

# Targeted consultation on the Orientations of the first two years of the proposed Digital Europe programme

Fields marked with \* are mandatory.

## Digital transformations in Europe – what is at stake?

The purpose of this consultation is to gather the stakeholders' views on the key areas, elements and priorities of the initial phases of the future EU Digital Europe programme.

The Digital Europe programme was proposed by the Commission as part of the next Multiannual Financial Framework 2021-2027. The programme's objective is to respond to the harsh challenge Europe is facing in a context of increasing global competition. Global actors are injecting vast amounts of public capital in advanced digital capacities to boost their competitiveness, modernise their public sector and protect their society and economy. However, the EU has been slower than competing regions in investing in the uptake of latest technologies including world-class infrastructures.

In concrete terms, the programme's aim is to reinforce Europe's capacities in areas of strategic importance such as high performance computing (HPC), artificial intelligence (AI) and cybersecurity and to make sure they benefit the economy and address societal challenges and citizens' needs. It plans to achieve this by overcoming the fragmentation of investments, the lack of advanced digital skills and the slow pace of adoption of innovative digital solutions by public administrations and small and medium-sized enterprises (SMEs).

Since Digital Europe will support economies and societies in their digital transformation, it has the potential to bring significant benefits to a wide variety of beneficiaries. By supporting digitalisation and modernisation of public services citizens will benefit from more user-centric services of public interest, be it health, mobility or administrative services. Public administrations will benefit from efficiencies in the provision of services, which better correspond to user needs. Businesses and in particular SMEs will have easy access to strategic capacities like data, artificial intelligence and computing resources for experimenting and testing and hence developing new business ideas. The programme will help technology transfer organisations to take an active role in the deployment of innovative solutions and support them to do so. Finally, the programme has the potential to contribute to climate targets inter alia by providing technology tools for better predicting environmental impacts (HPC), providing techniques for reducing pollution load (e.g. precision farming through AI tools), but also by choosing to promote the use of solutions with a low environmental impact.

This consultation focusses specifically on priorities for the first two years of the Digital Europe programme (2021-2022). We expect public authorities, especially at local level to be interested in this consultation, as well as industry, especially SMEs, but also any citizen who feels involved in the digital transformation.

You will find the Commission proposal for the Digital Europe programme [here](#).

You will also find the Digital Europe programme draft Orientations for 2021-2022 [here](#).

The privacy statement is available [here](#).

Thank you for your contribution!

## About you

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\* I am giving my contribution as

- Academic/research institution
- Business association
- Company/business organisation
- Consumer organisation
- EU citizen
- Environmental organisation
- Non-governmental organisation
- Public authority
- Trade union
- Non-EU citizen
- Other

\* First name

*40 character(s) maximum*

Annika

\* Surname

*80 character(s) maximum*

Linck

\* Email (this won't be published)

*80 character(s) maximum*

a.linck@digitalsme.eu

\* Organisation name

*255 character(s) maximum*

European DIGITAL SME Alliance

\* Organisation size

- Micro (1 to 9 employees)
- Small (10 to 49 employees)
- Medium (50 to 249 employees)
- Large (250 employees or more)

\* Country of origin

Please add your country of origin, or that of your organisation.

- Austria
- Belgium
- Bulgaria
- Croatia
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Romania
- Slovak Republic
- Slovenia
- Spain
- Sweden
- United Kingdom
- EEA country
- Other

Transparency register number

*255 character(s) maximum*

Check if your organisation is on the transparency register. It's a voluntary database for organisations seeking to influence EU decision-making.

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I agree to the processing of my personal data in accordance with the [privacy statement](#). (This is necessary to participate in the survey.)

\* Publication privacy settings

**Anonymous**

Only your type of respondent, country of origin and contribution will be published. All other personal details (name, organisation name and size, transparency register number) will not be published.

**Public**

Your personal details (name, organisation name and size, transparency register number, country of origin) will be published with your contribution.

## High Performance Computing

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The computing and data needs of European scientists and industry do not currently match the computation capabilities available in the EU. This situation may create problems related to privacy, data protection, commercial trade secrets or ownership of data. In addition, Europe consumes about 29% of HPC resources worldwide today, but the EU industry provides only ~5% of such resources.

Digital Europe's overarching strategic objective for High Performance Computing (HPC) is to develop, deploy and maintain in the EU an integrated world-class exascale and post-exascale supercomputing and data infrastructure, including the integration of quantum computing technologies, and to develop and support a highly competitive and innovative HPC ecosystem. This will drive innovation in the digital economy and help ensure the digital autonomy of Europe.

