article 107(1) TFEU and therefore do not need to be notified to the Commission for approval before they are implemented.

- Member States need to verify that the amount of the '**de minimis aid'** provided to a beneficiary does not exceed the ceiling of **EUR 300 000** per Member State per undertaking **over any period of 3 years**.

- Member States will have to register 'de minimis aid' in a central register set at national or EU level as of 1 January 2026.

'De-minimis aid' has been identified, based on the feedback received from the European Digital Innovation hubs, as the most frequently chosen support instrument, due to the rather straightforward implementation.

State aid rules applicable to Member States' contribution: GBER

- When implementing support under the GBER, **Member States need to ensure compliance** with general and relevant specific provisions of GBER. For example, Member States need to verify that the beneficiary is not an undertaking in difficulty.

- When GBER applies to aid granted to an SME, Member States need to verify that the criteria laid down in Annex I of the GBER are fulfilled. As a way of facilitation, it can be confirmed on the basis of a **self-declaration**. Midcaps or large enterprises are not always eligible for support under GBER. When they are excluded, they may still be able to receive aid upon the Commission's clearance (following the notification procedure pursuant to Article 108(3) TFEU) based on the applicable State aid instrument (for example, Framework for State aid for research and development and innovation)[207] or be supported under the de minimis Regulation.

- Where passing on of the State aid is required (for example where all/some State aid granted initially to an aid beneficiary is fully passed on to the users of an EDIH or competence centre), detailed accounting records need to be kept by the aid beneficiary to account for the State aid it has received and for fully transferring it to the users.

It must be demonstrated that the aid has an incentive effect.

- In order to be compatible with the internal market, aid to facilitate an economic activity must have an incentive effect. The rationale of the incentive effect test is to ensure that the aid is given to projects/activities which the beneficiary would not undertake at all or carry out on a reduced scale without the State aid support. Article 6 GBER states "*aid shall be considered to have an incentive effect if the beneficiary has submitted a written application for the aid to the Member State concerned before work on the project or activity starts*". For ad hoc aid to large undertakings, further documentary evidence needs to be provided. It is the Member State's

[207] C(2022) 7388 final of 19.10.2022

responsibility to ensure compliance with all the conditions listed in Article 6 GBER.

DIGITAL Funding is centrally managed EU funding and thus not State aid, but in case of cofinancing with State aid eligible costs, State aid cumulation rules need to be respected.

- Public funding awarded under the DIGITAL programme is considered as Union funding centrally managed by the EU Commission that is not directly or indirectly under the control of the Member State. Although not constituting State aid, when combined with State aid to cover the same eligible costs, Union funding needs to be taken into consideration in the application of the aid cumulation rules. According to Article 8(2) GBER: "*Where Union funding centrally managed by the institutions, agencies, joint undertakings or other bodies of the Union that is not directly or indirectly under the control of the Member State is combined with State aid, only the latter shall be considered for determining whether notification thresholds and maximum aid intensities or maximum aid amounts are respected, provided that the total amount of public funding granted in relation to the same eligible costs does not exceed the most favourable funding rate laid down in the applicable rules of Union law*."

- Thus, cumulation rules set out in Article 8(2) GBER apply to State aid combined with DIGITAL funding for the same eligible costs. In line with Article 8(2) GBER the total amount of public funding granted in relation to the same eligible costs **cannot exceed the most favourable funding rate** laid down in the applicable rules of Union law.

  However, it needs to be acknowledged that DIGITAL could finance costs that are not eligible under State aid rules. These non-eligible costs (i.e. costs which are not eligible under State aid rules) shall **not** be taken into account in the State aid assessment applicable to State resources used by Member States to fund projects.

- **In line with Article 8(2) GBER,** Member States will verify at project level that the combined DIGITAL and national support for **State aid eligible costs** does not exceed the most preferential funding rate (as set in the DIGITAL Regulation and DIGITAL Work Programme).

Member States need to ensure that State aid granted for the eligible project/activity respects the compatibility criteria set out in the applicable GBER provisions (such as aid intensity). If the State aid exceeds the notification threshold set out in Article 4 GBER, such State aid would need to be notified to the Commission.

The State aid assessment is done at the level of the single project.

- Support for a project from multiple public sources (e.g. from DIGITAL, ERDF, RRF funds) will continue to be treated as support for one single project. Thus, Member States will check compliance with State aid rules at the level of the whole project.

