



6 December 2021

Funding Newsletter Issue | 6 Supplement

Dear members,

Let me first start by thanking you all for participating in the summit and also providing feedback with respect to the intervention from the Projects and Proposals Office (PPO).

As announced beforehand in the summit there are now many new open calls that have been published from the Digital Europe Programme 2021-2022. The scope of this newsletter supplement is to focus specifically on these digital calls while informing you as well about others that are of equivalent importance to you under the Horizon Europe Programme.

Digital Europe Programme

1. Cloud Data and TEF (DIGITAL-2021-CLOUD-AI-01)

TOPIC ID: DIGITAL-2021-CLOUD-AI-01-DATA-TECH

Grant: DIGITAL-CSA DIGITAL Coordination and Support Actions

Deadline 22 February 2022 **Budget 1 million**

This action is to support the activities of the Industrial Alliance on processors and semiconductor technologies that was announced in the Communication on “Updating the 2020 New Industrial Strategy” 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 industrial capacities in the design and manufacturing of advanced processors and other electronic components. The activities of the Alliance will contribute to delivering on the EU’s digital targets for 2030, by addressing use cases for all sectors of the economy, notably mobility, communications, industrial manufacturing, security, and health.

The main tasks of the Alliance will include identification of critical gaps in the semiconductor value chain, development of targets and roadmaps, increasing design and manufacturing capacities and leveraging investment and innovation synergies. Member States representatives 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:

- *Supporting the work of the Alliance, including through the organisation of relevant thematic working groups in view of ensuring progress towards and delivering on the Alliance’s milestones.*
- *Organisation of the annual General Assembly with all members of the Alliance, in close coordination with the European Commission.*
- *Organisation of the annual Alliance Forum with all members of the Alliance and interested stakeholders, in close coordination with the European Commission.*
- *Creation and maintenance of the Alliance’s website and day-to-day content creation to inform the broader audience about the Alliance’s activities.*

2. Marketplace for federated cloud-to-edge based services

TOPIC ID: DIGITAL-2021-CLOUD-AI-01-DS-MARKETPLACE-CLOUD Grant: Digital Simple Grant

Deadline 22 February 2022 **Budget 20 million**

Scope of the chosen project:

- *Define clear rules for the open, fair and transparent functioning of the marketplace, including how these would be guaranteed in the long term through an appropriate governance structure;*
- *Deploy the technical infrastructure of the marketplace platform, with strong customer focus, user-friendliness, and inclusion and equality principles;*
- *Ensure that the marketplace is built over the cloud-to-edge middleware platform;*
- *Operate the platform according to security, energy and resource efficiency, data protection, ethical standards and portability requirements;*

- *Ensure the integration of state-of-the-art identity and access management services on the marketplace platform to support its operations;*
- *Design a curation/vetting process for services offered on the marketplace, notably for sector-specific services in regulated sectors (e.g., health, energy, finance...); these services should, inter alia, include the cloud-to-edge services and middleware (the Artificial Intelligence tools as well as building blocks deployed under the Common Services Platform);*
- *Where other marketplaces exist, such as marketplaces already developed in some Member States or services platforms addressing specific areas, this marketplace will put in place the required mechanisms to offer a seamless and integrated end-user experience;*
- *Adopt the appropriate governance to ensure the proper supervision of the marketplace by all relevant stakeholders, fostering interconnections with similar marketplaces and service catalogues that exist in some Member States;*
- *Enable access on such platforms, through a single EU portal for cloud users, to an online catalogue of existing cloud-to-edge based service offerings (such as predictive analytics, data visualisation, edge services, Artificial Intelligence services and language technology services ...) that are compliant with a pre-defined set of EU rules and requirements (to be compiled in the EU Cloud Rulebook);*
- *Implement a service brokerage functionality to enable transactions between providers and users to take place on the marketplace;*
- *Ensure a vendor-neutral technical architecture and reference framework;*
- *Develop an agile and future-proof revenue model to cement long-term commercial viability of the EU online marketplace, while ensuring unbiased competition and strict vendor neutrality in the positioning of services on the marketplace; and (if necessary), ensure the integration of trusted payment services on the marketplace platform to facilitate transactions;*
- *Report regularly (at least once per month) to the Commission throughout the deployment phase of the project.*

Where possible, open-source software should be used for the development of the marketplace, notably to demonstrate transparency, vendor- independence and neutrality in the offering of services on the platform.