See pp. 7-8 of the [draft Orientations document](#).

The following main actions are foreseen for the first two years of the programme:

- Towards exascale supercomputing: involves acquiring and deploying new supercomputing capabilities, notably the precursors to exascale, several petascale EuroHPC supercomputers and one exascale EuroHPC supercomputer.
- Ensuring the widest access to HPC infrastructure: will include the definition of the conditions for European-wide access to HPC resources, the federation of national and European HPC and of data resources into a common platform and horizontal HPC-based services for industry, academia and public sector.
- Building capabilities: applications development and widening the use of HPC, by developing and supporting the ecosystem for user communities, networking HPC competence centres between participating states and through training and education activities.

Do you agree that the actions set out above identify the right priorities to addresses this strategically important sector?

|                   | Completely agree      | Partially agree                  | Partially disagree    | Completely disagree   | No opinion            |
|-------------------|-----------------------|----------------------------------|-----------------------|-----------------------|-----------------------|
| * Please evaluate | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Do you agree that the EU should support Member States in improving the existing supercomputing capacities?

|                   | Completely agree      | Partially agree       | Partially disagree    | Completely disagree   | No opinion                       |
|-------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------------------------|
| * Please evaluate | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> |

\* Are you/your organisation interested in investing in this area or otherwise directly involved?

- Yes
- No

\* Which of the following main areas would you be interested to invest and/or be involved in and why?

- Building infrastructure capabilities in Europe
- Access to supercomputing
- Capacity building
- Other

Reasons for the selected action(s) (including 'other')

There are times when companies need to experiment with a new technology and the cost is so high that it makes experimentation difficult. Free access to infrastructure either for HPC or AI would boost experimentation possibilities. In order to build AI applications fast, service-facilities for AI models and access to HPC, like some providers are already offering, are needed. In addition, there is a big demand for labelled datasets which can be used by companies. In the area of AI, provision of data-sharing centres or platforms could be useful, but the hubs themselves should not duplicate solutions which are available on the market, but only provide infrastructure for testing. Also, procurement needs to be done in a way that allows smaller players to get involved and provide solutions.

However, at the same time it is important that the Digital Europe Programme as well as funding and services provided via the Digital Innovation Hubs is market-driven and builds on and supports existing business or industry structures.

Which activities are necessary to facilitate innovation by using European Supercomputing Infrastructure for industry (including SMEs), and why?

Which actions are necessary to help public bodies/users profit from the European Supercomputing Infrastructure – and why?

## Artificial Intelligence

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Artificial intelligence (AI) has become an area of strategic importance and a key driver of economic development. It can bring solutions to many societal challenges from treating diseases to minimising the

environmental impact of farming. However, socio-economic, legal and ethical impacts have to be carefully addressed.

It is essential to join forces in the European Union to stay at the forefront of this technological revolution, to ensure competitiveness and to shape the conditions for its development and use (ensuring respect of European values).

The aim, in the Digital Europe programme is to build capacity in artificial intelligence (AI), in line with the Communication on Artificial Intelligence for Europe and the Coordinated Plan on Artificial Intelligence. To this end, it is foreseen that the first two years of the programme will focus on deploying an infrastructure which offers access to AI tools and components and data resources, as well as reference testing and experiment facilities in some prioritised application sectors.

See pp. 9-10 of the [draft Orientations document](#).

The proposed priorities for the first couple of years are the following:

- establishing EU-wide common data spaces providing access to data for AI, building on data from the public and the private sector. The aim is to support the emergence of European data spaces identified for industrial/societal priorities, including through trustworthy industrial and personal data platforms to exchange verified data, and to make a critical mass of high value public sector data sets accessible and fit for AI applications and use in concrete large-scale test cases. During the first two years the programme will focus on the creation of EU wide data spaces for health (including the pooling of medical images and human genome data), environmental, industrial and mobility data, where data are shared, pooled and used at European level.
- developing world-class large-scale reference Testing and Experimentation Facilities for AI hardware, software, components, systems and solutions, and underlying resources (data, computing, cloud), thus providing a highly-specialised resources to be shared at European level. The following sectors may be targeted: health, agri/food, environment, clean/renewable energy, manufacturing, smart cities and mobility (including autonomous driving, logistics, shipping, trains, etc.).
- scaling up the Common European AI platform, building on the existing AI-on-demand platform, to provide a single access point to high quality tested AI resources (including knowledge, computing power, tools and algorithms), and, where needed, bring such resources to industrial standard, and to provide corresponding support for its users to integrate AI into solutions, products and services.

