

Targeted Consultation on the 2030 Digital Compass

Fields marked with * are mandatory.

Introduction

The COVID-19 pandemic has changed the role and perception of digitalisation in our societies and economies, and accelerated its pace. Digital technologies are now imperative for working, learning, entertaining, socialising, shopping and accessing everything from health services to culture. The EU needs to ensure that this transformation is based on digital leadership and technological excellence, guided by our shared European values, and advances in a way that benefits all people and businesses.

What is the Digital Compass?

On 9 March 2021, the European Commission published a [Communication on the 2030 Digital Compass](#) to present a clear vision and path towards a human-centred, sustainable and more prosperous digital future. The vision revolves around four cardinal points with specific targets for each: (1) a digitally skilled population and highly skilled digital professionals, (2) secure and performant sustainable digital infrastructures, (3) the digital transformation of businesses, and (4) the digitalisation of public services.

To deliver this vision, the Commission proposes a Digital Compass in the form of a policy programme to be adopted by co-decision of the European Parliament and Council. The Digital Compass will include:

- A set of **common EU digital targets** for 2030, with key performance indicators for each of the four cardinal points.
- A **robust governance structure** including a monitoring mechanism and annual reporting to assess progress towards the targets through a score of 'traffic lights'; a collaborative analysis between the Commission and Member States to address identified gaps through joint commitments and targeted actions at European and/or national level; as well as a stakeholder forum to involve economic and societal actors in the governance process.
- A mechanism to operate and deploy **Multi-Country Projects** for building Europe's strategic capacity in critical areas.

For more information, please consult the [Digital Compass webpage](#).

We also invite you to participate in the ongoing [public consultation on a set of European Digital Principles](#), which will be proposed in the form of a joint interinstitutional solemn declaration as the second major initiative following from the Digital Compass Communication.

What is the purpose of this consultation?

This questionnaire seeks to collect views from citizens, the business community (particularly SMEs); Member States and public authorities; local, economic and social partners; as well as other digital stakeholders from research/academia and civil society. It is divided into four sections to gather feedback and input on the following key elements of the Digital Compass Communication:

1. Overall need and vision for accelerating EU's digital transformation
2. Approaches for reaching the 2030 targets for each cardinal point
3. Design of the governance framework
4. Mechanism to facilitate the development and implementation of Multi-Country Projects

Your contribution to this consultation will be used to prepare a policy programme and pave the ground for a smooth and effective achievement of the Digital Decade objectives.

How can I participate?

The survey is open from 22 June to 3 August. You can save your contribution as a draft to complete and submit at any time before the closing date.

You can answer all 71 questions or select and skip questions according to your knowledge and interest. Use the tabs at the top of the page to navigate between the different pages of the questionnaire.

About you

* 1) Language of my contribution:

- Bulgarian
- Croatian
- Czech
- Danish
- Dutch
- English
- Estonian
- Finnish
- French
- German
- Greek
- Hungarian
- Irish
- Italian

- Latvian
- Lithuanian
- Maltese
- Polish
- Portuguese
- Romanian
- Slovak
- Slovenian
- Spanish
- Swedish

* 2) I am contributing as representative of:

- Academic/research institution
- Business association
- Company
- Consumer organisation
- EU citizen
- Non-EU citizen
- Non-governmental organisation (NGO)
- Public authority
- Trade union
- Other

* 3) First name

Irina

* 4) Surname

Varlan

* 5) Email:

irina.varlan@gigaeurope.eu

* 6) Organisation name:

GIGAEurope aisbl

7) Organisation size:

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

8) Organisation scope:

- International
- Local
- National
- Regional

9) Transparency register number:

50 character(s) maximum

Check if your organisation is on the [transparency register](#). It is a voluntary database for organisations seeking to influence EU decision-making.

