

# HORIZON EUROPE - Overview of the Topics 2026-2027

## Work Programme Cluster 4 "Digital, Industry and Space"



According to the Work Programme: 2025-12-11

Destination 1: Leadership in materials and production for Europe			
CALL: INDUSTRY	Opening	Deadline	Type of Action
<b>Sustainable Advanced Materials, Raw Materials and Chemicals</b>			
<u>HORIZON-CL4-2026-02-MAT-PROD-21-two-stage: Development of safe and sustainable alternatives to substances of concern</u>	16.12.2025	17.03.2026 13.10.2026	IA
<u>HORIZON-CL4-2027-01-MAT-PROD-22: Innovative advanced materials and new production processes – reducing dependencies on Critical and Strategic Raw Materials (IA) (Innovative Advanced Materials for the EU and Processes4Planet</u>	22.09.2026	02.02.2027	IA
<u>HORIZON-CL4-2026-01-MAT-PROD-23: Accelerating the discovery and development of chemicals and innovative advanced materials through digitalisation and artificial intelligence (IA) (Innovative Advanced Materials for the EU partnership)</u>	06.01.2026	21.04.2026	IA
<u>HORIZON-CL4-2026-01-MAT-PROD-24: Cooperation on innovative advanced materials with Japan</u>	06.01.2026	21.04.2026	CSA
<b>Fast-tracking Circularity</b>			
<u>HORIZON-CL4-2026-01-MAT-PROD-01: Advanced manufacturing for key products (IA) (Made in Europe partnership)</u>	06.01.2026	21.04.2026	IA
<u>HORIZON-CL4-2027-01-MAT-PROD-02: Advanced manufacturing for key products (IA) (Made in Europe partnership)</u>	22.09.2026	02.02.2027	IA
<u>HORIZON-CL4-2027-01-MAT-PROD-03: Factory processes and automation for de- and re-manufacturing (RIA) (Made in Europe partnership)</u>	22.09.2026	02.02.2027	RIA
<u>HORIZON-CL4-2026-01-MAT-PROD-04: Optimise the usage of resources in a circular economy (RIA) (Processes4Planet and Clean Steel partnerships)</u>	06.01.2026	21.04.2026	RIA
<u>HORIZON-CL4-2026-01-MAT-PROD-05: Circular innovative advanced materials: facilitating the transition from design to markets (RIA) (Innovative Advanced Materials for the EU and Made in Europe partnerships)</u>	06.01.2026	21.04.2026	RIA
<u>HORIZON-CL4-2027-01-MAT-PROD-06: Circular innovative advanced materials: facilitating the transition from design to markets (RIA) (Innovative Advanced Materials for the EU and Made in Europe partnerships)</u>	22.09.2026	02.02.2027	RIA
<u>HORIZON-CL4-2027-01-MAT-PROD-08: Textile circularity through advanced processing and manufacturing technologies and system approaches (IA) (Textiles for the Future partnership)</u>	22.09.2026	02.02.2027	IA
<b>Disruptive technologies for carbon capture and clean energy use</b>			
<u>HORIZON-CL4-2026-01-MAT-PROD-31: Efficient capture / purification / utilisation of CO2 for the production of competitive products (RIA) (Processes4Planet partnership)</u>	06.01.2026	21.04.2026	RIA
<u>HORIZON-CL4-2027-02-MAT-PROD-32-two-stage: Efficient energy input from renewable sources and energy management in the process industries (IA) (Processes4Planet and Innovative Advanced Materials for the EU partnerships)</u>	22.09.2026	02.02.2027 02.09.2027	RIA

