

## Overview of synergies Digital Europe/Horizon Europe/CEF Digital support to Multi-country projects - updated

Multi-country-projects	Activities and Budget under EU Programme		
	Digital Europe WP 2023-2024 – actions in 2023 <sup>1</sup>	Horizon Europe WP 2023-2024	CEF Digital WP 2021-2027
<b>European Common data infrastructure and services</b>	2.1.1 Cloud IPCEI Exploitation Office  DIGITAL-2023-CLOUD-AI-04-IPCEI-EXPLOIT (CSA: 3 M€)	HORIZON-CL4-2023-DATA-01-02: Integration of data life cycle, architectures and standards for complex data cycles and/or human factors, language (AI, data and robotics partnership) (RIA: 45 M€)	4.2 Backbone networks for pan-European Cloud federation  CEF-DIG-2022-TA-PLATFORMS. Preparation of works for Operational digital platforms. (CEF-PJG CEF Project Grants: 4 M€)
	2.1.2 Highly Secure Collaborative Platform for Aeronautics and Security Industry  DIGITAL-2023-CLOUD-AI-04-AEROSSEC (SG: 22 M€)	HORIZON-CL4-2023-DATA-01-04: Cognitive Computing Continuum: Intelligence and automation for more efficient data processing (AI, data and robotics partnership) (RIA: 28 M€)	
	2.2.1.1 Data Space for Cultural Heritage  DIGITAL-2023-CLOUD-DATA-AI-05-CULTHERITAGE (Simple Grant: 4 M€)	HORIZON-CL4-2023-DATA-01-06: Coordination and Support of Cognitive Computing Continuum research and policy (CSA: 2 M€)	
	2.2.1.2 Data Space for Tourism  DIGITAL-2023-CLOUD-DATA-AI-05-DATATOURISM (Simple Grant: 8 M€)	HORIZON-CL4-2024-DATA-01-01: AI-driven data operations and compliance technologies (AI, data and robotics partnership) (Innovation Action: 38 M€)	
	2.2.1.3 Language Data Space (Procurement: 5 M€)	HORIZON-CL4-2024-DATA-01-03: Piloting emerging Smart IoT Platforms and decentralized intelligence (IA:45 M€)	
		HORIZON-CL4-2024-DATA-01-05: Platform Building, standardisation and Up-scaling of the	

<sup>1</sup> Only actions for 2023 have been considered regarding Digital Europe Programme.

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	Digital Europe WP 2023-2024 – actions in 2023 <sup>1</sup>	Horizon Europe WP 2023-2024	CEF Digital WP 2021-2027
	<p>2.2.1.4.1 Federated European Infrastructure for Intensive Care Units' (ICU) data</p> <p>DIGITAL-2023-CLOUD-AI-04-ICU-DATA (Simple Grant: 5 M€)</p> <p>2.2.2 Digital Product Passport</p> <p>DIGITAL-2023-CLOUD-DATA-04-DIGIPASS (SG: 6 M€)</p> <p>2.2.3.1 Open Data Portal (Procurement: 6 M€)</p> <p>2.2.3.2 The European Single Access Point (ESAP) for EU capital markets (Procurement: 3 M€)</p> <p>5.4 EU Energy Saving Reference Framework</p> <p>DIGITAL-2023-DEPLOY-BESTUSE-TECH-04-ENERSAVING - EU Energy saving reference framework (SG: 5 M€)</p>	<p>'Cloud-Edge-IoT' Solutions (Horizontal Activities – CSA: 2 M€)</p> <p>HORIZON-CL4-2024-DIGITAL-EMERGING-01-21: Open Source for Cloud/Edge to support European Digital Autonomy (RIA: 20 M€)</p> <p>HORIZON-CL4-2024-TWIN-TRANSITION-01-05: Technologies/solutions to support circularity for manufacturing (Made in Europe Partnership) (RIA: 36 M€)</p> <p>HORIZON-CL4-2024-TWIN-TRANSITION-01-38: Hubs for circularity for industrialised urban peripheral areas (Processes4Planet partnership) (IA: 40 M€)</p> <p>HORIZON-CL4-2023-RESILIENCE-01-39: Coordination and knowledge sharing across materials development communities (CSA: 2 M€)</p> <p>KDT JU Coordination of the European software-defined vehicle platform (CSA) -HORIZON-KDT-JU-2023-3-CSA-Topic-3 , (Horizontal Activities – CSA: 2 M€)</p> <p>HORIZON-HLTH-2023-DISEASE-03-06: Towards structuring brain health research in Europe (CSA: 1 M€)</p>	