42178977290-80

* 10) Country of origin of your organisation

- Afghanistan
- Albania
- Algeria
- Andorra
- Angola
- Antigua and Barbuda
- Argentina
- Armenia
- Australia
- Austria
- Azerbaijan
- Bahamas
- Bahrain
- Bangladesh
- Barbados
- Belarus
- Belgium
- Belize
- Benin
- Bhutan
- Bolivia
- Bosnia and Herzegovina
- Botswana
- Brazil
- Brunei Darussalam
- Bulgaria
- Burkina Faso
- Burundi
- Cabo Verde
- Cambodia
- Cameroon
- Canada
- Central African Republic
- Chad

- Chile
- China
- Colombia
- Comoros
- Congo
- Costa Rica
- Croatia
- Cuba
- Cyprus
- Czechia
- Côte D'Ivoire
- Democratic Republic of the Congo
- Denmark
- Djibouti
- Dominica
- Dominican Republic
- Ecuador
- Egypt
- El Salvador
- Equatorial Guinea
- Eritrea
- Estonia
- Eswatini
- Ethiopia
- Fiji
- Finland
- France
- Gabon
- Gambia
- Georgia
- Germany
- Ghana
- Greece
- Grenada
- Guatemala
- Guinea
- Guinea Bissau
- Guyana
- Haiti
- Honduras
- Hungary
- Iceland
- India
- Indonesia
- Iran
- Iraq
- Ireland

- Israel
- Italy
- Jamaica
- Japan
- Jordan
- Kazakhstan
- Kenya
- Kiribati
- Kuwait
- Kyrgyzstan
- Laos
- Latvia
- Lebanon
- Lesotho
- Liberia
- Libya
- Liechtenstein
- Lithuania
- Luxembourg
- Madagascar
- Malawi
- Malaysia
- Maldives
- Mali
- Malta
- Marshall Islands
- Mauritania
- Mauritius
- Mexico
- Micronesia
- Monaco
- Mongolia
- Montenegro
- Morocco
- Mozambique
- Myanmar
- Namibia
- Nauru
- Nepal
- Netherlands
- New Zealand
- Nicaragua
- Niger
- Nigeria
- North Korea
- North Macedonia
- Norway

- Oman
- Pakistan
- Palau
- Panama
- Papua New Guinea
- Paraguay
- Peru
- Philippines
- Poland
- Portugal
- Qatar
- Republic of Moldova
- Romania
- Russian Federation
- Rwanda
- Saint Kitts and Nevis
- Saint Lucia
- Saint Vincent and the Grenadines
- Samoa
- San Marino
- Sao Tome and Principe
- Saudi Arabia
- Senegal
- Serbia
- Seychelles
- Sierra Leone
- Singapore
- Slovakia
- Slovenia
- Solomon Islands
- Somalia
- South Africa
- South Korea
- South Sudan
- Spain
- Sri Lanka
- Sudan
- Suriname
- Sweden
- Switzerland
- Syrian Arab Republic
- Tajikistan
- Tanzania
- Thailand
- Timor-Leste
- Togo
- Tonga

- Trinidad and Tobago
- Tunisia
- Turkey
- Turkmenistan
- Tuvalu
- Uganda
- Ukraine
- United Arab Emirates
- United Kingdom
- United States of America
- Uruguay
- Uzbekistan
- Vanuatu
- Venezuela
- Viet Nam
- Yemen
- Zambia
- Zimbabwe

* 11) The Commission will publish all contributions to this consultation. For the purpose of transparency, the following information will always be published: type of respondent; size, scope, transparency register number (if any), and country of origin of your organisation. Your e-mail address will never be published. Do you consent to the publication of the following information alongside your contribution? (multiple selections possible)

- Your name
- The name of your organisation
- Neither (To protect your anonymity, please do not include any identifying information in the contribution itself.)

I agree with the personal data protection provision.

[Privacy statement for Digital Compass targeted consultation.pdf](#)

I. Accelerating the Digital Transformation

This section features general questions about the need and vision for accelerating EU's digital transformation in the context of the COVID-19 pandemic. It is targeted at all stakeholder groups.

1) To what extent do you agree with the following statements?

