

## Horizon 2021 - Calls 2021-2022 im Programmteil Gesellschaftliche Herausforderungen 1 "Digital, Industry and Space"

	Topic identifier	Topic title	Type of action	Deadline	Deadline Model	Estimated budget per project in million	Total budget in million	Jahr	Bemerkungen
<b>Destination – Climate neutral, circular and digitised production</b>									
<b>Call - TWIN GREEN AND DIGITAL TRANSITION 2021</b>									
	HORIZON-CL4-2021-TWIN-TRANSITION 01-01	<a href="#">AI enhanced robotics systems for smart manufacturing (AI, Data and Robotics - Made in Europe Partnerships) (IA)</a>	IA	23. Sep 21	single-stage	8-10	28	2021	
	HORIZON-CL4-2021-TWIN-TRANSITION 01-02	<a href="#">Zero-defect manufacturing towards zero-waste (Made in Europe Partnership) (IA)</a>	IA	23. Sep 21	single-stage	8-10	27	2021	
	HORIZON-CL4-2021-TWIN-TRANSITION 01-03	<a href="#">Laser-based technologies for green manufacturing (Photonics - Made in Europe Partnerships) (RIA)</a>	RIA	23. Sep 21	single-stage	5-7	26	2021	
	HORIZON-CL4-2021-TWIN-TRANSITION 01-05	<a href="#">Manufacturing technologies for bio-based materials (Made in Europe Partnership) (RIA)</a>	RIA	23. Sep 21	single-stage	4-6	20	2021	
	HORIZON-CL4-2021-TWIN-TRANSITION 01-07	<a href="#">Artificial Intelligence for sustainable, agile manufacturing (AI, Data and Robotics - Made in Europe Partnerships) (IA)</a>	IA	23. Sep 21	single-stage	4-6	18	2021	
	HORIZON-CL4-2021-TWIN-TRANSITION 01-08	<a href="#">Data-driven Distributed Industrial Environments (Made in Europe Partnership) (IA)</a>	IA	23. Sep 21	single-stage	4-8	24	2021	
	HORIZON-CL4-2021-TWIN-TRANSITION 01-10	<a href="#">Digital permits and compliance checks for buildings and infrastructure (IA)</a>	IA	23. Sep 21	single-stage	5	15	2021	
	HORIZON-CL4-2021-TWIN-TRANSITION 01-11	<a href="#">Automated tools for the valorisation of construction waste (RIA)</a>	RIA	23. Sep 21	single-stage	6-10	21	2021	
	HORIZON-CL4-2021-TWIN-TRANSITION 01-12	<a href="#">Breakthrough technologies supporting technological sovereignty in construction (RIA)</a>	RIA	23. Sep 21	single-stage	8-10	24	2021	
	HORIZON-CL4-2021-TWIN-TRANSITION 01-14	<a href="#">Deploying industrial-urban symbiosis solutions for the utilization of energy, water, industrial waste and by-products at regional scale (Processes4Planet Partnership) (RIA)</a>	RIA	23. Sep 21	single-stage	8-12	28	2021	
	HORIZON-CL4-2021-TWIN-TRANSITION 01-16	<a href="#">Hubs for Circularity European Community of Practice (ECOP) platform (Processes4Planet Partnership) (CSA)</a>	CSA	23. Sep 21	single-stage	2	2	2021	
	HORIZON-CL4-2021-TWIN-TRANSITION 01-17	<a href="#">Plastic waste as a circular carbon feedstock for industry (Processes4Planet Partnership) (IA)</a>	IA	23. Sep 21	single-stage	12-18	39	2021	
	HORIZON-CL4-2021-TWIN-TRANSITION 01-18	<a href="#">Carbon Direct Avoidance in steel: Electricity and hydrogen-based metallurgy (Clean Steel Partnership) (IA)</a>	IA	23. Sep 21	single-stage	6-8	28	2021	
	HORIZON-CL4-2021-TWIN-TRANSITION 01-19	<a href="#">Improvement of the yield of the iron and steel making (Clean Steel Partnership) (IA)</a>	IA	23. Sep 21	single-stage	4-5	14	2021	
	HORIZON-CL4-2021-TWIN-TRANSITION 01-20	<a href="#">Reducing environmental footprint, improving circularity in extractive and processing value chains (IA)</a>	IA	23. Sep 21	single-stage	12	36	2021	
	HORIZON-CL4-2021-TWIN-TRANSITION 01-21	<a href="#">Design and optimisation of energy flexible industrial processes (Processes4Planet Partnership) (IA)</a>	IA	23. Sep 21	single-stage	12-18	39	2021	
	HORIZON-CL4-2021-TWIN-TRANSITION 01-22	<a href="#">Adjustment of Steel process production to prepare for the transition towards climate neutrality (Clean Steel Partnership) (IA)</a>	IA	23. Sep 21	single-stage	4-5	14	2021	
<b>Call - CLIMATE NEUTRAL, CIRCULAR AND DIGITISED PRODUCTION 2022</b>									
	HORIZON-CL4-2022-TWIN-TRANSITION 01-01	<a href="#">Rapid reconfigurable production process chains (Made in Europe Partnership) (IA)</a>	IA	30. Mar 22	single-stage	8-10	27,5	2022	