Do you agree that the actions set out above identify the right priorities to addresses this strategically important sector?

|                   | Completely agree      | Partially agree                  | Partially disagree    | Completely disagree   | No opinion            |
|-------------------|-----------------------|----------------------------------|-----------------------|-----------------------|-----------------------|
| * Please evaluate | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Do you agree that the EU should support Member States in improving the business case for investments in such a strategically important sector?

|  | Completely agree      | Partially agree       | Partially disagree    | Completely disagree   | No opinion            |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|  | <input type="radio"/> |

|                   |                       |                       |                       |                       |                                  |
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Are you/is your organisation interested in investing in this area or otherwise directly involved?

- Yes  
 No

\* Why?

- The return on investment is not clear/too long term  
 Prefer investing in other priorities  
 Do not have the competence  
 Too costly  
 Other

## Cybersecurity

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The digital era is creating numerous new opportunities for the economy and society. But, at the same time, it introduces new challenges. Cyber-incidents and cyber-attacks cause the loss of billions of euros every year. Cybersecurity, trust and privacy are the foundations of a prosperous European Digital Single Market.

The European Union works on a number of fronts to promote cyber resilience across the European Union. Establishing a Network of Cybersecurity National Centres with a new European Cybersecurity Industrial, Technology and Research Competence Centre lies at the heart of this process.

Actions in the Digital Europe programme addressing cybersecurity aim to reinforce European strategic autonomy in this area by strengthening the cyber resilience of essential services in the Digital Single Market and by creating a strong, innovative and autonomous European industry.

See pp. 11-12 of the [draft Orientations document](#).

The proposed priorities in the first two years will focus on:

- Quantum Communication Infrastructure: starting the large-scale deployment for an infrastructure which will offer high security in critical communications.
- Certification: contributing to the implementation of the regulation "[EU Cybersecurity Act](#)", notably by supporting enabling infrastructure for security certification, the adoption of those certification schemes ([focusing first on 5G infrastructures](#)) and through awareness-raising activities.
- Cyber Threat Information Network: deploying through key cyber ranges, with Member States and industry, the European cyber threat information network needed at national and at industrial levels, by the creation of federated interconnected data repositories (e.g. vulnerabilities, intelligence); by supporting testbeds where ICT equipment and services will be assessed; by providing AI tools (e.g. for data analytics, for augmenting self-healing), by supporting trainings and skill development.
- Continuation of the support for the implementation of NIS directive through capacity building and the enhancement of cross-border cooperation on cybersecurity at technical, operational and strategic levels among Member State bodies and among industry stakeholders, including Information Sharing and Analysis Centres (ISACs).

- Cybersecurity Competence Centre Network (CCCN): deploying the [competence centre network](#) with Member States.
- Market uptake of innovative solutions: widening the deployment of cybersecurity tools and strengthening EU industrial capacity in cybersecurity, inter alia by supporting faster validation and take-up of new research/innovations, and supporting EU supply chain providers from critical sectors.

Cybersecurity both underpins the security of AI tools and high performance computing infrastructures supported under other parts of the programme, and relies on them for the development of its own solutions (e.g. by testing against attacks run on high performance computing machines). A key activity will also be the creation in coordination with activities under the advanced digital skills pillar of the programme, of the specific skill sets needed by professionals.

Do you agree that the actions set out above identify the right priorities to address this strategically important sector?

|                   | Completely agree      | Partially agree                  | Partially disagree    | Completely disagree   | No opinion            |
|-------------------|-----------------------|----------------------------------|-----------------------|-----------------------|-----------------------|
| * Please evaluate | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Do you agree that the EU should support Member States in improving the business case for investments in such digital infrastructure deployments?

|                   | Completely agree      | Partially agree       | Partially disagree    | Completely disagree   | No opinion                       |
|-------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------------------------|
| * Please evaluate | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> |

\* Are you/your organisation interested in investing in this area or otherwise directly involved?

- Yes  
 No

\* Why?