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<b>Technology infrastructure, knowledge valorisation and support for scaleups and startups</b>			
<u>HORIZON-CL4-2026-01-MAT-PROD-41: Enhancing industry-academia knowledge exchange in Social Sciences and Humanities (SSH)</u>	06.01.2026	21.04.2026	CSA
<u>HORIZON-CL4-2027-01-MAT-PROD-42: Unlocking the potential of academic intellectual assets for industry, SMEs and startups</u>	22.09.2026	02.02.2027	CSA
<u>HORIZON-CL4-2027-01-MAT-PROD-61: Fast Track to Research and Innovation for breakthroughs in industrial technologies</u>	22.09.2026	02.02.2027	RIA
<u>HORIZON-CL4-2027-01-MAT-PROD-62: Fast Track to Innovation for breakthroughs in the Chemical Industry Action Plan</u>	22.09.2026	02.02.2027	RIA
<u>HORIZON-CL4-2026-01-MAT-PROD-44: Attracting management talent for capacity building for Technology Infrastructures staff members</u>	06.01.2026	21.04.2026	CSA
<u>HORIZON-CL4-2026-01-MAT-PROD-45: Pilot access schemes to Technology Infrastructures for European startups, scaleups and innovative SMEs</u>	06.01.2026	21.04.2026	CSA
<u>HORIZON-CL4-2026-01-MAT-PROD-46: Mapping and service finder for Technology Infrastructures</u>	06.01.2026	21.04.2026	CSA
<u>HORIZON-CL4-2027-01-MAT-PROD-47: Pilot access schemes to Technology Infrastructures for European startups, scaleups and innovative SMEs</u>	22.09.2026	02.02.2027	CSA
<u>HORIZON-CL4-2026-01-MAT-PROD-48: 'Proof of market' to improve valorisation and commercialisation of Horizon generated R&amp;I results</u>	06.01.2026	21.04.2026	IA
<u>HORIZON-CL4-2027-01-MAT-PROD-49: 'Proof of market' to improve valorisation and commercialisation of Horizon generated R&amp;I results</u>	22.09.2026	02.02.2027	IA
<b>Raw Materials</b>			
<u>HORIZON-CL4-2026-01-MAT-PROD-11: Innovative technologies and tools for exploration and data modelling of raw materials</u>	06.01.2026	21.04.2026	RIA
<u>HORIZON-CL4-2026-01-MAT-PROD-12: Technologies for innovative extraction of critical raw materials</u>	06.01.2026	21.04.2026	RIA
<u>HORIZON-CL4-2026-01-MAT-PROD-13: Monitoring of secondary raw materials</u>	06.01.2026	21.04.2026	CSA
<u>HORIZON-CL4-2026-01-MAT-PROD-14: Improving availability of secondary raw materials through recycling</u>	06.01.2026	21.04.2026	IA
<u>HORIZON-CL4-2027-01-MAT-PROD-16: Technologies for innovative processing of raw materials</u>	22.09.2026	02.02.2027	IA
<u>HORIZON-CL4-2027-01-MAT-PROD-17: Expert network on Critical raw materials</u>	22.09.2026	02.02.2027	CSA
<b>Innovative Advanced Materials-based Technologies</b>			
<u>HORIZON-CL4-2026-05-MAT-PROD-25: New or enhanced Innovative Advanced Materials (IAM) enabled sensing functionality</u>	15.01.2026	15.04.2026	RIA

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<b>Destination 2: Developing an agile and secure single market and infrastructure for data-services and trustworthy artificial intelligence services</b>			
<b>CALL: DATA</b>	<b>Opening</b>	<b>Deadline</b>	<b>Type of Action</b>
<b>Telco-Edge-Cloud continuum/ 3C Network (Connected Collaborative Computing) and Open Internet Stack</b>			
<u>HORIZON-CL4-2027-04-DATA-08: Demand-side 3C pilot demonstrators on converged Telco Edge Cloud Infrastructure</u>	17.11.2026	18.03.2027	IA
<u>HORIZON-CL4-2026-04-DATA-02: Open Internet Stack Sovereign Solutions</u>	15.01.2026	15.04.2026	RIA
<u>HORIZON-CL4-2026-04-DATA-03: Open Internet Stack Support for Scale</u>	15.01.2026	15.04.2026	CSA
<b>Achieving the end-to-end AI compute continuum</b>			
<u>HORIZON-CL4-2027-04-DATA-03: New approaches for decentralized, federated and sustainable AI data processing</u>	17.11.2026	18.03.2027	RIA
<u>HORIZON-CL4-2027-04-DATA-09: Energy efficiency and sustainability of AI data processing in Data Centres</u>	17.11.2026	18.03.2027	IA
<b>Data (under AI, Data and Robotics partnership)</b>			
<u>HORIZON-CL4-2026-04-DATA-06: Efficient and compliant access to and use of data (IA) (AI, Data and Robotics partnership)</u>	15.01.2026	15.04.2026	IA