Expected Outcomes and deliverables:

- *Strengthen the competitiveness and the innovation of the European economy and of common data spaces in the green digital age;*
- *Cloud-to-edge services uptake among public entities and private sectors that lag behind in cloud adoption, such as the European health sector;*
- *The proper governance mechanism to supervise the marketplace by all relevant stakeholders, possibly through the setup of a legal entity;*
- *A large-scale and user-friendly interoperable European marketplace for cloud-to-edge based services for public and private entities across the EU and common data spaces. Interconnections of the marketplace with existing national cloud marketplaces.*

3. Governance of the Living-in.eu community

TOPIC ID: DIGITAL-2021-DEPLOY-01-LIVING-EU Accelerating best use of technologies

Grant: DIGITAL Coordination and Support Actions

Deadline 22 February 2022 **Budget 2 million**

The aim is to support the governance of the Living-in.eu community by coordinating the broad range of activities and stakeholders with various expertise (legal, financial, technical, education and capacity building, impact measuring).

The project should define the processes of interaction and decision-making among the actors involved in the Living-in.eu community. The activities should comprise:

- *Co-creation of the processes, actors, roles, rights, associated timeframes of the various sub-groups and to ensure the development and scaling up of digital smart and green solutions by the community;*
- *Running the coordination of all activities, including, but not limited to, community building and management, on boarding of new members, communication and exploitation of results, in the context of the Living-in.eu movement for the benefit of all the parties;*
- *Monitoring and supporting the relevant actions undertaken by the community that contribute to the establishment of interoperable digital platforms in cities and communities and measuring their impact to achieve their smart and sustainability goals;*
- *Organise the supply side around a joint vision compatible with Living-in.EU principles for the provision of Local Digital Twins solutions in Europe.*

4. Deploying advanced national QCI systems and networks - EU Secure Quantum Communication Infrastructure (DIGITAL-2021-QCI-01) Grant – Digital Simple Grant

TOPIC ID: DIGITAL-2021-QCI-01-DEPLOY-NATIONAL Deadline 22 February 2021 **Budget 108 million**

Expected outcomes and deliverables:

- *First deployed QKD experimental networks integrated and operating with existing communication networks in several Member States and addressing different advanced use cases, stimulating the emergence of a fully-fledged and technologically autonomous European quantum communication industry and contributing to preparations for the full deployment of the EuroQCI;*
- *A large number of trained users in quantum communication technologies and Member States ready for the design and deployment of next generation highly secure communication and data networks.*

5. Digital Transformation (DIGITAL-2021-TRUST-01) Grant: Digital SME Support Actions

European Digital Media Observatory (EDMO) - national and multinational hubs

TOPIC ID: DIGITAL-2021-TRUST-01-EDMO Deadline 22 February 2021 **Budget 11 million**

Expected outcomes and deliverables:

At the end of the actions, a network of existing and newly established research hubs will be in place across the EU. Networks of expert and organisations linked to the hubs will be part of a European multidisciplinary community which will actively detect, analyse and expose disinformation campaigns in Europe. Each hub will have produced at least 10 investigations and reports on disinformation campaigns and shared them through EDMO. Hubs will have established at least 5 tailor-made media literacy programs in Member States and supported national authorities in producing reports (at least 1 per year) regarding the implementation and effectiveness of online platforms policies to tackle disinformation.

6. Federated European infrastructure for genomics data Grant: DIGITAL Simple Grants

TOPIC ID: DIGITAL-2021-CLOUD-AI-01-FEI-DS-GENOMICS Deadline 22 February 2021 **Budget 20 million**

The following elements shall be delivered by the selected project:

- *Deployment of an interoperable, FAIR-compliant and secure federated infrastructure and data governance needed to enable sustainable cross-border linkage of genomic data sets in compliance with the relevant legal, ethical, quality and interoperability requirements and agreed standards;*
- *Platform enabling the application of appropriate high-end computing, AI and simulation resources to analyse the data;*
- *Support for the establishment or upgrade of the necessary local infrastructure, and for the creation, extension and adaptation (e.g., FAIRification) of genomic datasets;*
- *Business model including an uptake strategy explaining the motivation and incentives for all stakeholders at the different levels (national, European, global) to support the data infrastructure towards its sustainability, including data controllers (biobanks, hospitals/municipalities, research institutes, patients), data users (clinicians, researchers, policymakers, companies), service providers (e.g., IT industry, biotech industry), healthcare systems and public authorities at large;*
- *Coordination support for the multi-country project 'Genome of Europe';*
- *Comprehensive communication strategy.*