- The return on investment is not clear/too long term  
 Prefer investing in other priorities  
 Do not have the competence  
 Too costly  
 Other

## Advanced Digital Skills

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Gains from investment in the new capacities will not materialise if there are not enough people able to use and deploy them. Currently, the EU is facing a systemic digital skills gap, in particular when it comes to the most specialised digital skills. As highlighted in the mid-term review on the implementation of the Digital Single Market Strategy, over the past 10 years, employment of ICT specialists in the EU has grown by

around 2 million, but 53% of companies looking to take on new ICT staff struggled to do so in 2018 (Source: Eurostat). In addition, the offer of specialised education in digital technologies seems to be concentrated only in some geographical areas and sometimes not reflecting the latest technological developments ([JRC 2019](#)).

Actions under this objective aim at addressing the shortages of digital experts in the EU in particular in the fields of artificial intelligence, high performance computing and cybersecurity.

See pp. 12-14 of the [draft Orientations document](#).

It is proposed that the programme will, in the first two years, focus on (1) setting up highly specialised Masters programmes or modules, as well as the reinforcing existing ones through the establishment of consortia of higher education institutions working alongside excellence centres and industry participants; (2) the design and delivery of short-term training courses in the advanced technologies for both people already in employment and those unemployed and (3) the provision of job placements in companies or research centres, in particular to students and graduates, to acquire the necessary advanced digital skills needed for the deployment of the above advanced technologies.

Do you agree that the EU should support Member States in improving the advanced digital skills necessary to operate the up-to-date digital infrastructures?

|                   | Completely agree      | Partially agree                  | Partially disagree    | Completely disagree   | No opinion            |
|-------------------|-----------------------|----------------------------------|-----------------------|-----------------------|-----------------------|
| * Please evaluate | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

\* Are you/your organisation interested in investing in this area or otherwise directly involved?

- Yes
- No

\* Why?

- The return on investment is not clear/too long term
- Prefer investing in other priorities
- Do not have the competence
- Too costly
- Other

## Digital Innovation Hubs

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For Europe to remain competitive internationally, its companies and public administrations must be able to benefit from digital opportunities. This will lead to higher value products and smarter processes. The digital revolution brings opportunities for many actors, but many of them still find it difficult to know in which technologies to invest and how to secure financing for their digital transformation. The hubs funded under the Digital Europe Programme, the *European Digital Innovation Hubs (DIH)*, can help ensure that every company and public administration, small or large, high-tech or not, can grasp the digital opportunities.

DIHs offer access to technology-testing, financing advice, market intelligence and networking opportunities. The Digital Europe programme will co-invest, together with Member States, in capacity building for a select number of DIHs to help the digital transformation of SMEs and public sector organisations on a large scale. While Member States' investments in DIHs – supported through national, regional or European Regional Development Funds - would focus on local activities of a hub, the Digital Europe Programme would focus on trans-national activities of European added value. EU funding would allow for example to enhance their capacity to serve more than one country and to export a DIH's excellence and to ensure that the capacities that have been build up for HPC, AI, cybersecurity, advanced digital skills are being diffused across the whole economy everywhere in Europe.

See pp. 14-16 of the [draft Orientations document](#).

It is proposed that over the first two years the programme will setup an initial network of European DIHs and the early stages of the network's expansion. Beyond the geographical coverage (at least one European DIH per Member State from the start, aiming ultimately at one hub per NUTS2 region in subsequent years), the ambition is to support the highest quality hubs. Each DIH will have a specialisation, which can be build up over time, and which should ensure the future strengths of the region's industry and public sector, e.g. precision agriculture, smart manufacturing, smart government, ... by combining AI, HPC or cybersecurity and promising application areas, e.g. in smart specialisation priorities. Some of these hubs may focus at health and care, smart and sustainable cities and communities, agrifood or blockchain. The Digital Europe programme will also support the networking of the European Digital Innovation Hubs amongst themselves to transfer expertise between regions and to be able to provide expertise not locally available.

Do you agree that it is strategically important to have a well-connected network of regional hubs to support SMEs and local administrations in their digital transition?

|                   | Completely agree      | Partially agree                  | Partially disagree    | Completely disagree   | No opinion            |
|-------------------|-----------------------|----------------------------------|-----------------------|-----------------------|-----------------------|
| * Please evaluate | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Do you agree that the EU should support Digital Innovation Hubs to help SMEs and local administrations in their digital transition?

|                   | Completely agree      | Partially agree                  | Partially disagree    | Completely disagree   | No opinion            |
|-------------------|-----------------------|----------------------------------|-----------------------|-----------------------|-----------------------|
| * Please evaluate | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

\* Are you/is your organisation interested in investing in this area or otherwise directly involved?