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	Digital Europe WP 2023-2024 – actions in 2023 <sup>1</sup>	Horizon Europe WP 2023-2024	CEF Digital WP 2021-2027
		<p>HORIZON-HLTH-2023-TOOL-05-09: Developing a Data Quality and Utility Label for the European Health Data Space (CSA: 4 M€)</p> <p>HORIZON-HLTH-2023-IND-06-02: Expanding the European Electronic Health Record Exchange Format to improve interoperability within the European Health Data Space (RIA: 8 M€)</p> <p>HORIZON-CL2-2023-HERITAGE-ECCCH-01-01: A European Collaborative Cloud for Cultural Heritage (IA: 25 M€)</p> <p>HORIZON-CL2-2023-HERITAGE-ECCCH-01-02: A European Collaborative Cloud for Cultural Heritage – Innovative tools for digitising cultural heritage objects (RIA: 10 M€)</p> <p>HORIZON-CL5-2023-D3-01-15: Supporting the green and digital transformation of the energy ecosystem and enhancing its resilience through the development and piloting of AI-IoT Edge-cloud and platform solutions (IA: 18 M€)</p> <p>HORIZON-CL6-2024-BIODIV-01-2: Digital for nature (IA: 16 M€)</p> <p>HORIZON-CL6-2023-GOVERNANCE-01-17: Data-driven solutions to foster industry’s contribution to inclusive and sustainable food systems (RIA: 8 M€)</p>	

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	Digital Europe WP 2023-2024 – actions in 2023 <sup>1</sup>	Horizon Europe WP 2023-2024	CEF Digital WP 2021-2027
		<p>HORIZON-INFRA-2024-EOSC-01-01: FAIR and open data sharing in support of the mission adaptation to climate change (RIA: 16 M€)</p> <p>HORIZON-INFRA-2023-EOSC-01-04: Next generation services for operational and sustainable EOSC Core Infrastructure (RIA: 10 M€)</p> <p>HORIZON-INFRA-2023-EOSC-01-05: EOSC Architecture and Interoperability Framework (CSA: 3 M€)</p> <p>HORIZON-INFRA-2023-EOSC-01-06: Trusted environments for sensitive data management in EOSC (RIA: 15 M€)</p> <p>HORIZON-INFRA-2024-EOSC-01-05: Innovative and customizable services for EOSC Exchange (28 M€)</p>	
	TOTAL WP 2023-24: 67 M€	Total 2023-24: 422 M€	TOTAL WP 2021-23: 26 M€
<b>Secure quantum and space-based communication infrastructure (EuroQCI)</b>	N/A	<p>HORIZON-CL4-2023-SPACE-01-62: Quantum Communication Technologies for space systems (RIA: 5 M€)</p> <p>ESA.2 2023-2024 Secure Connectivity/GOVSATCOM Space infrastructure:</p>	4.1 Quantum communication infrastructure - The EuroQCI initiative