The COVID-19 pandemic has...	Strongly agree	Agree	Neutral	Somewhat disagree	Strongly disagree
...demonstrated a need to accelerate the pace of digital transformation in Europe.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...exposed vulnerabilities of our digital space linked to our dependency on non-European technologies.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

...highlighted a need for a substantial increase of investments through all relevant EU funds and national spending to develop critical technologies.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
...showed that achieving digital sovereignty by building our own technological capacities is crucial for strengthening the EU's resilience.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
...exposed a digital divide between people who can fully benefit from a digital space with a full range of services, and those who cannot.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...exposed a digital divide between those businesses already able to leverage the full potential of the digital environment and those not yet fully digitalised.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...emphasized the importance of ensuring that everyone in Europe fully benefits from the digital transformation.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...highlighted the need to increase the EU's role for coordinating the digitalisation efforts of Member States.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

If you would like to present additional comments or views on the impact of the COVID-19 pandemic on digitalisation in the EU, please add:

500 character(s) maximum

5G and VHCNs should be considered critical infrastructures and Europe should recognize it is lagging behind globally. Catching-up requires more private investments stimulated by policy reform, more network sharing, but also more funds to avoid the widening of the digital divide between rural and urban areas. Public funds need to be targeted only at instances of clear market failure to preserve business incentives to invest in broadband networks and 5G and to avoid distorting market dynamics.

2) To what extent has the COVID-19 pandemic altered your/your organisation's need for and reliance on each of the following elements?

	Decreased	No change	Increased	Strongly increased
A digitally skilled population (i.e., citizens with at least basic digital skills)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Highly skilled digital professionals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Secure, performant and sustainable digital infrastructures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Digital products, tools, and services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Digital public services



If you would like to present additional comments or specifications, please add:

500 character(s) maximum

3) In your opinion, how important are the following elements for accelerating EU's digital transformation? Please rank on a scale of 1-5 (1 = most important, 5 = least important).

	1	2	3	4	5
A digitally skilled population and highly skilled digital professionals	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Secure, performant and sustainable digital infrastructures	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Digital transformation of businesses	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Digitalisation of public services	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
An EU governance framework to enable close cooperation and coordination between the Commission and Member States, with the objective of adopting recommended actions including joint commitments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A framework for accelerating the implementation of Multi-Country Projects, i.e., projects that aim to mobilise and combine investments from the EU budget, Member States and the private sector to achieve digital goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If you would like to include another element or present additional comments, please add:

500 character(s) maximum

Whilst all elements are important for accelerating Europe's digital transformation, we would like to underline that policies fostering a performant, secure digital infrastructure should be the priority. Connectivity is the precondition for being able to reach the ambitions on the four cardinal points and, as such, is the cornerstone for the EU Digital Compass objectives. Creating an environment for investment is important to ensure digital transformation.

4) In your view, how important is progress in each of the areas below for realizing the EU's commitment to reduce greenhouse gas emissions by at least 55% by 2030? Please rank on a scale of 1-5 (1 = most important, 5 = least important).

	1	2	3	4	5
A digitally skilled population and highly skilled digital professionals	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Secure, performant and sustainable digital infrastructures	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Digital transformation of businesses	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Digitalisation of public services	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If you would like to present additional comments or views, please add:

500 character(s) maximum

The connectivity sector is an important enabler for the economy and society at large to access and deploy digital solutions for reducing greenhouse gas emissions, eg businesses to continue remote working and thereby reduce pressure on transportation. Also, the connectivity sector is implementing sustainability measures itself, with regard to energy saving network and product innovations (e.g. use of recycled materials) and the use of renewable energy sources to comply with 2030 emission targets

5) In addition to the cardinal points and targets that have been identified in the [Digital Compass Communication](#), which additional elements would you consider relevant for achieving a successful digital transformation?

2000 character(s) maximum

Policy and regulation must stimulate ongoing private investment in European infrastructure through greater harmonization and reducing administrative burdens. There is still a significant investment gap to be overcome to reach the 2030 connectivity targets. Public funds should only be considered in clear cases of market failure, where there is no prospective business case for private investment in infrastructure upgrade or roll-out in areas where Gigabit capable networks are already present.

6) In your view, which opportunities can an accelerated European digital transformation create for you/your organisation?

500 character(s) maximum

7) How do you view your/your organisation's role in accelerating the digital transformation and reaching the 2030 targets?