7. Secretariat for the Alliance on industrial data, cloud and edge Grant: DIGITAL Coordination and Support Actions

TOPIC ID: DIGITAL-2021-CLOUD-AI-01-INDUSTRIAL-DATA Deadline 22 February 2022 **Budget 1 million**

Expected outcome:

- *A platform for leveraging investment synergies across the EU and Member States in the research, development and deployment of next generation of resource-efficient, interoperable,*

highly secure and trusted EU cloud and edge technologies, in coordination with other relevant EU investment initiatives;

- *A matchmaking platform for businesses on investments in next-generation data processing capacities addressing the needs for processing sensitive personal or highly sensitive public sector and business data;*
- *A consultation platform in the context of the preparatory work of the EU cloud Rulebook, including expertise on common technical rules and norms for cloud services operating on the EU market;*
- *A platform to create synergies with common European data spaces, in particular those hosting sensitive personal, or highly sensitive public sector and business data requiring high security requirements, in close coordination with the Data Space Support Centre and the European Data Innovation Board.*

8. Digital Solutions in support of the New European Bauhaus Initiative

Grant: DIGITAL Coordination and Support Actions

TOPIC ID: DIGITAL-2021-DEPLOY-01-BAUHAUS Deadline 22 February 2022 **Budget 1 million**

Expected outcomes and deliverables:

- *A map of the European framework for the ecosystem of digital solutions and services relevant for projects implementing New European Bauhaus initiative, covering technological and organisational innovation and addressing the needs of the involved stakeholders, and including those of SMEs and start-ups;*
- *Creation of a network that facilitates interactions between digital and New European Bauhaus stakeholders. The network will organise at least five workshops and meetings with a representative sample of New European Bauhaus stakeholders, digital stakeholders as well as representatives from projects identified in the first work strand of the action. The workshops, meetings and events will foster the exchange of good practices at pan-European level and identify how the digital transformation can contribute to the implementation of the new European Bauhaus Initiative.*

9. Preparatory actions for the data space for skills Grant: DIGITAL Coordination and Support Actions

TOPIC ID: DIGITAL-2021-PREFACTS-DS-01-SKILLS Deadline 22 February 2022 **Budget 1 million**

The coordination and support action will provide:

- *An inventory of existing platforms collecting, storing and sharing data relevant for education and skills (public and private). A particular focus should be placed on the analysis of skills relevant for attaining the targets of the Digital Decade;*
- *A proposed design approach based on scenarios with corresponding business models;*
- *A multi-stakeholder governance scheme specific to the sector;*
- *A blueprint for the data space including an architecture considering common building blocks;*
- *Interim results in due time to inform the development of the implementation action to be supported under the next Work Programme;*
- *Input to the work of the Data Spaces Support Centre.*

10. Digital Product Passport: sustainable and circular systems Grant: DIGITAL Coordination and Support Actions

TOPIC ID: DIGITAL-2021-TRUST-01-DIGIPASS Deadline 22 February 2021 **Budget 2 million**

Expected Outcome:

- *Delivery of at least 3 digital product passport prototypes, one in each of the 3 key value chains mentioned above, including agreement on data and system architectures. The work will support the goals of the Green Deal and in particular Circular Economy Action Plan's Sustainable Product Initiative, the EU Digital strategy's Circular Electronics Initiative and the EU Data strategy by improving product sustainability, boosting material and energy efficiency, enabling new business models and circular value extraction based on data sharing;*
- *The work should also contribute to enhanced concertation of stakeholders, provision of a roadmap for open and standardised approaches for viable use of product passport based on digital innovations that is beneficial in terms of environmental sustainability and circular business opportunities. The results are also expected to support the EU Single Market providing consistent information about products, across the value chain and borders, to business, customers and authorities.*

11. Safer Internet Centres (SICs) Grant : DIGITAL Simple Grants

TOPIC ID: DIGITAL-2021-TRUST-01-SAFERINTERNET Deadline 22 February 2022 **Budget 21 million**