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	HORIZON-CL4-2022-TWIN-TRANSITION 01-02	<a href="#">Products with complex functional surfaces (Made in Europe Partnership) (RIA)</a>	RIA	30. Mar 22	single-stage	4-6	21,5	2022
	HORIZON-CL4-2022-TWIN-TRANSITION 01-03	<a href="#">Excellence in distributed control and modular manufacturing (Made in Europe Partnership) (RIA)</a>	RIA	30. Mar 22	single-stage	4-6	21,5	2022
	HORIZON-CL4-2022-TWIN-TRANSITION 01-04	<a href="#">Intelligent work piece handling in a full production line (Made in Europe Partnership) (RIA)</a>	RIA	30. Mar 22	single-stage	4-6	21,5	2022
	HORIZON-CL4-2022-TWIN-TRANSITION 01-06	<a href="#">ICT Innovation for Manufacturing Sustainability in SMEs (I4MS2) (Made in Europe Partnership) (IA)</a>	IA	30. Mar 22	single-stage	4-8	30	2022
	HORIZON-CL4-2022-TWIN-TRANSITION 01-07	<a href="#">Digital tools to support the engineering of a Circular Economy (Made in Europe Partnership) (RIA)</a>	RIA	30. Mar 22	single-stage	3-6	22	2022
	HORIZON-CL4-2022-TWIN-TRANSITION 01-09	<a href="#">Demonstrate the use of Digital Logbook for buildings (IA)</a>	IA	30. Mar 22	single-stage	4,5	9	2022
	HORIZON-CL4-2022-TWIN-TRANSITION 01-10	<a href="#">Circular flows for solid waste in urban environment (Processes4Planet Partnership) (IA)</a>	IA	30. Mar 22	single-stage	12-18	42,5	2022
	HORIZON-CL4-2022-TWIN-TRANSITION 01-11	<a href="#">Valorisation of CO/CO2 streams into added-value products of market interest (Processes4Planet Partnership) (IA)</a>	IA	30. Mar 22	single-stage	12-18	42,5	2022
	HORIZON-CL4-2022-TWIN-TRANSITION 01-13	<a href="#">Raw material preparation for clean steel production (Clean Steel Partnership) (IA)</a>	IA	30. Mar 22	single-stage	4-5	14	2022
	HORIZON-CL4-2022-TWIN-TRANSITION 01-15	<a href="#">New electrochemical conversion routes for the production of chemicals and materials in process industries (Processes4Planet Partnership) (RIA)</a>	RIA	30. Mar 22	single-stage	8-12	30	2022
<b>DESTINATION – INCREASED AUTONOMY IN KEY STRATEGIC VALUE CHAINS FOR RESILIENT INDUSTRY</b>								
Call - Resilient Infrastructure Call - A DIGITISED, RESOURCE-EFFICIENT AND RESILIENT INDUSTRY 2021								
	HORIZON-CL4-2021-RESILIENCE-01-01	<a href="#">Ensuring circularity of composite materials (Processes4Planet Partnership) (RIA)</a>	RIA	23. Sep 21	single-stage	8-9	24,7	2021
	HORIZON-CL4-2021-RESILIENCE-01-03	<a href="#">Identifying future availability of secondary raw materials (RIA)</a>	RIA	23. Sep 21	single-stage	13,5	13,5	2021
	HORIZON-CL4-2021-RESILIENCE-01-04	<a href="#">Developing climate-neutral and circular raw materials (IA)</a>	IA	23. Sep 21	single-stage	12	36	2021
	HORIZON-CL4-2021-RESILIENCE-01-05	<a href="#">Building EU-Africa partnerships on sustainable raw materials value chains (CSA)</a>	CSA	23. Sep 21	single-stage	8	8	2021
	HORIZON-CL4-2021-RESILIENCE-01-06	<a href="#">Innovation for responsible EU sourcing of primary raw materials, the foundation of the Green Deal (RIA)</a>	RIA	23. Sep 21	single-stage	7,5	30	2021
	HORIZON-CL4-2021-RESILIENCE-01-07	<a href="#">Building innovative value chains from raw materials to sustainable products (IA)</a>	IA	23. Sep 21	single-stage	12	36	2021
	HORIZON-CL4-2021-RESILIENCE-01-08	<a href="#">Establishing EU led international community on safe- and sustainable-by-design materials to support embedding sustainability criteria over the life cycle of products and processes (CSA)</a>	CSA	23. Sep 21	single-stage	3-4	4	2021
	HORIZON-CL4-2021-RESILIENCE-01-09	<a href="#">Promote Europe's availability, affordability, sustainability and security of supply of essential chemicals and materials (IA)</a>	IA	23. Sep 21	single-stage	7-10	28	2021
	HORIZON-CL4-2021-RESILIENCE-01-10	<a href="#">Paving the way to an increased share of recycled plastics in added value products (RIA)</a>	RIA	23. Sep 21	single-stage	5-7	23	2021
	HORIZON-CL4-2021-RESILIENCE-01-11	<a href="#">Safe- and sustainable-by-design polymeric materials (RIA)</a>	RIA	23. Sep 21	single-stage	4-5	19	2021