500 character(s) maximum

GIGAEurope represents private operators who build, operate and invest in European fixed and mobile gigabit communications networks that enable Europe's digital connectivity. GIGAEurope members collectively provide connectivity services to over 40 million fixed broadband customers and 130 million mobile customers spanning across Europe. Our members continuously upgrade & roll-out their very high capacity networks to provide multi-gigabit speeds.

II. Reaching the 2030 Targets

The Digital Compass sets out targets along four cardinal points. The first two cardinal points focus on digital capacities in the area of skills and infrastructures, and the other two focus on digital transformation of businesses and public services.

The questions in this section are targeted at stakeholders with expertise in any or all of the four areas. You can skip sections and questions according to your specific knowledge and interest. If you are contributing as representative of a start-up or small-to-medium-sized enterprise, please pay special attention to the questions in subsection IIc.

IIa) A digitally skilled population and highly skilled digital professionals

Europe needs digitally empowered and capable citizens, a digitally skilled workforce and way more digital experts than today. Basic digital skills for all citizens and the opportunity to acquire specialised skills in information and communications technology (ICT) for the workforce are a prerequisite to participate actively in the Digital Decade.

8) In your opinion, how challenging will it be to achieve the proposed EU targets by 2030? Please rank on a scale of 1-5 (1=not challenging at all, 5= very challenging).

2030 EU Targets	1	2	3	4	5
80% of all adults have at least basic digital skills (2020: 58,3%)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
At least 20 million employed ICT specialists in the EU (2019: 7.8 million)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Convergence between the number of female and male ICT specialists (2020 share of women among employed ICT specialists: 18%)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9) In your experience, what are the biggest barriers and bottlenecks regarding progress towards a digitally empowered citizenry, a digitally skilled workforce and more digital experts?

500 character(s) maximum

GIGAEurope members are actively engaged in various company programs and expanded funding to support EU and national digital skills and education programs. One common challenge in view of reaching the EU digital skills objectives is scalability and speed of progress. It would make an enormous positive difference if digital skills formed part of the curriculum in schools.

10) What are the main difficulties (if any) you encountered while trying to improve your digital skills, both at a basic and a more advanced level?

500 character(s) maximum

11) What is today needed the most to achieve the 2030 targets? Please rank interventions in order of importance to achieve each proposed target (1=most important, 6= least important).

11a)

80% of all adults have at least basic digital skills	1	2	3	4	5	6
More public investment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stimulation of more private investment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More public-private cooperation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Additional regulation to advance the Single Market	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Better implementation and enforcement of existing regulation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More robust governance to steer EU and Member State actions on digital	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

11b)

At least 20 million employed ICT specialists in the EU	1	2	3	4	5	6
More public investment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stimulation of more private investment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More public-private cooperation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Additional regulation to advance the Single Market	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Better implementation and enforcement of existing regulation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More robust governance to steer EU and Member State actions on digital	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

11c)

Convergence between the number of female and male ICT specialists	1	2	3	4	5	6
More public investment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stimulation of more private investment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More public-private cooperation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Additional regulation to advance the Single Market	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Better implementation and enforcement of existing regulation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More robust governance to steer EU and Member State actions on digital	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please indicate specific areas where the interventions you identified as important are needed and specify how, or present other interventions to achieve the proposed targets in the area of digital skills:

500 character(s) maximum

12) Do you/does your organisation have experience with national and/or European initiatives in the area of digital skills? If yes, please indicate which initiatives and share best practices and issues you have encountered:

500 character(s) maximum

13) In your opinion, which priority action should the EU undertake to accelerate progress towards the digital skills targets?

500 character(s) maximum

14) In your opinion, which priority action should EU Member States undertake to accelerate progress towards the digital skills targets?

500 character(s) maximum

IIb) Secure and performant sustainable digital infrastructures

Europe will only achieve digital leadership by building on sustainable digital infrastructures in the areas of connectivity, microelectronics and the ability to process vast amounts of data, which act as enablers for other technological developments and support our industry's competitive edge.

15) In your opinion, how challenging will it be to achieve the proposed EU targets by 2030? Please rank on a scale of 1-5 (1=not challenging at all, 5= very challenging).