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	Digital Europe WP 2023-2024 – actions in 2023 <sup>1</sup>	Horizon Europe WP 2023-2024	CEF Digital WP 2021-2027
		Development and Validation (CA: 28 M€ for EuroQCI)	
	N/A	Total 2023-24: 33 M€	Total 2021-27: 90 M€
<b>Genomics</b>	2.2.1.4.2 Genome of Europe DIGITAL-2023-CLOUD-AI-04-GENOME (Simple Grant: 20 M€)	HORIZON-HLTH-2023-TOOL-05-04: Better integration and use of health-related real-world and research data, including genomics, for improved clinical outcomes (RIA: 35 M€)	N/A
	TOTAL WP 2023-24: 20 M€	Total 2023-24: 35 M€	N/A
<b>CitiVerse</b>	2.3.2 Developing CitiVerse DIGITAL-2023-CLOUD-AI-04-DEVELOPCITI (SG: 15 M€)	HORIZON-MISS-2023-CIT-02-01: Associating Ukrainian cities to the Climate-neutral and smart cities Mission (CSA: 5 M€)  HORIZON-CL6-2024-BIODIV-02-2-two-stage: Demonstrating the potential of Naturebased Solutions and the New European Bauhaus to contribute to sustainable, inclusive and resilient living spaces and communities (IA: 10 M€)  HORIZON-MISS-2023-CLIMA-CITIES-01-01: Urban greening and re-naturing for urban regeneration, resilience and climate neutrality (IA: 40 M€)	N/A

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	Digital Europe WP 2023-2024 – actions in 2023 <sup>1</sup>	Horizon Europe WP 2023-2024	CEF Digital WP 2021-2027
		<p>HORIZON-CL5-2024-D4-01-02: Smart grid-ready buildings (IA: 10 M€)</p> <p>HORIZON-CL6-2024-CircBio-01-1: Circular Cities and Regions Initiative’s project development assistance (CCRI-PDA) (CSA: 6 M€)</p>	
	TOTAL WP 2023-24: 15 M€	Total 2023-24: 71 M€	N/A
<b>Processors and semiconductors chips</b>	<p>DEP contribution to Chips JU<sup>2</sup>: 756 M€ in 2023-24</p> <p>4.2 Reinforcing Skills in semiconductors</p> <p>DIGITAL-2023-SKILLS-04-SEMICONDUCTORS (SG: 10 M€)<sup>3</sup></p>	<p>HORIZON-CL4-2023-DIGITAL-EMERGING-01-11: Low TRL research in microelectronics and integration technologies for industrial solutions (RIA: 35 M€)</p> <p>HORIZON-CL4-2023-DIGITAL-EMERGING-01-40: Quantum Photonic Integrated Circuit technologies (RIA: 12 M€)</p> <p>HORIZON-CL4-2023-DIGITAL-EMERGING-01-41: Investing in alternative quantum computation and simulation platform technologies (RIA: 20 M€)</p>	N/A

<sup>2</sup> The DEP contribution to the Chips Joint Undertaking includes capacity building activities on a design platform, pilot lines, quantum chips and associated semiconductor technologies, and competence centres. The contribution to “processors and semiconductors chips” is part of the overall DEP contribution

<sup>3</sup> This action also contributes to the “High-tech partnerships for digital skills and specialized education” MCP; its corresponding budget has only been considered in the High-tech partnerships for digital skills and specialized education section, to avoid double representation in the total budget.

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	Digital Europe WP 2023-2024 – actions in 2023 <sup>1</sup>	Horizon Europe WP 2023-2024	CEF Digital WP 2021-2027
		<p>HORIZON-CL4-2023-DIGITAL-EMERGING-01-43: Framework Partnership Agreement for developing large-scale quantum Computing platform technologies (FPA)</p> <p>HORIZON-CL4-2023-DIGITAL-EMERGING-01-51: Pervasive photonics – multi-technology integration for digital infrastructure, sensors, and internet of things (RIA: 18 M€)</p> <p>HORIZON-CL4-2023-DIGITAL-EMERGING-01-57: Advanced imaging and sensing technologies (IA: 20 M€)</p> <p>HORIZON-CL4-2024-DIGITAL-EMERGING-01-21: Open Source for Cloud/Edge to support European Digital Autonomy (RIA: 20 M€)<sup>4</sup></p> <p>HORIZON-CL4-2024-DIGITAL-EMERGING-01-31: Pilot line(s) for 2D materials-based devices (RIA: 33 M€)</p> <p>HORIZON-CL4-2024-DIGITAL-EMERGING-01-54: Smart photonics for joint communication &amp; sensing and access everywhere (RIA: 18 M€)</p>	

<sup>4</sup> This action also contributes to the “European Common data infrastructure and services” MCP; its corresponding budget has only been considered in the European Common data infrastructure and services section, to avoid double representation in the total budget.