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Destination 3: Achieving open strategic autonomy in digital and emerging enabling technologies			
CALL: DIGITAL	Opening	Deadline	Type of Action
<b>AI Continent</b>			
<u>HORIZON-CL4-2026-04-DIGITAL-EMERGING-01: Apply AI: Pilot of the "Science for AI" Pillar of RAISE ("Resource for AI science in Europe")</u>	15.01.2026	15.04.2026	RIA
<u>HORIZON-CL4-2027-04-DIGITAL-EMERGING-11: EU Frontier AI Initiative: Developing frontier AI solutions that are safe and computationally efficient within Apply AI</u>	17.11.2026	18.03.2027	RIA
<b>Apply AI</b>			
<u>HORIZON-CL4-2026-05-DIGITAL-EMERGING-02: Next-Generation AI Agents for Real-World Applications in the Apply AI sectors (RIA) (Partnership in AI, Data and Robotics)</u>	15.01.2026	15.04.2026	RIA
<u>HORIZON-CL4-2027-04-DIGITAL-EMERGING-04: Apply AI: Challenge-Driven AI Innovation Booster in Apply AI prioritised sectors (RIA) (Partnership in AI, Data and Robotics)</u>	17.11.2026	18.03.2027	RIA
<u>HORIZON-CL4-2026-04-DIGITAL-EMERGING-19: Challenge-Driven GenAI4EU Booster in Apply AI prioritised sectors (RIA) (AI/Data/Robotics Partnership)</u>	15.01.2026	15.04.2026	RIA
<b>Robotics</b>			
<u>HORIZON-CL4-2026-05-DIGITAL-EMERGING-03: Apply AI: Next-Generation Agile and Intelligent Robotics Platforms for Industrial and Service Applications (Partnership in AI, Data and Robotics)</u>	15.01.2026	15.04.2026	RIA
<u>HORIZON-CL4-2027-04-DIGITAL-EMERGING-05: Apply AI: AI-Driven Robotics for Industry: Enabling System Integration and Adoption (IA) (Partnership in AI, Data and Robotics)</u>	17.11.2026	18.03.2027	IA
<u>HORIZON-CL4-2026-04-DIGITAL-EMERGING-08: Apply AI: Robotics for Manufacturing: Advancing Core Skills through Technical Challenges (RIA) (Partnership in AI, Data and Robotics)</u>	15.01.2026	15.04.2026	RIA
<b>AI4GOOD</b>			
<u>HORIZON-CL4-2026-04-DIGITAL-EMERGING-09: Advanced Local Digital Twins using AI for Early Warning and Preparedness</u>	15.01.2026	15.04.2026	IA
<u>HORIZON-CL4-2027-04-DIGITAL-EMERGING-06: International cooperation in AI</u>	17.11.2026	18.03.2027	IA