2030 EU Targets	1	2	3	4	5
All EU households covered by a gigabit network (2020: 59%)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
All populated EU areas covered by 5G (2021: 41%)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
The production of cutting-edge and sustainable semiconductors in Europe including processors is at least 20% of world production in value (2020: 10%)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10,000 climate neutral highly secure edge nodes are deployed in the EU (2020: 0)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Europe is at the cutting edge of quantum capabilities, with its first computer with quantum acceleration by 2025 (2020: 0)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

16) In your experience, what are the biggest barriers and bottlenecks regarding progress towards secure, performant and sustainable digital infrastructures?

500 character(s) maximum

The roll-out of broadband networks meets with significant deployment cost and delays due to varying local procedures regarding network build permits and digging fees. The Broadband Cost Reduction Directive seeks to address these issues in order to speed up the roll-out of very high capacity networks. Member States are still to fully comply with the radio spectrum policy objectives and make 5G spectrum available to operators in all markets in a way that incentives private investments.

17) What is today needed the most to achieve the 2030 targets? Please rank interventions in order of importance to achieve each proposed target (1=most important, 6= least important).

17a)

All EU households covered by a gigabit network	1	2	3	4	5	6
More public investment	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stimulation of more private investment	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

More public-private cooperation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Additional regulation to advance the Single Market	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Better implementation and enforcement of existing regulation	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More robust governance to steer EU and Member State actions on digital	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

17b)

All populated EU areas covered by 5G	1	2	3	4	5	6
More public investment	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stimulation of more private investment	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More public-private cooperation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Additional regulation to advance the Single Market	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Better implementation and enforcement of existing regulation	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More robust governance to steer EU and Member State actions on digital	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

17c)

The production of cutting-edge and sustainable semiconductors in Europe including processors is at least 20% of world production in value	1	2	3	4	5	6
More public investment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stimulation of more private investment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More public-private cooperation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Additional regulation to advance the Single Market	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Better implementation and enforcement of existing regulation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More robust governance to steer EU and Member State actions on digital	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

17d)

10,000 climate neutral highly secure edge nodes are deployed in the EU	1	2	3	4	5	6
More public investment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stimulation of more private investment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More public-private cooperation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Additional regulation to advance the Single Market	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Better implementation and enforcement of existing regulation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More robust governance to steer EU and Member State actions on digital	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

17e)

Europe is at the cutting edge of quantum capabilities, with its first computer with quantum acceleration by 2025	1	2	3	4	5	6
More public investment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stimulation of more private investment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More public-private cooperation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Additional regulation to advance the Single Market	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Better implementation and enforcement of existing regulation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More robust governance to steer EU and Member State actions on digital	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please indicate specific areas where the interventions you identified as important are needed and specify how, or present other interventions to achieve the proposed targets in the area of digital infrastructures:

500 character(s) maximum

Reduction of deployment costs already can be improved through better implementation of existing rules. The Connectivity Toolbox is a step in the right direction. Member States should now implement the best practices identified. This can already help network operators until the revised BCRD is in place. Also, timely and harmonized implementation of the EECC and a revised Radio spectrum Policy Programme that incentivize investments and take-up of Very-High capacity networks are urgently needed.

18) How important is coordinated action/EU guidance in the following policy areas for enabling the EU's digital transformation? (1 = most important, 5 = least important)?

	1	2	3	4	5
Harmonising spectrum management and availability	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fostering connectivity infrastructures	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Investing in EU joint infrastructures and capacities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If you would like to present additional comments or include other policy areas where common objectives could be considered, please add:

500 character(s) maximum

Current spectrum licenses should be prolonged to create more legal certainty for private investments in next generation mobile technologies and spectrum (5G in all populated areas). More focus is needed on swift implementation of the Connectivity Toolbox' best practices by the Member States, relating to reducing cost, streamlining permit granting procedures, measures giving operators access to the spectrum needed to rollout 5G and encourage operators to further invest in 5G coverage.

19) In which areas would additional (new) 5G network deployment objectives at EU level be most relevant?