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	Digital Europe WP 2023-2024 – actions in 2023 <sup>1</sup>	Horizon Europe WP 2023-2024	CEF Digital WP 2021-2027
		Horizon Europe contribution to KDT JU and Chips JU <sup>5</sup> : 877 M€ in 2023-2024	
	TOTAL WP 2023-24: 759 M€	Total 2023-24: 1033 M€	N/A
<b>Connected public administration</b>	5.2.1.1 European Digital Identity and Trust Ecosystem (Standards and Sample Implementation) (Procurement: 20 M€)  5.2.1.2 Support to the implementation of the Once Only Technical System under the Single Digital Gateway Regulation (Procurement: 7.5 M€)  5.2.1.3 eProcurement and eInvoicing (Procurement: 3 M€)  5.2.2 Interoperable Europe - Interoperability for the public sector (Procurement: 21.5 M€)	HORIZON-CL2-2024-DEMOCRACY-01-07: Digital democracy (RIA: 9 M€)  HORIZON-CL3-2023-CS-01-02: Privacy-preserving and identity management technologies (IA: 15.7 M€)	N/A
	TOTAL WP 2023-24: 52 M€	Total 2023-24: 24.7 M€	N/A

<sup>5</sup> The HE contribution to the Chips JU (and its predecessor the KDT JU) includes research and innovation activities on advanced design capacities, pilot lines, quantum chips and associated semiconductor technologies, competence centres, and R&I activities not covered under the Chips for Europe Initiative. The contribution to “processors and semiconductors chips” is part of the overall HE contribution.



Multi-country-projects	Activities and Budget under EU Programme		
	Digital Europe WP 2023-2024 – actions in 2023 <sup>1</sup>	Horizon Europe WP 2023-2024	CEF Digital WP 2021-2027
<b>European Blockchain Services Infrastructure</b>	5.1 Blockchain (Procurement 10 M€)	Although not directly contributing to the development of EBSI, multiple actions under HE encourage the deployment of innovative blockchain technologies in areas such as corruption prevention and detection (CL 2), energy sharing (CL 5), forest monitoring, value chain circularity in tourism, manufacturing, waste management and recycling (CL 6), sensitive data management (INFRA).	N/A
	TOTAL WP 2023-24: 10 M€	-	N/A
<b>High-tech partnerships for digital skills and specialized education</b>	<p>4.1 Specialised Education Programmes in Key Capacity Areas</p> <p>DIGITAL-2023-SKILLS-05-SPECIALLEDU (LumpSum: 30 M€)</p> <p>DIGITAL-2023-SKILLS-05-SPECIAL-PROGEDU (CSA: 2 M€)</p> <p>4.2 Reinforcing Skills in semiconductors</p> <p>DIGITAL-2023-SKILLS-04-SEMICONDUCTORS (SG: 10 M€)</p> <p>4.3 Cybersecurity Skills Academy (SG: 10 M€)</p>	<p>HORIZON-CL4-2023-DIGITAL-EMERGING-01-56: Photonic Strategies and Skills Development (Photonics Partnership) – Type 2 fostering careers in photonics (CSA: 1 M€)</p> <p>HORIZON-CL4-2023-HUMAN-01-54: Green and digital skills and training needs for a just transition (CSA: 2.4 M€)</p>	N/A