The investment will deliver a pan-European network of Safer Internet Centres (SICs) that will allow children and young people to become more resilient digital users through awareness-raising activities in informal and formal education (e.g., youth participation activities, workshops, classroom visits, competitions). Parents, carers, teachers, and other professionals working with children will gain a better understanding of the risks and opportunities of children accessing digital content and services, through information sessions, train the trainers programmes, and online and offline material. Local, national, and European actors will gain timely information on emerging risks through the helpline service. Public authorities including law enforcement agencies will have access to resources and services, and exchanges with hotline analysts to develop better preventive measures and to remove online child sexual abuse material (CSAM) in an effective manner. The private sector will benefit from increased market opportunities for high quality online content and will cooperate with the SICs through joint initiatives and awareness campaigns such as the Safer Internet Day.

12. Preparatory actions for the AI-on-demand platform - Cloud Data and TEF

Grant: DIGITAL Coordination and Support Actions

TOPIC ID: DIGITAL-2021-CLOUD-AI-01-PREP-AI Deadline 22 February 2022 **Budget 1 million**

Expected impact:

- *Requirements and mechanisms for the AI-on-demand platform, optimising its services on the basis of users' needs and strengthening the AI developers' community, to support wide uptake of trustworthy AI "made in Europe".*

13. Preparatory actions for the data space for smart communities

Grant: DIGITAL Coordination and Support Actions

TOPIC ID: DIGITAL-2021-CLOUD-AI-01-PREP-SMART-COMM Deadline 22 February 2022 **Budget 1 million**

Outcomes and deliverables:

- *A sustainable data governance scheme for the smart communities' data space as well as a blueprint that connects existing local data ecosystems and EU systems and enables public and private stakeholders to develop cross-sector, cross-community, data services, including AI-enabled data services;*
- *A detailed roadmap towards a full-fledged pan-EU smart communities' data space that will be interconnected with the Green Deal data space and will include a set of technical specifications for interoperability with the European Data Spaces Technical Framework;*
- *The data space will offer data related to several critical city infrastructures such as energy supply and consumption, water management, waste management, traffic information, etc. which could then be exposed to vulnerabilities and impact EU public order. In addition, such data may be used for further fine-tuning the functioning of such city critical infrastructures (such as smart grids, etc.) as well as the AI-based solutions using this data.*

14. Uptake of digital solutions in Health and Care - Accelerating best use of technologies

Grant: DIGITAL Coordination and Support Actions

TOPIC ID: DIGITAL-2021-DEPLOY-01-HEALTH Deadline 22 February 2022 **Budget 1 million**

Expected impact:

- *The consolidation of a European framework and ecosystem of digital health solutions and services, covering technological and organisational innovation and addressing the needs of the involved stakeholders, including those of SMEs and start-ups.*

15. An ecosystem for digital twins in healthcare Grant: DIGITAL Coordination and Support Actions

TOPIC ID: DIGITAL-2021-DEPLOY-01-TWINS-HEALTH Deadline 22 February 2022 **Budget 5 million**

Expected impact:

- *A consolidated European ecosystem around digital twins for healthcare that brings together, streamlines, bundles and fosters their use across stakeholders in a coordinated manner, thereby empowering patients and enabling health professionals, pharmaceutical and medical devices industries, SMEs, software developers, academia and regulatory agencies to make use of DTH in full compliance with applicable data protection requirements;*
- *A roadmap for the development of a strategic approach to accelerate the uptake of DTH-based solutions and for further integrating the resources towards a comprehensive virtual representation of the human body;*
- *A governance framework for a federated, cloud-based repository, combining DTH resources, as well as the subsequent use and deployment of the repository;*

- *The blueprint and technical specifications for a simulation platform for DTHs, and early prototypes.*

16. Coordinate the first deployment of national EuroQCI projects and prepare the large-scale QKD testing and certification infrastructure (CSA) - EU Secure Quantum Communication Infrastructure

Grant: DIGITAL Coordination and Support Actions

TOPIC ID: DIGITAL-2021-QCI-01-EUROQCI-QKD Deadline 22 February 2022 **Budget 2 million**

Expected outcome:

- *A full set of requirements for an operational QKD infrastructure facility covering EU needs in terms of testing, experimentation, and validation of QKD devices, technologies and systems, with a view to their standardisation and accreditation [within the first six months of the action];*
- *Consolidated feedback from the national deployments at real scale, identifying the complementary activities (including technology developments) required to establish a complete the EU QKD ecosystem;*
- *A well-coordinated assessment of the first deployments of EuroQCI networks and systems for preparing the full deployment phase of the EuroQCI.*

17. Preparatory actions for data spaces for manufacturing Grant: DIGITAL Coordination and Support Actions

TOPIC ID: DIGITAL-2021-CLOUD-AI-01-PREP-DS-MANUFACT Deadline 22 February 2022 **Budget 1 million**

The selected action will be expected to deliver:

- *A sustainable data governance scheme and the identification of a proper governance body, including, where relevant, European Digital Innovation Hubs and Testing and Experimentation facilities;*
- *an inventory of existing data platforms for manufacturing and a blueprint for manufacturing-specific building blocks which could contribute to the long-term convergence of existing and new data-related initiatives in manufacturing by making use of the data space technical infrastructure;*
- *A detailed roadmap towards pan-EU data spaces for manufacturing and migration paths for the convergence of broadly established industrial systems to manufacturing data spaces and the data space technical infrastructure.*

18. Preparatory actions for the Green Deal Data Space

TOPIC ID: DIGITAL-2021-CLOUD-AI-01-PREP-DS-GREEN-DEAL

Grant: DIGITAL Coordination and Support Actions Deadline 22 February 2022 **Budget 2 million**

Expected outcomes and deliverables:

- *A sustainable data governance scheme as well as a blueprint that connects existing national, regional and local data ecosystems and enables public and private stakeholders to access relevant data; and to develop cross-sector data services;*
- *A priority list of datasets relevant to the European Green Deal Strategy;*
- *A roadmap towards the common European Green Deal data space.*

19. Testing and Experimentation Facility for Edge AI Grant: DIGITAL Grants for Procurement

TOPIC ID: DIGITAL-2021-CLOUD-AI-01-TEF-EDGE Deadline 22 February 2022 **Budget 78 million**

Expected outcome:

- *Wide availability of world-class experimentation facilities in Europe for edge AI microelectronic components based on advanced low-power computing technologies;*
- *Service provisioning to a wide range of users: from semiconductor manufacturers and fabless companies to end-user industries, SMEs and start-ups, requiring a varying degree of support in their further market development;*
- *Fully tested and validated European IP and edge AI products based on European technology, ready for market deployment.*

20. Data Space for Mobility Grant: DIGITAL Coordination and Support Actions

TOPIC ID: DIGITAL-2021-CLOUD-AI-01-PREP-DS-MOB

Deadline 22 February 2022 **Budget 1 million**

Expected outcomes and deliverables:

- *Inventory of existing platforms sharing data relevant for mobility;*
- *An analysis regarding gaps and overlaps of data, and identifying potential common building blocks, feeding into the Commission preparatory work establishing the mobility data space;*
- *The data space will offer among others, data on the transport network and its use in real time. Data can reveal sensitive information about critical points including potential vulnerabilities, hence essential for the Union's security.*

21. Create a European Industrial Ecosystem for Secure QCI technologies and systems

TOPIC ID: DIGITAL-2021-QCI-01-INDUSTRIAL Grant: Digital SME Support Actions

Deadline 22 February 2022 **Budget 44 million**

Expected outcomes and deliverables:

- Mature QKD-based systems ready for integration and deployment in an operational telecom infrastructure, over short and long distances;
- First fully functional telecom network systems managing quantum keys and assuring the interoperability between quantum and traditional cybersecurity systems, that ensure the secrecy and integrity of sensitive digital data in Europe.

22. Data Spaces Support Centre Grant: DIGITAL Coordination and Support Actions

TOPIC ID: DIGITAL-2021-CLOUD-AI-01-SUPPCENTRE Deadline 22 February 2022 **Budget 14 million**

The outcome of this action will be the creation of a Support Centre, which will promote and coordinate all relevant actions on sectorial data spaces and will make available technologies, processes, standard and tools that will support the deployment of common data spaces and will allow reuse of data across sectors.