	Not relevant	Slightly relevant	Relevant	Very relevant	Extremely relevant
Geographical coverage of 5G services beyond populated areas (potentially all land mass, not only households)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Level of service quality (min. connectivity performance, to be agreed at EU level)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Level of network security	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Contribution to green policy objectives	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Geographical availability of edge cloud capability	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Penetration of software-based network management approaches	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If you would like to present additional comments or include other areas, please add:

500 character(s) maximum

20) Do you/does your organisation have experience with national and/or European initiatives in the area of secure, performant and sustainable digital infrastructures? If yes, please indicate which initiatives and share best practices and issues you have encountered:

500 character(s) maximum

21) Do you/does your organisation have experience with national and/or European initiatives in the area of gigabit connectivity, semiconductors, edge computing and/or quantum computing in Europe? If yes, please indicate which initiatives and share best practices and issues you have encountered:

500 character(s) maximum

On gigabit connectivity it's important to pool private resources and share risks of deploying fixed and mobile technologies. Our members were involved in various forms of co-investments and are supportive of sharing risks of deployment with competitors or even incumbents. Attention should be paid to co-investment offers that don't ensure sustainable competition in downstream markets. We urge BEREC and EC to thoroughly assess the co-investment offers that aim at fully de-regulating fibre markets.

22) Do you/does your organisation expect to engage in national and/or European initiatives in the area of gigabit connectivity, semiconductors, edge computing and/or quantum computing in Europe in the coming three years? Please indicate key actions and circumstances which, in your view, would incentivize such engagement:

500 character(s) maximum

23) In your opinion, which priority action should the EU undertake to accelerate progress towards the infrastructure targets?

500 character(s) maximum

Priority areas that directly impact the roll-out of, and legal certainty for, private investment in Gigabit communications networks and 5G are the revision of the Broadband Cost Reduction Directive and the review of the Broadband State Aid Guidelines. At Member State level, the EU should call for rapid, harmonized implementation of the European Electronic Communications Code (EECC) and of the 5G Spectrum Policy commitments.

24) In your opinion, which priority action should EU Member States undertake to accelerate progress towards the infrastructure targets?

500 character(s) maximum

In addition to completing the implementation of the EECC and 5G spectrum allocation (in a way that incentivizes private investments), Member States should implement best practices defined in the Connectivity Toolbox for reducing the cost of deploying electronic communications networks and for efficient access to 5G spectrum. This would trigger immediate progress preempting pending initiatives, like the revision of the Broadband Cost Reduction Directive or of the Broadband State Aid Guidelines.

IIc) Digital transformation of businesses

The digital transformation of businesses will depend on their ability to adopt new technologies rapidly and across the board, including in industrial and service ecosystems that are lagging behind. This will enable more efficient resource use, boost material productivity, and reduce vulnerability to supply shocks. SMEs play a central role in this process, not only because they represent the bulk of EU companies, but also because they are a critical source of innovation. A truly functioning single market should create favourable conditions for digital take-up, disruptive innovation, rapid-growth and scale-up.

25) In your opinion, how challenging will it be to achieve the proposed EU targets by 2030? Please rank on a scale of 1-5 (1=not challenging at all, 5= very challenging).

The Digital Intensity Index (DII) measures the availability at firm level of 12 different digital technologies: internet for at least 50% of employed persons, recourse to ICT specialists, fast broadband (30 Mbps or above), mobile internet devices for at least 20% of employed persons, a website, a website with sophisticated functions, social media, paying for advertising on the internet; the purchase of advanced cloud computing services; sending eInvoices, eCommerce turnover accounting for over 1% of total turnover and business-to-consumer (B2C) web sales of over 10% of total web sales. The list of technologies is reviewed and improved every year to keep up with latest developments and policy priorities.

By unicorn we understand here both: 1) realised unicorn, i.e. companies founded after 1990 that have had an IPO or trade sale above \$1 billion and 2) unrealised unicorn, i.e. companies that have been valued at or over \$1 billion in their last private venture funding round (meaning the valuation has not been confirmed in a secondary transaction).