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<b>Quantum</b>			
<u>HORIZON-CL4-2026-04-DIGITAL-EMERGING-11: Grand Challenge on Quantum Sensors for Inertial Navigation</u>	15.01.2026	15.04.2026	CSA
<u>HORIZON-CL4-2026-04-DIGITAL-EMERGING-12: Standards for Quantum Technologies – Coordination and Support Action</u>	15.01.2026	15.04.2026	CSA
<u>HORIZON-CL4-2026-04-DIGITAL-EMERGING-18: Large-Scale Photonic Quantum Computing Platform Technologies</u>	15.01.2026	15.04.2026	RIA
<b>Photonics</b>			
<u>HORIZON-CL4-2027-05-DIGITAL-EMERGING-03: Advanced integrated photonic devices for extended features and ultra-low power consumption (RIA) (Photonics Partnership)</u>	17.11.2026	18.03.2027	RIA
<u>HORIZON-CL4-2026-04-DIGITAL-EMERGING-14: Networking and Future Photonics Strategy (CSA) (Photonics Partnership)</u>	15.01.2026	15.04.2026	CSA
<b>Semiconductors</b>			
<u>HORIZON-CL4-2026-04-DIGITAL-EMERGING-15: Strengthening the cooperation of semiconductor-intensive EU regions</u>	15.01.2026	15.04.2026	CSA
<b>Other emerging technologies</b>			
<u>HORIZON-CL4-2027-04-DIGITAL-EMERGING-10: Horizon scanning and foresight in future enabling digital technologies</u>	17.11.2026	18.03.2027	CSA
<u>HORIZON-CL4-2026-04-DIGITAL-EMERGING-17: Fostering 2-Dimensional Materials (2DM) based emerging and enabling technologies</u>	15.01.2026	15.04.2026	CSA
<b>AI for manufacturing and energy-intensive industries</b>			
<u>HORIZON-CL4-2026-02-DIGITAL-EMERGING-51-two-stage: AI improved advanced manufacturing and production processes in factories (RIA) (Made in Europe and AI, Data and Robotics partnerships)</u>	16.12.2025	17.03.2026 13.10.2026	RIA
<u>HORIZON-CL4-2027-02-DIGITAL-EMERGING-52-two-stage: New approaches for Human/AI collaboration for the workforce of the future (RIA) (Made in Europe and AI, Data and Robotics partnerships)</u>	22.09.2026	02.02.2027 02.09.2027	RIA
<u>HORIZON-CL4-2026-02-DIGITAL-EMERGING-53-two-stage: Innovative AI methods and technologies for the process industries (RIA) (Processes4Planet and AI, Data and Robotics partnerships)</u>	16.12.2025	17.03.2026 13.10.2026	RIA

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### Work Programme Cluster 4 "Digital, Industry and Space"



<b>Destination 4: Open Strategic Autonomy in Developing, Deploying and Using Global Space-Based Infrastructure, Services, Applications and Data</b>			
<b>CALL: SPACE</b>	<b>Opening</b>	<b>Deadline</b>	<b>Type of Action</b>
<b>Accessing Space</b>			
<u>HORIZON-CL4-2026-SPACE-03-11: Reinforcing EU autonomous access to space through EU-based spaceports</u>	10.03.2026	03.09.2026	IA
<u>HORIZON-CL4-2027-SPACE-03-12: Digital solutions for autonomy for space transportation systems, design and simulation tools - Digital enablers and building blocks (Space Partnership)</u>	09.03.2027	02.09.2027	IA
<b>Acting in Space</b>			
<u>HORIZON-CL4-2027-SPACE-03-21: ISOS4I Pilot Mission Integrated Ground Test and consolidation of space-compatible USI solutions</u>	09.03.2027	02.09.2027	RIA
<b>Using Space on Earth - Telecommunications</b>			
<b>Using Space on Earth - Telecommunications and Earth Observation</b>			
<u>HORIZON-CL4-2026-SPACE-03-31: Digital enablers and building-blocks for Earth Observation and Satellite telecommunication for Space solutions (Space Partnership)</u>	10.03.2026	03.09.2026	RIA
<u>HORIZON-CL4-2026-SPACE-03-32: Preparing demonstration missions for Earth Observation and Satellite telecommunication for Space solutions (Space Partnership)</u>	10.03.2026	03.09.2026	IA
<u>HORIZON-CL4-2027-SPACE-03-33: Digital enablers and building blocks for collaborative Earth Observation and Satellite telecommunications for Space solutions (Space Partnership)</u>	09.03.2027	02.09.2027	RIA
<u>HORIZON-CL4-2027-SPACE-03-34: Preparing demonstration missions for collaborative Earth Observation and Satellite telecommunication for Space solutions (Space Partnership)</u>	09.03.2027	02.09.2027	IA
<b>Using Space on Earth - Satellite navigation</b>			
<b>Space sciences and exploration</b>			
<u>HORIZON-CL4-2026-SPACE-03-61: Scientific analysis and exploitation of space data</u>	10.03.2026	03.09.2026	RIA