23. e-Justice Communication via Online Data Exchange (e-CODEX)

TOPIC ID: DIGITAL-2021-TRUST-01-ECODEX Deadline 22 February 2021 **Budget 3 million**

Grant: DIGITAL Coordination and Support Actions

Expected outcome:

- *The e-CODEX system supports a number of cross-border electronic exchanges in the context of family law (iSupport), civil law (European Small Claims, European Payment Order) and criminal law (e-Evidence Digital Exchange System);*
- *The funding will ensure its sustainability with operational support, as well as corrective and evolutive maintenance of e-CODEX until its transfer to eu-LISA in 2023, thus not endangering the use cases it supports.*

24. Initial Network of European Digital Innovation Hubs Grant: DIGITAL Simple Grants

TOPIC ID: DIGITAL-2021-EDIH-INITIAL-01 Deadline 22 February 2022 **Budget 240 930 000-euro**

Expected outcomes and deliverables:

At the end of the project, a balanced network of EDIH will cover all regions in Europe, addressing the needs of the public and private sectors, including all economic sectors, offering a wide range of specialised digital transformation services.

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

- Number of businesses and public sector entities, which have used the European Digital Innovation Hubs' services, by user category (businesses of different sizes, public sector entities, etc.), sector, location and type of support received. Where relevant, this will include a description of which Digital Europe Programme capacities have been used;
- For access to finance: number 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 EDIH.

A set of additional impact indicators will be collected and analyzed 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 developed by the Joint Research Centre assessing the categories digital strategy and readiness, intelligence and automation, data and connectedness, green and human-centric digitalisation. The green digitalisation category will focus on the use of digital technologies to improve environmental sustainability and the inclusion of circularity in value chains;*
- *Market maturity and market creation potential of innovations, as defined in the JRC's Innovation Radar methodology (<https://ec.europa.eu/jrc/en/innovation-radar>);*
- *Cross-border trans-national hubs are possible; in this case, each Member State involved will provide the co-financing for participants legally established in their country. Grants will make use of multi-annual instalments.*

Only entities that are designated by their Member State or Associated countries may apply to this call. As a proof of their designation, they need to attach the letter of designation they received to their proposal.

25. Preparatory actions for the data space for Agriculture

TOPIC ID: DIGITAL-2021-PREFACTS-DS-01-AGRI Deadline 22 February 2022 **Budget 2 million**

Grant: DIGITAL Coordination and Support Actions

The coordination and support action will provide:

- An inventory of existing platforms sharing data relevant for agriculture (public and private);
- A proposed design approach based on scenarios with corresponding business models;
- A multi-stakeholder governance scheme specific to the sector;
- A blueprint for the data space including an architecture considering common building blocks;
- Interim results in due time to inform the development of the implementation action to be supported under the next Work Programme;
- Input to the work of the Data Spaces Support Centre.

26. Preparatory actions for the data space for tourism

TOPIC ID: DIGITAL-2021-PREFACTS-DS-01-TOURISM Grant: DIGITAL Coordination and Support Actions

Deadline 22 February 2022 **Budget 1 million**

Expected outcome:

- *Inventory of existing platforms sharing data relevant for tourism;*
- *An analysis regarding gaps and overlaps of data, and identifying potential common building blocks with other data spaces created in the EU together with a priority list of data sets relevant for the tourism data space;*
- *A sustainable data sharing governance as well as a blue-print that interconnects existing local data ecosystems and enables public and private stakeholders to develop tourism related data-driven services, including AI-enabled data services, on the basis of many types of data;*
- *A detailed roadmap towards a sustainable data space for tourism, building on national initiatives and interconnecting with other data spaces;*
- *A set of technical specifications for interoperability with the European Data Spaces Technical Framework and other sectorial data spaces.*

27. Advanced digital skills analysis

TOPIC ID: DIGITAL-2021-SKILLS-01-ANALYSIS Deadline 22 February 2022 **Budget 2 million**

Grant: DIGITAL Coordination and Support Actions

Expected Outcome:

A refined knowledge of the market needs related to different digital technologies and insights to design relevant and high-quality learning opportunities, in line with the latest technological development.