	HORIZON-CL4-2021-RESILIENCE-01-12	<a href="#">Safe- and sustainable-by-design metallic coatings and engineered surfaces (RIA)</a>	RIA	23. Sep 21	single-stage	4-5	19	2021
	HORIZON-CL4-2021-RESILIENCE-01-14	<a href="#">Development of more energy efficient electrically heated catalytic reactors (IA)</a>	IA	23. Sep 21	single-stage	7-10	33	2021
	HORIZON-CL4-2021-RESILIENCE-01-16	<a href="#">Creation of an innovation community for solar fuels and chemicals (CSA)</a>	CSA	23. Sep 21	single-stage	3-4	4	2021
	HORIZON-CL4-2021-RESILIENCE-01-17	<a href="#">Advanced materials for hydrogen storage (RIA)</a>	RIA	23. Sep 21	single-stage	4-6	21	2021

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	HORIZON-CL4-2021-RESILIENCE-01-20	<a href="#">Antimicrobial, Antiviral, and Antifungal Nanocoatings (RIA)</a>	RIA	23. Sep 21	single-stage	4-6	23	2021
	HORIZON-CL4-2021-RESILIENCE-01-25	<a href="#">Biomaterials database for Health Applications (CSA)</a>	CSA	23. Sep 21	single-stage	2-4	6	2021
	HORIZON-CL4-2021-RESILIENCE-01-26	<a href="#">Sustainable Industry Commons (RIA)</a>	RIA	23. Sep 21	single-stage	2-4	6	2021
	HORIZON-CL4-2021-RESILIENCE-01-27	<a href="#">Innovation Radar, Tech Due Diligence and Venture Building for strategic digital technologies (CSA)</a>	CSA	23. Sep 21	single-stage	2,5-4	4	2021
	HORIZON-CL4-2021-RESILIENCE-01-28	<a href="#">Re-opening industrial sites preparatory action – Promoting a sustainable strategy for Europe’s industrial future (CSA)</a>	CSA	23. Sep 21	single-stage	1	2	2021
	HORIZON-CL4-2021-RESILIENCE-01-29	<a href="#">Innovate to transform' support for SME's sustainability transition (CSA)</a>	CSA	23. Sep 21	single-stage	5	10	2021
	HORIZON-CL4-2021-RESILIENCE-01-31	<a href="#">European Technological and Social Innovation Factory (RIA)</a>	RIA	23. Sep 21	single-stage	3-5	5	2021
Call - A DIGITISED, RESOURCE-EFFICIENT AND RESILIENT INDUSTRY 2021								
	HORIZON-CL4-2021-RESILIENCE-02-32	<a href="#">Social and affordable housing district demonstrator (IA)</a>	RIA	25. Jan 22	single-stage	2,5	10	2022
Call - A DIGITISED, RESOURCE-EFFICIENT AND RESILIENT INDUSTRY 2022								
	HORIZON-CL4-2022-RESILIENCE-01-01	<a href="#">Circular and low emission value chains through digitalisation (Processes4Planet Partnership) (RIA)</a>	RIA	30. Mar 22	single-stage	6-8	25,3	2022
	HORIZON-CL4-2022-RESILIENCE-01-02	<a href="#">Monitoring and supervising system for exploration and future exploitation activities in the deep sea (RIA)</a>	RIA	30. Mar 22	single-stage	14	14	2022
	HORIZON-CL4-2022-RESILIENCE-01-03	<a href="#">Streamlining cross-sectoral policy framework throughout the extractive life-cycle in environmentally protected areas (CSA)</a>	CSA	30. Mar 22	single-stage	2,4	2,4	2022
	HORIZON-CL4-2022-RESILIENCE-01-04	<a href="#">Developing digital platforms for the small scale extractive industry (IA)</a>	IA	30. Mar 22	single-stage	5	15	2022
	HORIZON-CL4-2022-RESILIENCE-01-05	<a href="#">Technological solutions for tracking raw material flows in complex supply chains (RIA)</a>	RIA	30. Mar 22	single-stage	13,5	13,5	2022
	HORIZON-CL4-2022-RESILIENCE-01-06	<a href="#">Sustainable and innovative mine of the future (IA)</a>	IA	30. Mar 22	single-stage	12	36	2022
	HORIZON-CL4-2022-RESILIENCE-01-07	<a href="#">Innovative solutions for efficient use and enhanced recovery of mineral and metal by-products from processing of raw materials (IA)</a>	IA	30. Mar 22	single-stage	12	36	2022
	HORIZON-CL4-2022-RESILIENCE-01-08	<a href="#">Earth observation technologies for the mining life cycle in support of EU autonomy and transition to a climate-neutral economy (RIA)</a>	RIA	30. Mar 22	single-stage	4,5	13,5	2022
	HORIZON-CL4-2022-RESILIENCE-01-10	<a href="#">Innovative materials for advanced (nano)electronic components and systems (RIA)</a>	RIA	30. Mar 22	single-stage	3-5	20	2022
	HORIZON-CL4-2022-RESILIENCE-01-11	<a href="#">Advanced lightweight materials for energy efficient structures (RIA)</a>	RIA	30. Mar 22	single-stage	3-5	20	2022
	HORIZON-CL4-2022-RESILIENCE-01-12	<a href="#">Functional multi-material components and structures (RIA)</a>	RIA	30. Mar 22	single-stage	4-6	20	2022