There can be different/several levels of State aid beneficiaries of public funding.

For example, in the case of European Digital Innovation Hubs or competence centres, there could be State aid granted to the legal entity (or the consortium of legal entities) that owns, sets up and operates the hub or the competence centre and, on the other hand, there could be State aid to the SMEs when they use the services provided by the hubs or the competence centres at reduced fees or for free.

It is the responsibility of the Member State to identify the aid beneficiary and the applicable compatibility basis, as well as respect the applicable State aid procedure.

Specific cases of support under GBER

The measures identified below can be potentially relevant for DEP. Member States are reminded to comply with the compatibility conditions laid down for the specific category of the aid and the common provisions of the GBER. The following sections highlight some of the main elements of the aid measures.

Support to SMEs

In the context of the DIGITAL, support provided to SMEs in the form of reduced access fees to services or "*for free*", could be granted on the basis of Article 28 GBER (Innovation aid for SMEs) or Article 25 GBER (Aid for research and development projects)[208] or Article 22 GBER (Aid for start-ups).

Investment aid for testing and experimentation infrastructures (Art 26a GBER)

Some of the DIGITAL actions may be compatible with the definition of 'testing and experimentation infrastructures' in Article 2(98a) GBER. Testing and experimentation infrastructures are defined as "*facilities, equipment, capabilities and resources, such as test beds, pilot lines, demonstrators, testing facilities or living labs, and related support services that are used predominantly by undertakings, especially SMEs, which seek support for testing and experimentation, in order to develop new or improved products, processes and services, and to test and upscale technologies, to advance through industrial research and experimental development*."

Investment aid for testing and experimentation infrastructures under Article 26a GBER must meet the following State aid compatibility criteria (among others):

- The supported costs are investment costs in tangible and intangible assets;
- Access must be granted to several users on open, transparent and non- discriminatory terms;
- Access must be provided on market terms (the price charged for the operation or use of the infrastructure shall correspond to a market price or reflect their costs plus a reasonable margin in the absence of a market price);

Aid for innovation clusters (Art 27 GBER)

Some of the DIGITAL actions may be compatible with the definition of 'innovation clusters' in Article 2(92) GBER. 'Innovation clusters' are defined as "*structures or organised groups of independent parties (such as innovative start-ups, small, medium and large enterprises, as well as research and knowledge dissemination organisations, research infrastructures, testing and experimentation infrastructures, Digital Innovation Hubs, non-for-profit organisations and other related economic actors) designed to stimulate innovative activity and new ways of collaboration, such as by digital means, by sharing and/or promoting the sharing of facilities and exchange of knowledge, and expertise and by contributing effectively to knowledge transfer, networking, information dissemination and collaboration among the undertakings and other organisations in the cluster.* Digital Innovation Hubs, including European Digital Innovation Hubs funded under the centrally managed Digital Europe Programme established by Regulation (EU) 2021/694 of the European Parliament and of the Council[209], are entities whose aim is to stimulate the broad uptake of digital technologies, such as artificial intelligence, cloud, edge and high-performance computing and cybersecurity, by industry (in particular by SMEs) and public sector organisations. Digital Innovation Hubs may qualify as an innovation cluster by themselves for the purpose of this Regulation".

Investment aid can be granted to the owner of the innovation cluster. Operating aid can be granted for

[208] Article 25 GBER is applicable if the SME uses the service provided as an input for an eligible R&D project.

[209] Regulation (EU) 2021/694 of the European Parliament and of the Council of 29 April 2021 establishing the Digital Europe Programme and repealing Decision (EU) 2015/2240 (OJ L 166, 11.5.2021, p. 1)

personnel and administrative costs to the operator of the innovation cluster. The operator, when different from the owner, can either have a legal personality or be a consortium of undertakings without a separate legal personality. In all instances separate accounting for the costs and revenues of each activity (ownership, operation and use of the cluster) has to be kept according to the applicable accounting standards by each undertaking.

According to Article 4(1)(k) GBER, the maximum State aid, covering both investment and operating aid, which can be granted under the Article 27 GBER, is EUR 10 million per innovation cluster (operating aid shall not exceed 10 years).