28. Specialised education programmes in key capacity areas

TOPIC ID: DIGITAL-2021-SKILLS-01-SPECIALISED Deadline 22 February 2022 **Budget 70 million**

Grant: DIGITAL Simple Grants

Expected outcome:

- *Gains from Investment in key capacities can only materialise if there are enough people to design, deploy and use them. At present, all Member States face shortages of digital specialists and the training opportunities in digital areas are missing in the EU, compared to other countries. Specialised courses, such as master's courses in domains like Artificial Intelligence are not uniformly available in all Member States and concentrated in some regions;*
- *The action will contribute to expand the education offer across Europe, by increasing the number of courses, jointly designed by universities from different Member States and associated countries together with excellence centres and businesses active in the domain. The impact will be twofold: an increase of courses offer all over the EU and the development of dynamic digital ecosystems where academic excellence, research and innovative industries work together to attract and retain the best talents worldwide.*

Horizon Europe Programme

1. Cognitive Cloud: AI-enabled computing continuum from Cloud to Edge

TOPIC ID: HORIZON-CL4-2022-DATA-01-02 Deadline 5 April 2022 **Budget 50 million**

Grant: HORIZON Research and Innovation Actions

Proposal results are expected to contribute to the following expected outcomes:

- *A new AI-enabled Cloud-edge framework (Cognitive Cloud) that will automatically adapt to the growing complexity and data deluge by integrating seamlessly and securely diverse computing and data environments, spanning from core cloud to edge. This framework will respond and adapt intelligently to changes in application behaviour and data variability offering automatic deployment, mobility and secure adaptability of services from cloud to edge to diverse users and contexts. Resource management should take into account the openness and trustworthiness of the underlying resource management layers. The Cognitive Cloud will interface with all the layers in the computing continuum plane and will learn through the monitoring and management of resources deployed on Cloud/Edge. Applying AI-techniques will cater for dynamic load balancing to optimise energy efficiency and maintaining balanced data traffic and high, distributed, reliable throughput from cloud to edge according to the application and user needs and the underlying infrastructures. The framework will also dynamically adapt the processing capacity of the cloud to the varying supply of green energy in order to optimise its environmental footprint. Application developers will be empowered with greater control over network, computing and data infrastructures and services, and the end-user will benefit from seamless access to a continuous service environment.*

2. Methods for exploiting data and knowledge for extremely precise outcomes (analysis, prediction, decision support), reducing complexity and presenting insights in understandable way

TOPIC ID: HORIZON-CL4-2022-DATA-01-01

Grant: RIA HORIZON Research and Innovation Actions Deadline 5 April 2022 **Budget 33 million**

Proposal results are expected to contribute to the following expected outcomes:

- *Improving automated ways for extracting meaning and providing insights from data extremely fast and/or accurately in order to optimize decision making (ranging from crisis/emergency management to predictive maintenance) or action planning, as well as demonstrating how these improvements can have great positive impacts for society, people, economy, or the environment.*

3. Extreme data mining, aggregation and analytics technologies and solutions

TOPIC ID: HORIZON-CL4-2022-DATA-01-05

Grant: RIA HORIZON Research and Innovation Actions Deadline 5 April 2022 **Budget 30 million**

Proposal results are expected to contribute to the following expected outcomes:

- *Provide better technologies, tools and solutions for data mining (searching and processing) of large, constantly growing amounts and varieties of data, and/or extremely sparse/dispersed/heterogeneous/multilingual data (stored centrally or in distributed/decentralized systems), in particular IoT, industrial, business, administrative, environmental, scientific or societal data.*

4. Technologies and solutions for data trading, monetizing, exchange and interoperability (AI, Data and Robotics Partnership) (IA)

TOPIC ID: HORIZON-CL4-2022-DATA-01-04

Grant: IA HORIZON Innovation Actions Deadline 5 April 2022 **Budget 52 million**

Proposal results are expected to contribute to the following expected outcomes:

- *Improve the digital technologies, solutions and interoperable frameworks for data markets and data economy (e.g. industrial, administrative and societal/cultural data platforms/data spaces), allowing for data assets to be discoverable, efficiently and fairly priced and shared/traded in a secured, user-friendly, compliant and energy-efficient way; promote the development of a European industrial ecosystem of the data economy capable of ensuring digital autonomy; develop training material to endow workers in this occupational group with the right skillset in order to deploy the new technologies.*
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5. Programming tools for decentralised intelligence and swarms

TOPIC ID: HORIZON-CL4-2022-DATA-01-03

Grant: RIA HORIZON Research and Innovation Actions Deadline 5 April 2022 **Budget 40 million**

Proposal results are expected to contribute to the following expected outcomes:

- *Agile and secure architectures for collaborative smart nodes with decentralised or swarm intelligence, which build on European strengths in embedded sensors and devices and wireless communication, both non-cellular and mobile 5G networks;*
 - *Programming environments for smart edge-connected nodes and dynamic groups of nodes across the device-edge-cloud continuum, which reduce the complexity of programming and maintenance;*
 - *Dynamic open environments and tools, which stimulate open architectures and interfaces, interoperability and avoiding vendor lock-in, open source where appropriate;*
- Reinforced Europe's position in the market of next generation smart systems (sensors and devices) integrated in an evolving Internet of Things and cyber-physical ecosystems with strong capacities at the edge.