	HORIZON-CL4-2022-RESILIENCE-01-13	<a href="#">Smart and multifunctional biomaterials for health innovations (RIA)</a>	RIA	30. Mar 22	single-stage	3-5	20	2022
	HORIZON-CL4-2022-RESILIENCE-01-14	<a href="#">Membranes for gas separations - membrane distillation (IA)</a>	IA	30. Mar 22	single-stage	6-8	21	2022
	HORIZON-CL4-2022-RESILIENCE-01-16	<a href="#">Building and renovating by exploiting advanced materials for energy and resources efficient management (IA)</a>	IA	30. Mar 22	single-stage	5-7	21	2022
	HORIZON-CL4-2022-RESILIENCE-01-19	<a href="#">Advanced materials modelling and characterisation (RIA)</a>	RIA	30. Mar 22	single-stage	4-6	18	2022
	HORIZON-CL4-2022-RESILIENCE-01-20	<a href="#">Climate Neutral and Circular Innovative Materials Technologies Open Innovation Test Beds (IA)</a>	IA	30. Mar 22	single-stage	10-12	34	2022
	HORIZON-CL4-2022-RESILIENCE-01-21	<a href="#">Leveraging standardisation in Digital Technologies (CSA)</a>	CSA	30. Mar 22	single-stage	4,5	4,5	2022
	HORIZON-CL4-2022-RESILIENCE-01-23	<a href="#">Safe- and sustainable-by-design organic and hybrid coatings (RIA)</a>	RIA	30. Mar 22	single-stage	3-5	20	2022

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	HORIZON-CL4-2022-RESILIENCE-01-24	<a href="#">Novel materials for supercapacitor energy storage (RIA)</a>	RIA	30. Mar 22	single-stage	4-6	23	2022	
	HORIZON-CL4-2022-RESILIENCE-01-25	<a href="#">Optimised Industrial Systems and Lines through digitalisation (IA)</a>	IA	30. Mar 22	single-stage	4-5	15	2022	
	HORIZON-CL4-2022-RESILIENCE-01-26	<a href="#">Innovate to transform' support for SME's sustainability transition (CSA)</a>	CSA	30. Mar 22	single-stage	5	10	2022	
Call - A DIGITISED, RESOURCE-EFFICIENT AND RESILIENT INDUSTRY 2021 (PCP)									
	HORIZON-CL4-2022-RESILIENCE-02-01-PCP	<a href="#">Boosting green economic recovery and open strategic autonomy in Strategic Digital Technologies through pre-commercial procurement (PCP action)</a>	PCP	30. Mar 22	single-stage	9	9	2022	
<b>DESTINATION – WORLD LEADING DATA AND COMPUTING TECHNOLOGIES</b>									
Call - WORLD LEADING DATA AND COMPUTING TECHNOLOGIES 2021									
	HORIZON-CL4-2021-DATA-01-01	<a href="#">Technologies and solutions for compliance, privacy preservation, green and responsible data operations (AI, Data and Robotics Partnership) (RIA)</a>	RIA	21. Oct 21	single-stage	8-11	52	2021	
	HORIZON-CL4-2021-DATA-01-03	<a href="#">Technologies for data management (AI, Data and Robotics Partnership) (IA)</a>	IA	21. Oct 21	single-stage	5	30	2021	
	HORIZON-CL4-2021-DATA-01-05	<a href="#">Future European platforms for the Edge: Meta Operating Systems (RIA)</a>	RIA	21. Oct 21	single-stage	12	54	2021	
	HORIZON-CL4-2021-DATA-01-07	<a href="#">Coordination and Support of the 'Cloud-Edge-IoT' domain (CSA)</a>	CSA	21. Oct 21	single-stage	1,5	3	2021	
	HORIZON-CL4-2021-DATA-01-08	<a href="#">Roadmap for next generation computing and systems technologies (CSA)</a>	CSA	21. Oct 21	single-stage	2	2	2021	
Call - WORLD LEADING DATA AND COMPUTING TECHNOLOGIES 2022									
	HORIZON-CL4-2022-DATA-01-01	<a href="#">Methods for exploiting data and knowledge for extremely precise outcomes (analysis, prediction, decision support), reducing complexity and presenting insights in understandable way (RIA)</a>	RIA	5. Apr 22	single-stage	8-12	33	2022	
	HORIZON-CL4-2022-DATA-01-02	<a href="#">Cognitive Cloud: AI-enabled computing continuum from Cloud to Edge (RIA)</a>	RIA	5. Apr 22	single-stage	4-6	50	2022	
	HORIZON-CL4-2022-DATA-01-03	<a href="#">Programming tools for decentralised intelligence and swarms (RIA)</a>	RIA	5. Apr 22	single-stage	4-8	40	2022	
	HORIZON-CL4-2022-DATA-01-04	<a href="#">Technologies and solutions for data trading, monetizing, exchange and interoperability (AI, Data and Robotics Partnership) (IA)</a>	IA	5. Apr 22	single-stage	10-13	52	2022	
	HORIZON-CL4-2022-DATA-01-05	<a href="#">Extreme data mining, aggregation and analytics technologies and solutions (RIA)</a>	RIA	5. Apr 22	single-stage	5	30	2022	