Innovation aid for SMEs (Art 28 GBER)

Some of the DIGITAL funded projects (i.e. European Digital Innovation Hubs, AI competence centres) will be set up to serve their customers. They should be open to a wide range of users and access to them, and their services needs to be granted on a transparent and non-discriminatory basis and on market terms, or on a cost-plus-reasonable-margin basis for large undertakings. In general, access to such services at reduced prices or access *"for free"* (even if it is granted to SMEs) is considered to be State aid. However, such State aid may be compatible with the internal market if the conditions set out, for example, in Article 28 GBER are fulfilled.

Such DIGITAL funded projects (i.e. European Digital Innovation Hubs, AI competence centres) set up to serve their customers should, in their proposal, draw up an indicative price list for all their services, based on market prices, if these exist. If these do not exist, they should be based on the costs incurred by the competence centre in providing these services, plus a reasonable margin. Such a price list needs to be published in a transparent manner (for example published on the competence centre's website) to be accessible to any interested user. The price list would apply to all stakeholders, but only large enterprises and other entities pursuing an economic activity (such as Research organisations carrying out economic activities) would need to pay according to the price list. The reduction of the prices for entities pursuing non-economic activities or SMEs, has to be made public as well, similarly to the prices charged on market terms. The relevant call text (or the accompanying Q&A) should indicate that the proposal must include the methods to calculate the market price used in the price list and/or the cost of the services, so that external experts can evaluate its validity and appropriateness.

Article 28(2) GBER specifies that innovation aid for SMEs may cover the following costs:

- costs for obtaining, validating and defending patents and other intangible assets;

- costs for secondment of highly qualified personnel from a research and knowledge-dissemination organisation or a large enterprise, working on research, development and innovation activities in a newly created function within the beneficiary and not replacing other personnel;

- costs for innovation advisory and support services, including those services provided by research and knowledge dissemination organisations, research infrastructures, testing and experimentation infrastructures or innovation clusters. These concepts are defined in Article 2 (94) and (95) GBER:

    - 'innovation advisory services' means consultancy, assistance or training in the fields of knowledge transfer, acquisition, protection or exploitation of intangible assets or the use of standards and regulations embedding them, as well as consultancy, assistance or training on the introduction or use of innovative technologies and solutions (including digital technologies and solutions);

- ‘innovation support services’ means the provision of office space, data banks, cloud and data storage services, libraries, market research, laboratories, quality labelling, testing, experimentation and certification or other related services, including those services provided by research and knowledge dissemination organisations, research infrastructures, testing and experimentation infrastructures or innovation clusters, for the purpose of developing more effective or technologically advanced products, processes or services, including the implementation of innovative technologies and solutions (including digital technologies and solutions).

Article 28 (3) GBER states that “the aid intensity shall not exceed 50% of the eligible costs”. In addition, Article 28(4) GBER provides for an alternative: “In the particular case of aid for innovation advisory and support services the aid intensity can be increased up to 100 % of the eligible costs provided that the total amount of aid for innovation advisory and support services does not exceed EUR 220 000 per undertaking within any 3-year period.” On this basis, any SME would be allowed to use the above services/functions for free or at a reduced price up to 50% of the applicable market fee or to a maximum aid amount of EUR 220 000 over three years where the reduction covers the whole price (whereby the State aid to the SME would correspond to the price discount offered to it).

9.7 Appendix 7: Abbreviations and Acronyms

Abbreviation/ Acronym	Definition
1+MG	1+Million Genomes initiative
AI	Artificial Intelligence
AML	Anti-money laundering
AMLA	Anti-Money Laundering Authority
API	Application Programming Interface
B2B	Business-to-Business
B2C	Business-to-Customer
B2G	Business-to-Government
BIK	Better Internet for Kids
BORIS	Beneficial Ownership Registers Interconnection System
BRIS	Business Registers Interconnection System
C2C	Customer-to-Customer
CAP	Common Agricultural Policy
CEF	Connecting Europe Facility
CERT-EU	Computer Emergency Response Team for EU institutions, bodies and agencies
Chips JU	Chips Joint Undertaking
CSA	Coordination and Support Action grant
CSAM	Child sexual abuse material
CSIRT	Computer Security Incident Response Team
CSRs	Country-specific recommendations
CTI	Cyber Threat Intelligence
D&E	Dissemination and exploitation
DCAT-AP	Data Catalogue Vocabulary Application profile for data portals in Europe
DDPP	Digital Decade policy programme
DestinE	Destination Earth
DG CONNECT	Directorate-General for Communications Networks, Content and Technology
DGA	Data Governance Act
DIGITAL	Digital Europe Programme