Other EU calls to be out on **21 December 2021**:

1. AI for human empowerment (AI, Data and Robotics Partnership)

Grant: RIA HORIZON Research and Innovation Actions

TOPIC ID: HORIZON-CL4-2022-HUMAN-01-01 **Budget 16 million**

2. European Network of AI Excellence Centres: Expanding the European AI lighthouse

Grant: RIA HORIZON Research and Innovation Actions

TOPIC ID: HORIZON-CL4-2022-HUMAN-01-02 **Budget 34.5 million**

3. Internet architecture and decentralised technologies

Grant: RIA HORIZON Research and Innovation Actions

TOPIC ID: HORIZON-CL4-2022-HUMAN-01-03 **Budget 22 million**

4. eXtended Reality Technologies

Grant: RIA HORIZON Research and Innovation Actions

TOPIC ID: HORIZON-CL4-2022-HUMAN-01-14 **Budget 19 million**

5. eXtended Reality Learning - Engage and Interact

Grant: IA HORIZON Innovation Actions

TOPIC ID: HORIZON-CL4-2022-HUMAN-01-19 **Budget 21.5 million**

6. Open source for cloud-based services

Grant: RIA HORIZON Research and Innovation Actions

TOPIC ID: HORIZON-CL4-2022-DIGITAL-EMERGING-01-26 **Budget 22 million**

7. Increased robotics capabilities demonstrated in key sectors (AI, Data and Robotics Partnership)

Grant: IA HORIZON Innovation Actions

TOPIC ID: HORIZON-CL4-2022-DIGITAL-EMERGING-01-07 **Budget 36 million**

8. AI, Data and Robotics for Industry Optimisation (including production and services) (AI, Data and Robotics Partnership)

Grant: IA HORIZON Innovation Actions

TOPIC ID: HORIZON-CL4-2022-DIGITAL-EMERGING-01-05 **Budget 19 million**

9. Pushing the limit of physical intelligence and performance

Grant: RIA HORIZON Research and Innovation Actions

TOPIC ID: HORIZON-CL4-2022-DIGITAL-EMERGING-01-06 **Budget 28.5 million**

10. European Enabling technologies for Beyond 5G/6G RAN disaggregated architectures

Grant: RIA HORIZON Research and Innovation Actions

TOPIC ID: HORIZON-CL4-2022-DIGITAL-EMERGING-01-30 **Budget 13 million**

Upcoming event:

HIPEAC 2022 | DL4IoT: Workshop on Deep Learning for IoT

The HiPEAC 2022 conference will take place in Budapest (Hungary), as a F2F event, from the 17th to the 19th of January 2022.

VEDLIoT workshop DL4IoT: Workshop on Deep Learning for IoT January 17th at 14:00 - 17.30

The use of AI in IoT applications dramatically extends the capabilities of IoT systems and their application areas. These new, next-generation IoT architectures allow for processing vast amounts of data collected in distributed systems, affecting areas like transportation (e.g. self-driving cars), automation (e.g. robotization or predictive maintenance), and our homes (e.g. assisted living). Teaching the IoT to learn imposes a number of new challenges. New hardware and accelerator concepts are required for efficient data processing in a distributed environment. Also, significant improvements on the toolchain are required to bridge between AI and IoT developers. Furthermore, security, privacy, or robustness for such systems becomes a critical challenge, being essential for most application domains. The workshop aims at discussing challenges and solutions related to the exploitation of artificial intelligence (AI) and deep learning (DL) for handling the large complexity of IoT applications.

More information on the workshop webpage is available on:

<https://www.hipeac.net/2022/budapest/#/program/sessions/7935/>.

Whilst wishing all our members the best of luck with these calls, until next time,

Best regards,

Jeanette Fava | CFO