<b>DESTINATION – DIGITAL AND EMERGING TECHNOLOGIES FOR COMPETITIVENESS AND FIT FOR THE GREEN DEAL</b>									
Call - Digital and emerging technologies for competitiveness and fit for the green deal									
	HORIZON-CL4-2021-DIGITAL-EMERGING 01-01	<a href="#">Ultra-low-power, secure processors for edge computing (RIA)</a>	RIA	21. Oct 21	single-stage	8-10	26	2021	
	HORIZON-CL4-2021-DIGITAL-EMERGING 01-05	<a href="#">Open Source Hardware for ultra-low-power, secure processors (CSA)</a>	CSA	21. Oct 21	single-stage	2	2	2021	
	HORIZON-CL4-2021-DIGITAL-EMERGING 01-06	<a href="#">Advanced optical communication components (Photonics Partnership) (IA)</a>	IA	21. Oct 21	single-stage	4-6	26	2021	
	HORIZON-CL4-2021-DIGITAL-EMERGING 01-07	<a href="#">Advanced Photonic Integrated Circuits (Photonics Partnership) (RIA)</a>	RIA	21. Oct 21	single-stage	3-5	39	2021	
	HORIZON-CL4-2021-DIGITAL-EMERGING 01-09	<a href="#">AI, Data and Robotics for the Green Deal (AI, Data and Robotics Partnership) (IA)</a>	IA	21. Oct 21	single-stage	3-5	27	2021	



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	HORIZON-CL4-2021-DIGITAL-EMERGING 01-10	<a href="#">AI, Data and Robotics at work (AI, Data and Robotics Partnership) (IA)</a>	IA	21. Oct 21	single-stage	3-5	22	2021
	HORIZON-CL4-2021-DIGITAL-EMERGING 01-11	<a href="#">Pushing the limit of robotics cognition (AI, Data and Robotics Partnership) (RIA)</a>	RIA	21. Oct 21	single-stage	5	44	2021
	HORIZON-CL4-2021-DIGITAL-EMERGING 01-12	<a href="#">European Network of Excellence Centres in Robotics (RIA)</a>	RIA	21. Oct 21	single-stage	11,5	11,5	2021
	HORIZON-CL4-2021-DIGITAL-EMERGING 01-13	<a href="#">Academia-Industry Forum on Emerging Enabling Technologies (CSA)</a>	CSA	21. Oct 21	single-stage	2,5	2,5	2021
	HORIZON-CL4-2021-DIGITAL-EMERGING 01-14	<a href="#">Advanced spintronics: Unleashing spin in the next generation ICs (RIA)</a>	RIA	21. Oct 21	single-stage	2-3	17	2021
	HORIZON-CL4-2021-DIGITAL-EMERGING 01-21	<a href="#">Next generation quantum sensing technologies (RIA)</a>	RIA	21. Oct 21	single-stage	6,75	13,5	2021
	HORIZON-CL4-2021-DIGITAL-EMERGING 01-23	<a href="#">International cooperation with Canada (RIA)</a>	RIA	21. Oct 21	single-stage	1,33	4	2021
	HORIZON-CL4-2021-DIGITAL-EMERGING 01-26	<a href="#">Coordination of European Smart Network actions (CSA)</a>	CSA	21. Oct 21	single-stage	3	3	2021
	HORIZON-CL4-2021-DIGITAL-EMERGING 01-27	<a href="#">Development of technologies/devices for bio-intelligent manufacturing (RIA)</a>	RIA	21. Oct 21	single-stage	5-7	22,5	2021
	HORIZON-CL4-2021-DIGITAL-EMERGING 01-30	<a href="#">Investing in new emerging quantum computing technologies (RIA)</a>	RIA	21. Oct 21	single-stage	5	10	2021
	HORIZON-CL4-2021-DIGITAL-EMERGING 01-31	<a href="#">Functional electronics for green and circular economy (RIA)</a>	RIA	21. Oct 21	single-stage	3-5	35	2021
	HORIZON-CL4-2021-DIGITAL-EMERGING 01-32	<a href="#">Support and coordination of the Quantum Technologies Flagship Initiative (CSA)</a>	CSA	21. Oct 21	single-stage	6,4	6,4	2021
Call - Digital and emerging technologies for competitiveness and fit for the green deal								
	HORIZON-CL4-2021-DIGITAL EMERGING-02-10	<a href="#">Strengthening the quantum software ecosystem for quantum computing platforms (RIA)</a>	RIA	27. Jan 22	single-stage	5-7	12	2022
	HORIZON-CL4-2021-DIGITAL EMERGING-02-15	<a href="#">Framework Partnership Agreement for developing the first large-scale quantum computers (FPA)</a>	FPA	27. Jan 22	single-stage			2022
	HORIZON-CL4-2021-DIGITAL EMERGING-02-16	<a href="#">Basic Science for Quantum Technologies (RIA)</a>	RIA	27. Jan 22	single-stage	2-3	16	2022
	HORIZON-CL4-2021-DIGITAL EMERGING-02-17	<a href="#">Framework Partnership Agreement for developing large scale quantum simulation platform technologies (FPA)</a>	FPA	27. Jan 22	single-stage			2022
	HORIZON-CL4-2021-DIGITAL EMERGING-02-19	<a href="#">Framework Partnership Agreements in Quantum Communications (FPA)</a>	FPA	27. Jan 22	single-stage			2022
	HORIZON-CL4-2021-DIGITAL EMERGING-02-20	<a href="#">Quantum sensing technologies for market uptake (IA)</a>	IA	27. Jan 22	single-stage	7-10	23	2021