- Yes
- No

What aspects of the DIH capacity need to be supported the most and how should the programme address these?

The DEP as well as funding and services provided via the DIHs needs to be market-driven and build on and supports existing business or industry structures.

#### Key points:

- 1) Build on existing ecosystems. Many DIGITAL SME's members provide digital solutions in B2B: they help transform traditional business models to digital business models by providing digital architecture, software, platforms and services, and other ICT based solutions to their SME counterparts or large businesses. While there may be an additional need to boost the digital transformation in Europe, government-led activities in this area need to focus on the provision of infrastructure, exchange of knowledge and best practices, boost existing mechanisms for the transfer of digital know-how and should not provide services that are available in the market.
- 2) European DIHS should build on the most successful models of hubs and best practices. DIHs should have a clear and narrow focus which follows the criteria set out above. They should not engage in activities that are provided by local businesses and rather focus on raising awareness, matchmaking, infrastructure, skills.
- 3) When engaging in public procurement to purchase solutions, infrastructure, or services for the DIHs, authorities and local administrations should provide equal opportunities to SME providers of solutions and services.
- 4) Access to funding should be simple. This could e.g. be realised by a one-shop access point for SMEs. Alternatively, financial support should come in the form of direct tax rebates. Funding schemes which require substantial administrative procedures and are characterised by a high level of complexity are not taken up by SMEs, thus do not bring added value.

#### Specific DIH functions

- Market and business intelligence are interesting for SMEs in the ICT sector. A function such as a market radar for SMEs showing companies active in a specific field could provide a better picture of the size of market, and the available solutions and products.
- Testing facilities: Sometimes companies need to experiment with a new technology and the cost is so high that it makes experimentation difficult. Free access to infrastructure either for HPC or AI would boost experimentation possibilities. In order to build AI applications fast, service-facilities for AI models and access to HPC, like some providers are already offering, are needed. In addition, there is a big demand for labelled datasets which can be used by companies. In the area of AI, provision of data-sharing centres or platforms could be useful, but the hubs themselves should not duplicate solutions which are available on the market, but only provide infrastructure for testing. Also, procurement needs to be done in a way that allows smaller players to get involved.
- Training programmes should be broad and cover different levels and skill sets. Ranging from short beginner courses to something with a valid/recognized certificate (or similar) at the end. The learning mode should allow employees to integrate such courses into the daily work process. SMEs especially struggle with high training costs and a lack of time. Training programmes should be demand-driven and focus on areas which will help European companies to become more competitive. One area that could be covered is direct funding for SMEs to achieve certain levels of certification or obtain a certain certificate based on recognised European and international standards. At the same time, attention needs to be paid to not distorting the market by offering things for free, which are developed and offered by businesses on the market.
- There could be funding for the experimentation with new technologies in the main fields of interest during the product-design process. It would be helpful to have funding for companies trying to change their focus.
- Matchmaking: This could be combined with the market radar introduced above, again making sure that no existing mechanisms provided by business associations or other existing structures are duplicated.
- Many SMEs lack knowledge and understanding about the opportunities of adopting new technologies or developing new products/services based on those technologies. For example, 5G and IoT are areas which may hold an untapped potential for SMEs to bring new solutions to the market. In many of areas, standards constitute natural building blocks, which allow small and large companies to interoperate and innovate in an ecosystem. Initiatives based on the model launched by ETSI with its Technology Awareness Roadshow for SMEs could be supported by DIHs and replicated all over Europe.

- An important function for DIHs could be capacity building by providing aggregated data on the status of digitalization (industry/sector audits, reports, analysis). Such information would help companies either to align with existing trends, or to forecast in a conscious manner changes in their business models, to create new services etc.

How should the programme incentivise collaboration between DIHs in order to strengthen the European network of DIHs?

On a European level, fragmentation should be as limited as possible. Harmonization and standardization are keys to successfully building a digital Europe. Authorities should be “lighthouses” showcasing that digitalization is not just a buzzword but is really working and benefiting everyone. It will be necessary to cut some old strings in order to transform the old Europe into a New Digital Europe. DIGITAL SME endorses the idea of including the Western Balkans in the general framework of the Digital Europe Programme. In many cases, the services mentioned above are already in the portfolio of IT cluster organization or local organisations and hubs. Better coordination is needed to make sure that new initiatives build on existing structures and use synergies between IT clusters and Digital Innovation Hubs.