DMA	Digital Markets Act
DSA	Digital Services Act
DSSC	Data Spaces Support Centre
DTA	Digital Transformation Accelerator
DTTI	Deep Tech Talent Initiative
ECCC	European Cybersecurity Competence Centre
ECMWF	European Centre for Medium-Range Weather Forecasts
ECP	European Central Platform
ECTS	European Credit Transfer and Accumulation System
EDIB	European Data Innovation Board
EDICs	European Digital Infrastructure Consortia
EDIHs	European Digital Innovation Hubs
EDMO	European Digital Media Observatory
EEA	European Economic Area
EEA/EFTA	European Economic Area and European Free Trade Association (Iceland, Liechtenstein, and Norway)
EEAP	European electronic access point
JUDEX	Justice Digital Exchange System
EEHRxF	European Electronic exchange Format
EEN	Enterprise Europe Network
EFTA	European Free Trade Association
EHDS	European Health Data Space
EIB	European Investment Bank
eID	European Digital Identity
eIDAS	Electronic Identification, Authentication and trust Services
EIF	European Investment Fund
EIO	European Investigation Order
EIP-AGRI	European Innovation Partnership Agricultural Productivity and Sustainability
ENISA	European Union Agency for Cybersecurity
ERDF	European Regional Development Fund
ERIC	European Research Infrastructure Consortia
ERPD	European Registry of Protected Data in the Public Sector

ESA	European Space Agency
ESF+	European Social Fund Plus
EU DTO	European Digital Twin of the Ocean
EUIBAs	EU institutions, bodies and agencies
eu-LISA	European Union Agency for the Operational Management of Large-Scale IT Systems in the Area of Freedom, Security and Justice
EUMETSAT	European Organisation for the Exploitation of Meteorological Satellites
EuroHPC JU	The European High Performance Computing Joint Undertaking
FPA	Framework Partnership Agreement
FSTP	Financial Support for Third Parties
GBER	General Block Exemption Regulation
GDI	Genomic Data Infrastructure
GDP	Gross Domestic Product
GDPR	General Data Protection Regulation
GenAI	Generative Artificial Intelligence
HaDEA	European Health and Digital Executive Agency
HDABs	Health Data Access Bodies
HPC	High Performance Computing
ICT	Information and Communications Technology
ICU	Intensive Care Unit
IoT	Internet of Things
IP	Intellectual Property
IPCEI	Important Projects of Common European Interest
IPCEI-CIS	Important Project of Common European Interest on Next Generation Cloud and Edge Infrastructure and Services
ISCED	International Standard Classification of Education
JITs CP	Joint Investigation Teams Collaboration Platform
JRC	Joint Research Centre
JU	Joint Undertaking
KPI	Key Performance Indicator
LLMs	Large language models
MCPs	Multi-Country Projects
MDR	Medical Device Regulation

ML	Machine Learning
MLA	Mutual Legal Assistance
MOOCs	Massive Open Online Courses
MS	Member State
MVP	Minimum viable product
NCC	National Coordination Centre
NCPs	National Contact Points
NGOs	Non-governmental organisations
NIS Directive	Directive on Security of Network and Information Systems
NIS2 Directive	Revised NIS Directive
NLP	Natural Language Processing
ODR	Online dispute resolution
OOTS	Once Only Technical System
OSPO	Open source programme offices
PPDS	Public Procurement Data Space
SDGR	Single Digital Gateway Regulation
SEMIC	Semantic interoperability community
SGA	Specific Grant Agreements
SIC	Safer Internet Centre
SICs	Network of Safer Internet Centres
SMEs	Small and Medium-sized Enterprises
SO	Specific Objective
SOC	Security Operation Centre
STEM	Science, Technology, Engineering & Mathematics
STEP	Strategic Technologies for Europe Platform
TDDs	Technical Design Documents
TEFs	Testing and Experimentation Facilities
TESTA	Trans-European Services for Telematics between Administrations
TFEU	Treaty on the Functioning of the European Union
TRL	Technology Readiness Level
VAT	Value Added Tax
VET	Vocational and Educational Training
VHT	Virtual human twin
VIS	Visa Information System

WP	Work Programme
XR	Extended reality