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	HORIZON-CL4-2021-DIGITAL EMERGING-02-22	<a href="#">Framework Partnership Agreements for open testing and experimentation and for pilot production capabilities for quantum technologies (FPA)</a>	FPA	27. Jan 22	single-stage			2022	
Call - Digital and emerging technologies for competitiveness and fit for the green deal									
	HORIZON-CL4-2022-DIGITAL-EMERGING 01-03	<a href="#">Advanced multi-sensing systems (Photonics Partnership) (RIA)</a>	RIA	5. Apr 22	single-stage	3-5	48	2022	
	HORIZON-CL4-2022-DIGITAL-EMERGING 01-05	<a href="#">AI, Data and Robotics for Industry optimisation (including production and services) (AI, Data and Robotics Partnership) (IA)</a>	IA	5. Apr 22	single-stage	3-5	19	2022	
	HORIZON-CL4-2022-DIGITAL-EMERGING 01-06	<a href="#">Pushing the limit of physical intelligence and performance (RIA)</a>	RIA	5. Apr 22	single-stage	4	28,5	2022	
	HORIZON-CL4-2022-DIGITAL-EMERGING 01-07	<a href="#">Increased robotics capabilities demonstrated in key sectors (AI, Data and Robotics Partnership) (IA)</a>	IA	5. Apr 22	single-stage	6	36	2022	
	HORIZON-CL4-2022-DIGITAL-EMERGING 01-26	<a href="#">Open source for cloud-based services (RIA)</a>	RIA	5. Apr 22	single-stage	4-6	22	2022	
	HORIZON-CL4-2022-DIGITAL-EMERGING 01-30	<a href="#">European Enabling technologies for Beyond 5G/6G RAN disaggregated architectures (RIA)</a>	RIA	5. Apr 22	single-stage	13	13	2022	
	HORIZON-CL4-2022-DIGITAL-EMERGING 01-35	<a href="#">Advanced characterisation methodologies to assess and predict the health and environmental risks of nanomaterials (RIA)</a>	RIA	5. Apr 22	single-stage	2-3	17,5	2022	
	HORIZON-CL4-2022-DIGITAL-EMERGING 01-38	<a href="#">International cooperation in semiconductors (CSA)</a>	CSA	5. Apr 22	single-stage	3	3	2022	
	HORIZON-CL4-2022-DIGITAL-EMERGING 01-39	<a href="#">Ultra low energy and secure networks (RIA)</a>	RIA	5. Apr 22	single-stage	13	13	2022	
Call - Digital and emerging technologies for competitiveness and fit for the green deal									
	HORIZON-CL4-2022-DIGITAL-EMERGING 02-17	<a href="#">New generation of advanced electronic and photonic 2D materials-based devices, systems and sensors (RIA)</a>	RIA	16. Nov 22	single-stage	16,5	16,5	2022	
	HORIZON-CL4-2022-DIGITAL-EMERGING 02-18	<a href="#">2D materials-based devices and systems for energy storage and/or harvesting (RIA)</a>	RIA	16. Nov 22	single-stage	9	9	2022	
	HORIZON-CL4-2022-DIGITAL-EMERGING 02-19	<a href="#">2D materials-based devices and systems for biomedical applications (RIA)</a>	RIA	16. Nov 22	single-stage	6	6	2022	
	HORIZON-CL4-2022-DIGITAL-EMERGING 02-20	<a href="#">2D-material-based composites, coatings and foams (IA)</a>	IA	16. Nov 22	single-stage	9	9	2022	
	HORIZON-CL4-2022-DIGITAL-EMERGING 02-22	<a href="#">Supporting the coordination of the Graphene Flagship projects (CSA)</a>	CSA	16. Nov 22	single-stage	3	3	2022	
<b>DESTINATION – OPEN STRATEGIC AUTONOMY IN DEVELOPING, DEPLOYING AND USING GLOBAL SPACE-BASED INFRASTRUCTURES, SERVICES, APPLICATIONS AND DATA</b>									
Call - STRATEGIC AUTONOMY IN DEVELOPING, DEPLOYING AND USING GLOBAL SPACE-BASED INFRASTRUCTURES, SERVICES, APPLICATIONS AND DATA 2021									
	HORIZON-CL4-2021-SPACE-01-11	<a href="#">End-to-end satellite communication systems and associated services</a>	RIA	16. Feb 22	single-stage	4-6	12	2021	
	HORIZON-CL4-2021-SPACE-01-12	<a href="#">Future space ecosystems: on-orbit operations, new system concepts</a>	RIA	16. Feb 22	single-stage	1-2	6	2021	

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	HORIZON-CL4-2021-SPACE-01-21	<a href="#">Reusability for European strategic space launchers - technologies and operation maturation including flight test demonstration</a>	RIA	16. Feb 22	single-stage	30-39	39	2021	
	HORIZON-CL4-2021-SPACE-01-22	<a href="#">Low cost high thrust propulsion for European strategic space launchers - technologies maturation including ground tests</a>	RIA	16. Feb 22	single-stage	15-19	19,8	2021	