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### Work Programme Cluster 4 "Digital, Industry and Space"



<b>Monitoring Space</b>			
<b>Boosting Space through EU non-dependence for critical space technologies</b>			
<u>HORIZON-CL4-2026-SPACE-03-81: Space critical EEE components for EU non-dependence – Radiation Hard FPGA on 7nm</u>	10.03.2026	03.09.2026	RIA
<u>HORIZON-CL4-2026-SPACE-03-82: Space critical EEE components for EU non-dependence – GaN MMICs mm-Wave Foundations (Phase A): Development and Industrialization of Semi-insulating SiC Substrate Capabilities</u>	10.03.2026	03.09.2026	RIA
<u>HORIZON-CL4-2026-SPACE-03-85: Critical Facilities Serving Space EEE components for EU non-dependence – High and Very High Energy Irradiation Test Facility Market Deployment</u>	10.03.2026	03.09.2026	IA
<u>HORIZON-CL4-2026-SPACE-03-86: Space critical Equipment for EU non-dependence – Space Refuelling Interface</u>	10.03.2026	03.09.2026	RIA
<u>HORIZON-CL4-2027-SPACE-03-83: Space critical EEE components for EU non-dependence</u>	09.03.2027	02.09.2027	RIA
<u>HORIZON-CL4-2027-SPACE-03-84: Space critical equipment for EU non-dependence</u>	09.03.2027	02.09.2027	RIA
<b>Boosting Space through innovative space technologies</b>			
<u>HORIZON-CL4-2027-SPACE-03-71: Quantum Space Gravimetry topic</u>	09.03.2027	02.09.2027	RIA
<b>Boosting Space through IOD/IOV opportunities</b>			
<b>Boosting Space through support to entrepreneurship</b>			
<b>Boosting Space through support to the Space Act and cybersecuritys</b>			

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### Work Programme Cluster 4 "Digital, Industry and Space"



Destination 5: Digital and industrial technologies driving human-centric innovation			
CALL: HUMAN	Opening	Deadline	Type of Action
<b>Virtual Worlds – Web 4.0 (Partnership)</b>			
<u>HORIZON-CL4-2026-04-HUMAN-01: Developing and demonstrating core technologies for Virtual Worlds and Web 4.0 (IA) (Virtual worlds Partnership)</u>	15.01.2026	15.04.2026	IA
<u>HORIZON-CL4-2026-04-HUMAN-02: Web 4.0 architectural framework and Open Internet Stack applications for virtual worlds</u>	15.01.2026	15.04.2026	RIA
<u>HORIZON-CL4-2027-04-HUMAN-01: Advanced and Innovative hardware components for Virtual Worlds (RIA) (Virtual Worlds Partnership)</u>	17.11.2026	18.03.2027	RIA
<u>HORIZON-CL4-2027-04-HUMAN-02: Create a thriving and competitive Virtual Worlds and Web 4.0 ecosystem (CSA) (Virtual Worlds Partnership)</u>	17.11.2026	18.03.2027	CSA
<b>STANDARDISATION – INTERNATIONAL</b>			
<u>HORIZON-CL4-2027-04-HUMAN-07: Facilitate the engagement of European stakeholders in international digital standardisation</u>	17.11.2026	18.03.2027	CSA

<b>Key:</b>
RIA: Research and Innovation Action
IA: Innovation Action
CSA: Coordination and Support Action