Linking cities and regions: Communication and knowledge about what each region or city specialise in is beneficial for all stakeholders. On the other hand, if regional administrations fulfil this role, DIHs do not need to be involved (no need to replicate existing structures).

## Areas and sectors for high impact deployments

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Europe needs to provide a simpler and faster way to deliver public services no matter where people are travelling or living in the EU. This involves employing digital solutions, notably in areas where there is a clear European benefit in scale and cross border access.

The proposal for the first two years will focus on projects with high transformative impact in key areas of public interest. Building on investment made in digital service infrastructures under the current CEF Telecom programme and interoperable solutions under ISA<sup>2</sup> programme, Digital Europe aims to rapidly scale up pan-European investments in interoperable and interconnected digital services, ensuring that the benefits of new technologies are taken up in key services of public interest across the EU economy.

### High impact deployments

See pp. 16-28 of the [draft Orientations document](#).

**Digital for a clean planet:** actions aim at 'greening' the ICT sector, namely by improving the energy efficiency as well as reparability, lifespan and recycling (circularity) of ICT products and services in order to minimize the unwanted side effects of digitalisation and to contribute positively overall to environmental goals, in particular to climate and circular economy. They will focus on common and open environment data spaces, on industrial pilots to test full reverse-flow industrial systems, from the finished products to modules, components and raw materials in the area of ICT goods and on building trust and innovation for/in green digital products and services (including standards and applications).

How important do you consider EU support for digital technologies and their use to have a clean planet?

|  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|

|                   | Very important        | Important                        | Moderately important  | Not very important    | Not at all important  | No opinion            |
|-------------------|-----------------------|----------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| * Please evaluate | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

**Clean, sustainable and smart communities and mobility:** actions aim at large scale deployment of open, interoperable and trustworthy cross-sectorial urban digital platforms & AI driven services and cross-border Mobility as a Service; support actions to innovative SMEs and start-ups; and development of new business models and shared practices including political engagement and user acceptance.

How important do you consider EU support for clean, sustainable and smart communities and mobility?

|                   | Very important        | Important                        | Moderately important  | Not very important    | Not at all important  | No opinion            |
|-------------------|-----------------------|----------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| * Please evaluate | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

**Digital transformation of agri-food:** actions aims at accelerating the deployment of digital solutions in the agri-food sector and will focus on setting up large-scale reference experimentation and testing facilities, allowing technology providers to test their technologies in real environments, and networking agri-food digital innovation hubs building on the existing related hubs.

How important do you consider EU support for the digital transformation of the agri-food?

|                   | Very important        | Important             | Moderately important  | Not very important    | Not at all important  | No opinion                       |
|-------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------------------------|
| * Please evaluate | <input type="radio"/> | <input checked="" type="radio"/> |

**Digital transformation for better and sustainable health and care:** actions aim to improve the efficiency and quality of health and care systems by accelerating and scaling-up the integration of new digital solutions. A key goal is the development of a European health data space. It builds on existing actions for cross-border interoperability of electronic health records and other relevant datasets, through setting up the infrastructure, fostering consensus on common standards, and building on initiatives in Member States and regions. It also entails fostering a European approach to accessing health data sets, setting up testing and experimentation platforms and training of health and care professionals that will enable the development, testing and deployment of innovative data-driven tools and services based on technologies like AI and data analytics, taking advantage of advanced computing and of federated cloud services for faster data processing.

How important do you consider EU support for the digital transformation of health and care?

|                   | Very important        | Important             | Moderately important  | Not very important    | Not at all important  | No opinion                       |
|-------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------------------------|
| * Please evaluate | <input type="radio"/> | <input checked="" type="radio"/> |

**Citizen-centric digital public services:** the programme will support European public administrations by:

- providing a Digital Transformation Platform Ecosystem to support the interoperability of data and services across borders and across domains;
- developing the technical specifications and supporting the infrastructures to realise the once-only principle across borders;
- providing an interoperability incubator infrastructure to support innovative GovTech services

The proposed ecosystem will build on the the [Connecting Europe Facility \(CEF\) Building Blocks](#), [ISA<sup>2</sup>](#) and the [European Open Data Portal](#).

How important do you consider EU support for the digital transformation of public services, in particular for their cross-border interoperability and for the realisation of the once-only principle?

|                   | Very important        | Important                        | Moderately important  | Not very important    | Not at all important  | No opinion            |
|-------------------|-----------------------|----------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| * Please evaluate | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

**Justice:** the programme will provide support to continue to operate, maintain and expand the already established digital service infrastructures: the Online Dispute Resolution system, the Business Registers Interconnection Systems, and the [eJustice portal](#). In addition, innovative solutions in the field of justice will be piloted in the framework of the interoperability incubator. Applications in the justice field may also serve as use cases for innovative technologies, such as AI and blockchain.