	HORIZON-CL4-2021-SPACE-01-23	<a href="#">New space transportation solutions and services</a>	RIA	16. Feb 22	single-stage	1-1,5	3	2021	
	HORIZON-CL4-2021-SPACE-01-41	<a href="#">Copernicus Climate Change Service evolution</a>	RIA	16. Feb 22	single-stage	10-11	11	2021	
	HORIZON-CL4-2021-SPACE-01-42	<a href="#">Copernicus Atmosphere Monitoring Service evolution</a>	RIA	16. Feb 22	single-stage	6-7,5	7,5	2021	
	HORIZON-CL4-2021-SPACE-01-43	<a href="#">Copernicus Security and Emergency Services evolution</a>	RIA	16. Feb 22	single-stage	4-5	5	2021	
	HORIZON-CL4-2021-SPACE-01-44	<a href="#">Copernicus evolution for cross-services thematic domains</a>	RIA	16. Feb 22	single-stage	3	5,6	2021	
	HORIZON-CL4-2021-SPACE-01-62	<a href="#">Quantum technologies for space gravimetry</a>	RIA	16. Feb 22	single-stage	15-17	17	2021	
	HORIZON-CL4-2021-SPACE-01-81	<a href="#">Space technologies for European non-dependence and competitiveness</a>	RIA	16. Feb 22	single-stage	2-3	10,32	2021	
<b>Call - STRATEGIC AUTONOMY IN DEVELOPING, DEPLOYING AND USING GLOBAL SPACE-BASED INFRASTRUCTURES, SERVICES, APPLICATIONS AND DATA 2022</b>									
	HORIZON-CL4-2022-SPACE-01-11	<a href="#">Future space ecosystems: on-orbit operations, preparation of orbital demonstration mission</a>	RIA	16. Feb 22	single-stage	20-26	26	2022	
	HORIZON-CL4-2022-SPACE-01-12	<a href="#">Technologies and generic building blocks for Electrical Propulsion</a>	IA	16. Feb 22	single-stage	1-2	5,1	2022	
	HORIZON-CL4-2022-SPACE-01-13	<a href="#">End-to-end Earth observation systems and associated services</a>	IA	16. Feb 22	single-stage	2-3	8,10	2022	
	HORIZON-CL4-2022-SPACE-01-21	<a href="#">Multi sites flexible industrial platform and standardised technology for improving interoperability of European access to space ground facilities</a>	RIA	16. Feb 22	single-stage	1-2	2	2022	
	HORIZON-CL4-2022-SPACE-01-41	<a href="#">Copernicus Marine Environment Monitoring Service evolution</a>	RIA	16. Feb 22	single-stage	8-10	10	2022	
	HORIZON-CL4-2022-SPACE-01-42	<a href="#">Copernicus Anthropogenic CO<sub>2</sub> Emissions Monitoring &amp; Verification Support (MVS) capacity</a>	RIA	16. Feb 22	single-stage	5-6	6	2022	
	HORIZON-CL4-2022-SPACE-01-43	<a href="#">Copernicus Land Monitoring Service evolution</a>	RIA	16. Feb 22	single-stage	4-5	5	2022	
	HORIZON-CL4-2022-SPACE-01-62	<a href="#">Space Weather</a>	RIA	16. Feb 22	single-stage	0,5-1	2	2022	
	HORIZON-CL4-2022-SPACE-01-72	<a href="#">Education and skills for the EU space sector</a>	CSA	16. Feb 22	single-stage	2-3	3	2022	
	HORIZON-CL4-2022-SPACE-01-81	<a href="#">Space technologies for European non-dependence and competitiveness</a>	RIA	16. Feb 22	single-stage	2-3	10,5	2022	
	HORIZON-CL4-2022-SPACE-01-82	<a href="#">Space science and exploration technologies</a>	RIA	16. Feb 22	single-stage	1-1,5	8	2022	
<b>DESTINATION – A HUMAN-CENTRED AND ETHICAL DEVELOPMENT OF DIGITAL AND INDUSTRIAL TECHNOLOGIES</b>									
<b>Call - A HUMAN-CENTRED AND ETHICAL DEVELOPMENT OF DIGITAL AND INDUSTRIAL TECHNOLOGIES 2021</b>									
	HORIZON-CL4-2021-HUMAN-01-01	<a href="#">Verifiable robustness, energy efficiency and transparency for Trustworthy AI: Scientific excellence boosting industrial competitiveness (AI, Data and Robotics Partnership) (RIA)</a>	RIA	21. Oct 21	single-stage	4	36	2021	
	HORIZON-CL4-2021-HUMAN-01-02	<a href="#">European coordination, awareness, standardisation &amp; adoption of trustworthy European AI, Data and Robotics (AI, Data and Robotics Partnership) (CSA)</a>	CSA	21. Oct 21	single-stage	4-9	13	2021	
	HORIZON-CL4-2021-HUMAN-01-03	<a href="#">European Network of AI Excellence Centres: Pillars of the European AI lighthouse (RIA)</a>	RIA	21. Oct 21	single-stage	9	9	2021	
	HORIZON-CL4-2021-HUMAN-01-04	<a href="#">Trust &amp; data sovereignty on the Internet (RIA)</a>	RIA	21. Oct 21	single-stage	12	12	2021	
	HORIZON-CL4-2021-HUMAN-01-05	<a href="#">Trustworthy open search and discovery (RIA)</a>	RIA	21. Oct 21	single-stage	8,5	17	2021	