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	Digital Europe WP 2023-2024 – actions in 2023 <sup>1</sup>	Horizon Europe WP 2023-2024	CEF Digital WP 2021-2027
	<p>4.4 Boosting digital skills of young people, in particular girls</p> <p>DIGITAL-2023-SKILLS-04-BOOSTINGDIGIT (CSA: 6 M€)</p>		
	TOTAL WP 2023-24: 58 M€	Total 2023-24: 3.4 M€	N/A
<b>Supercomputing and Quantum</b>	<p>EuroHPC WP – Infrastructure actions:</p> <ul style="list-style-type: none"> <li>• 2nd Exascale system procurement (WP23: 300 M€)</li> <li>• Access IT Platform (WP 23: 600 K€)</li> <li>• 2nd Quantum CFEI (Capex +Opex) (WP23: 20 M€)</li> <li>• Industrial HPC CFEI (WP23: 12.2 M€)</li> </ul>	<p>HORIZON-CL4-2023-DIGITAL-EMERGING-01-43: Framework Partnership Agreement for developing large-scale quantum Computing platform technologies (FPA)</p> <p>HORIZON-CL4-2023-DIGITAL-EMERGING-01-41: Investing in alternative quantum computation and simulation platform technologies (RIA: 20 M€)</p> <p>HORIZON-CL4-2024-DIGITAL-EMERGING-01-42: Stimulating transnational research and development of next generation quantum technologies, including basic theories and components (Cascading grant with FSTP: 15 M€)</p> <p>EuroHPC WP – Technology &amp; application actions:</p> <ul style="list-style-type: none"> <li>• Experimental Platform for European Technology (PCP) (WP23: 24 M€)</li> </ul>	4.4 Terabit connectivity for High Performance Computing – <i>implemented through EuroHPC JU</i>

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	Digital Europe WP 2023-2024 – actions in 2023 <sup>1</sup>	Horizon Europe WP 2023-2024	CEF Digital WP 2021-2027
		<ul style="list-style-type: none"> <li>• HPC Energy efficiency R&amp;I Call (WP23: 29 M€)</li> <li>• Interconnect technologies (Innovation Action) (WP23: 30 M€)</li> <li>• HPC Centres of Excellence (2nd call) (WP23: 20 M€)</li> <li>• Quantum Excellence Centres (WP23: 10 M€)</li> <li>• Quantum application prizes (WP23: 300 K€)</li> </ul>	
	Total 2023: 332.8 M€	Total 2023-24: 148.3 M€	Total 2021-23: 200 M€
5G deployment	N/A	<p>HORIZON-CL4-2023-HUMAN-01-65: Support facility for digital standardisation and international cooperation in digital partnerships (CSA: 1.5 M€)</p> <p>HORIZON-CL4-2023-HUMAN-01-66: Promoting EU standards globally (CSA: 2.5 M€)</p>	<p>3.1 5G coverage along transport corridors (WP 21-23) (229,6 M€)</p> <p>5.6 5G Strategic Deployment Agenda coordination (WP 21-23) (1 M€)</p>
	N/A	Total 2023-24: 4 M€	Total WP 2021-23: 230,6 M€
European Digital Innovation Hubs	(EDIH WP 2021-2023)	N/A	N/A

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	Digital Europe WP 2023-2024 – actions in 2023 <sup>1</sup>	Horizon Europe WP 2023-2024	CEF Digital WP 2021-2027
	<p>1.1 Expression of Interest to designate candidate European Digital Innovation Hubs</p> <p>1.2 Initial Network of European Digital Innovation Hubs (SG: 321.2 M€)</p> <p>1.3 Digital transformation accelerator (4 M€)</p>		
	TOTAL WP 2023-24: 325,2 M€	N/A	N/A
<b>Security Operations Centres</b>	<p>(CS WP 23-24)</p> <p>1.1.1 National SOCs (Joint procurement with Member States: 35 M€ and SG: 15 M€)</p> <p>1.1.2 Cross-Border SOC Platforms (Joint procurement with Member States: 20 M€ and SG: 10 M€)</p> <p>1.1.3 Strengthening the SOC ecosystem (CSA: 4 M€)</p>	N/A	N/A
	Total WP 2023-24: 84 M€	N/A	N/A