How important do you consider EU support for the digitalisation of justice related activities?

|                   | Very important        | Important                        | Moderately important  | Not very important    | Not at all important  | No opinion            |
|-------------------|-----------------------|----------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| * Please evaluate | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

**Security:** the programme will provide support to the deployment of digital tools for use by competent authorities in charge of public order and security (law enforcement, border and coast guards, customs, first responders). In particular, it will support the use of AI for the analysis of large amount of data for law enforcement purposes and on the creation of data spaces for training and testing. Given the sensitivity of the security domain and the need to ensure the societal acceptance of the final tools, potential ethical and legal implications will be adequately addressed.

How important do you consider EU support for the digitalisation of Security related activities?

|                   | Very important        | Important             | Moderately important  | Not very important    | Not at all important  | No opinion                       |
|-------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------------------------|
| * Please evaluate | <input type="radio"/> | <input checked="" type="radio"/> |

**Digital cultural heritage** : actions aim at supporting the i) advanced digitisation of cultural assets in adopting, making use of innovative use of digital technologies in the cultural heritage domain but also in helping them to upskill. The cultural heritage sector requires very specific skills in terms of technique of digitisation, as each object is unique and widely vary in size, scope and material ; and ii) the [Europeana](#) initiative to act as a catalyst and innovator for cultural heritage institutions, supporting EU Member States to address challenges faced in the digital transformation of access to culture. Europeana will also act as a showcase for leveraging digital opportunities to maximise the impact of cultural heritage institutions' activities and outreach.

How important do you consider EU support for the digital transformation of cultural heritage institutions?

|                   | Very important        | Important             | Moderately important  | Not very important    | Not at all important  | No opinion                       |
|-------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------------------------|
| * Please evaluate | <input type="radio"/> | <input checked="" type="radio"/> |

**Blockchain**: activities will focus on the further development and deployment of the European Blockchain Services Infrastructure (EBSI) in cooperation with countries which are member of the European Blockchain Partnership. EBSI concerns both the applications (use cases) and the infrastructure underpinning them. EBSI should address mainly cross border public services in first steps, but it should also support services concerning public and private organisations (such as new identification services based on blockchain, Know your Customer – KYC, etc).

How important do you consider EU support for the deployment and uptake of blockchain?

|                   | Very important        | Important             | Moderately important  | Not very important    | Not at all important  | No opinion                       |
|-------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------------------------|
| * Please evaluate | <input type="radio"/> | <input checked="" type="radio"/> |

**Cloud federation as a Service**: actions aim at deploying a federation of pan-European Cloud Services - including data storage and data optimisation services - to be seamlessly used by public administrations and small and medium companies across the whole EU to ultimately enable a swift provision of European services of general interest of both public and economic nature.

How important do you consider EU support for the deployment of a federation of pan-European Cloud Services?

|                   | Very important        | Important             | Moderately important  | Not very important    | Not at all important  | No opinion                       |
|-------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------------------------|
| * Please evaluate | <input type="radio"/> | <input checked="" type="radio"/> |

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[Widening the best use of digital technologies](#)

See pp. 28-30 of the [draft Orientations document](#).

**Building trust in the digital transformation:** actions are targeting two groups: minors and citizens getting and sharing news and information online.

Protecting and empowering minors, a particularly vulnerable user group of online content and services, and tackling the online dissemination of child sexual abuse material (CSAM), require continuous action within a multidisciplinary and transnational approach. The proposal is to continue support for the network of Safer Internet Centres in the Member States providing awareness raising activities, helpline counselling for children and hotlines for reporting CSAM.

As more and more citizens get and share news and information online, online disinformation proliferates, and there is a need for measures aimed at detecting and combatting intentional disinformation spread. Online disinformation will be tackled by the use of new technologies for checking veracity and source of information on the internet, and by networking stakeholders addressing the same issue in Member States so to develop adequate responses to the phenomenon of disinformation that involve the whole media ecosystem.