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	HORIZON-CL4-2021-HUMAN-01-06	<a href="#">Innovation for Media, including eXtended Reality (IA)</a>	IA	21. Oct 21	single-stage	8-9	26	2021	
	HORIZON-CL4-2021-HUMAN-01-07	<a href="#">Next Generation Internet community-building and outreach (CSA)</a>	CSA	21. Oct 21	single-stage	2	2	2021	
	HORIZON-CL4-2021-HUMAN-01-08	<a href="#">NGI International Collaboration - Transatlantic fellowship programme (CSA)</a>	CSA	21. Oct 21	single-stage	2	2	2021	
	HORIZON-CL4-2021-HUMAN-01-09	<a href="#">NGI Tech Review (CSA)</a>	CSA	21. Oct 21	single-stage	1,5	1,5	2021	
	HORIZON-CL4-2021-HUMAN-01-13	<a href="#">eXtended Reality Modelling (RIA)</a>	RIA	21. Oct 21	single-stage	4,8	14,5	2021	
	HORIZON-CL4-2021-HUMAN-01-14	<a href="#">eXtended Reality for All – Haptics (RIA)</a>	RIA	21. Oct 21	single-stage	6	6	2021	
	HORIZON-CL4-2021-HUMAN-01-17	<a href="#">Awareness raising on Intellectual property (IP) management for European R&amp;I (CSA)</a>	CSA	21. Oct 21	single-stage	1	1	2021	
	HORIZON-CL4-2021-HUMAN-01-18	<a href="#">Fostering standardisation to boost European industry's competitiveness (CSA)</a>	CSA	21. Oct 21	single-stage	1	1	2021	
	HORIZON-CL4-2021-HUMAN-01-19	<a href="#">Testing innovative solutions on local communities' demand (CSA)</a>	CSA	21. Oct 21	single-stage	5	5	2021	
	HORIZON-CL4-2021-HUMAN-01-20	<a href="#">Piloting a new industry-academia knowledge exchange focussing on companies' needs (CSA)</a>	CSA	21. Oct 21	single-stage	2	2	2021	
	HORIZON-CL4-2021-HUMAN-01-21	<a href="#">Art-driven use experiments and design (RIA)</a>	RIA	21. Oct 21	single-stage	2,8	8,5	2021	
	HORIZON-CL4-2021-HUMAN-01-24	<a href="#">Tackling gender, race and other biases in AI (RIA)</a>	RIA	21. Oct 21	single-stage	3-3,5	10	2021	
	HORIZON-CL4-2021-HUMAN-01-25	<a href="#">eXtended Collaborative Telepresence (IA)</a>	IA	21. Oct 21	single-stage	5-8	14	2021	
	HORIZON-CL4-2021-HUMAN-01-26	<a href="#">Workforce skills for industry 5.0 (RIA)</a>	RIA	21. Oct 21	single-stage	5	5	2021	
	HORIZON-CL4-2021-HUMAN-01-27	<a href="#">AI to fight disinformation (RIA)</a>	RIA	21. Oct 21	single-stage	6,5	13	2021	
	HORIZON-CL4-2021-HUMAN-01-28	<a href="#">eXtended Reality Ethics, Interoperability and Impact (CSA)</a>	CSA	21. Oct 21	single-stage	2,5	2,5	2021	
	HORIZON-CL4-2021-HUMAN-01-29	<a href="#">Support for transnational activities of National Contact Points in the thematic area of Digital (CSA)</a>	CSA	21. Oct 21	single-stage	2,5	2,5	2021	
	HORIZON-CL4-2021-HUMAN-01-30	<a href="#">Support for transnational activities of National Contact Points in the thematic area of Industry (CSA)</a>	CSA	21. Oct 21	single-stage	1,5	1,5	2021	
	HORIZON-CL4-2021-HUMAN-01-31	<a href="#">Verifiable robustness, energy efficiency and transparency for Trustworthy AI: Scientific excellence boosting industrial competitiveness (AI, Data and Robotics Partnership) (RIA)</a>	CSA	21. Oct 21	single-stage	1	1	2021	
Call - A HUMAN-CENTRED AND ETHICAL DEVELOPMENT OF DIGITAL AND INDUSTRIAL TECHNOLOGIES 2022									
	HORIZON-CL4-2022-HUMAN-01-01	<a href="#">AI for human empowerment (AI, Data and Robotics Partnership) (RIA)</a>	RIA	5. Apr 22	single-stage	4	16	2022	
	HORIZON-CL4-2022-HUMAN-01-02	<a href="#">European Network of AI Excellence Centres: Expanding the European AI lighthouse (RIA)</a>	RIA	5. Apr 22	single-stage	11,5	34,5	2022	
	HORIZON-CL4-2022-HUMAN-01-03	<a href="#">Internet architecture and decentralised technologies (RIA)</a>	RIA	5. Apr 22	single-stage	11	22	2022	
	HORIZON-CL4-2022-HUMAN-01-05	<a href="#">Next Generation Safer Internet: Technologies to identify digital Child Sexual Abuse Material (CSAM) (RIA)</a>	RIA	5. Apr 22	single-stage	2	2	2022	
	HORIZON-CL4-2022-HUMAN-01-07	<a href="#">NGI International Collaboration - USA and Canada (RIA)</a>	RIA	5. Apr 22	single-stage	6	6	2022	
	HORIZON-CL4-2022-HUMAN-01-14	<a href="#">eXtended Reality Technologies (RIA)</a>	RIA	5. Apr 22	single-stage	5-8	19	2022	
	HORIZON-CL4-2022-HUMAN-01-19	<a href="#">eXtended Reality Learning - Engage and Interact (IA)</a>	IA	5. Apr 22	single-stage	5-8	21,5	2022	