How important do you consider EU support for a more trustful and safer internet?

|                   | Very important        | Important             | Moderately important  | Not very important    | Not at all important  | No opinion                       |
|-------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------------------------|
| * Please evaluate | <input type="radio"/> | <input checked="" type="radio"/> |

**Language technologies:** English currently dominates the digital environment, while other EU languages are under-represented. This gives rise to economic, social and cultural barriers. To ensure that latest technologies are available across all EU languages so as to provide all EU citizens with access to online content and services in their language and all SMEs with latest technologies tuned to their needs, this action will support localisation and deployment of language technologies such as automatic translation, subtitling or text analytics across Europe.

How important do you consider EU support for bringing down language barriers and deploying the latest language technologies?

|                   | Very important        | Important                        | Moderately important  | Not very important    | Not at all important  | No opinion            |
|-------------------|-----------------------|----------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| * Please evaluate | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

**Digital transformation of learning and education:** Education is a key investment in Europe's future. Education plays a vital role in boosting growth, innovation and job creation. Europe's education systems need to better prepare students to the requirements of the job market in a context of rapid and profound changes induced by the technological revolution and globalisation. The objective of this action is to include as many schools (primary, secondary, vocational) as possible in large scale actions making use of digital capabilities with the aim of scaling up good practises at European level that have already been proven successful in smaller scale pilots.

How important do you consider EU support for the digital transformation of learning and education?

|                   | Very important        | Important                        | Moderately important  | Not very important    | Not at all important  | No opinion            |
|-------------------|-----------------------|----------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| * Please evaluate | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

### Additional deployments

In which areas or sectors, not already identified above, would EU investments supporting the digital transformation be necessary, and why?

Complete the Digital Single Market! And ensure fair conditions for SMEs and reduce the regulatory burden on them.

Other proposals:

- Explore ways to make sure legislation considers the limited resources of small companies and does not overburden them. There are different ways to achieve this, e.g. by allowing them to operate in a testing environment, integrating general exemptions in legislation or other means, as e.g. limited liability regimes.
- Provide SMEs with the means to file complaints against unfair practices adopted by multinationals or platforms and ensure that the decision-making authorities in such cases are well-positioned and competent to assess complex and highly technical cases.
- Ensure access to data (especially for SMEs) which is a core requirement for machine learning and automated data analysis. Create clusters and pilot projects of data sharing between research organisations /academia and companies. Foster an open access to re-usable public sector data.
- Ensure that all countries and most regions have reliable and fast broadband access. Invest in the deployment of secure mobile internet standards of the newest standard. This basic infrastructure is particularly important for small companies often located in rural areas.
- Create an SME-friendly business environment and harmonised rules that allow business to easily engage in cross-border business activities. Tackle persisting obstacles in traditional areas such as VAT, contract law etc. and make sure new legislation keeps in mind the overall goal of achieving a digital single market while limiting the regulatory burden on small players.
- Encourage SME participation in public procurement by lowering administrative burdens and eliminating structural barriers for smaller players. Make sure that SMEs have equal access to European research and innovation programmes and funding schemes.
- Create geographic areas with a “sandbox environment”, e.g. start-up capital like Paris, Stockholm or Berlin, which will provide an environment with favourable conditions where future technologies can be tested. These should be linked to existing research hubs and similar structures.
- Build and further develop public-private partnerships on ICT skills and jobs, including industry and trade associations, national, regional and local governments, companies, education providers and ICT professionals.
- Support standards-based innovation: facilitate the development of industry ecosystems based on key standardised technologies (e.g. IoT, Intelligent Transport, smart homes, etc.), which companies of all sizes can access and use as a basis to innovate. Ensure SME involvement and representativeness.

### Synergies and Implementation

What would be the best way, in your view, to ensure synergies and complementarity with other sources of public funding, whether from Member States and/or EU programmes? Please specify which action you are referring to.

Which type of partners/consortium members (e.g. SME, universities, beneficiaries from 3rd countries, etc.) would you need in order to invest / be involved in the chosen action?

For the actions you are most interested in please indicate main activities and the overall project size (in million EUR)?

*5000 character(s) maximum*

Which mechanisms could projects use to incentivise the take-up by different actors, including SMEs, of the capacities provided by the programme?

What form of financing do you consider adapted to the actions of the draft Orientations indicated in the questions above? Please explain.

In which area of the draft Orientations would you recommend a simplified form of cost reimbursement for grants (e.g. unit costs, lump sums, other)?

- High Performance Computing
- Artificial Intelligence
- Cybersecurity
- Advanced Digital Skills
- European Digital Innovation Hubs
- High-impact deployments
- Widening the best use of digital technologies
- None of the above

## Contact

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