	1	2	3	4	5

75% of European enterprises have taken up cloud computing services (2020: 26%), big data (2020: 14%), and Artificial Intelligence (2020: 25%)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More than 90% of European SMEs reach at least a basic level of digital intensity (2019: 60.6%)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The number of EU unicorns has doubled (2021: 122)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

26) In your experience, what are the biggest barriers and bottlenecks regarding the digital transformation of your business/businesses in general?

500 character(s) maximum

27) What is today needed the most to achieve the 2030 targets? Please rank interventions in order of importance to achieve each proposed target (1=most important, 6= least important).

27a)

75% of European enterprises have taken up cloud computing services, big data and Artificial Intelligence	1	2	3	4	5	6
More public investment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stimulation of more private investment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More public-private cooperation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Additional regulation to advance the Single Market	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Better implementation and enforcement of existing regulation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More robust governance to steer EU and Member State actions on digital	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

27b)

The Digital Intensity Index (DII) measures the availability at firm level of 12 different digital technologies: internet for at least 50% of employed persons, recourse to ICT specialists, fast broadband (30 Mbps or above), mobile internet devices for at least 20% of employed persons, a website, a website with sophisticated functions, social media, paying for advertising on the internet; the purchase of advanced cloud computing services; sending eInvoices, eCommerce turnover accounting for over 1% of total turnover and business-to-consumer (B2C) web sales of over 10% of total web sales. The list of technologies is reviewed and improved every year to keep up with latest developments and policy priorities.

More than 90% of European SMEs reach at least a basic level of digital intensity	1	2	3	4	5	6
More public investment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stimulation of more private investment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More public-private cooperation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Additional regulation to advance the Single Market	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Better implementation and enforcement of existing regulation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More robust governance to steer EU and Member State actions on digital	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

27c)

By unicorn we understand here both: 1) realised unicorn, i.e. companies founded after 1990 that have had an IPO or trade sale above \$1 billion and 2) unrealised unicorn, i.e. companies that have been valued at or over \$1 billion in their last private venture funding round (meaning the valuation has not been confirmed in a secondary transaction).

The number of EU unicorns has doubled	1	2	3	4	5	6
More public investment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stimulation of more private investment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More public-private cooperation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Additional regulation to advance the Single Market	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Better implementation and enforcement of existing regulation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More robust governance to steer EU and Member State actions on digital	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please indicate specific areas where the interventions you identified as important are needed and specify how, or present other interventions to achieve the proposed targets for the digital transformation of businesses:

500 character(s) maximum

28) Do you/does your organisation have experience with national and/or European initiatives in the area of digital transformation of businesses? If yes, please indicate which initiatives and share best practices and issues you have encountered:

500 character(s) maximum

29) Do you/does your organisation have experience with national and/or European initiatives in the area of cloud computing services, big data and Artificial Intelligence? If yes, please indicate which initiatives and share best practices and issues you have encountered:

500 character(s) maximum

30) Do you/does your organisation expect to engage in national and/or European initiatives in the area of cloud computing services, big data and Artificial Intelligence in Europe in the coming three years? Please indicate key actions and circumstances which, in your view, would incentivize such engagement:

500 character(s) maximum

31) In your opinion, which priority action should the EU undertake to accelerate the digital transformation of businesses?

500 character(s) maximum

32) In your opinion, which priority action should EU Member States undertake to accelerate the digital transformation of businesses?

500 character(s) maximum

33) In your opinion, which role can the [European Digital Innovation Hubs](#) play in accelerating the digital transformation of businesses?

500 character(s) maximum

Questions 34-38 are targeted at representatives of small and medium-sized enterprises (SMEs). Questions 39 and 40 are targeted at representatives of start-ups and unicorns, respectively. If you are contributing in a different capacity, please skip to the next section.

34) Is your SME making use of cloud computing services, big data and Artificial Intelligence? If yes, please indicate how and to which extent, and share best practices and issues you have encountered:

500 character(s) maximum

35) In your view, to what extent do cloud computing services, big data and Artificial Intelligence have the potential for adding value to your business?

500 character(s) maximum

36) Does your SME expect to make use of cloud computing services, big data and Artificial Intelligence in Europe in the coming three years? Please indicate key actions and circumstances which, in your view, would incentivize such use:

37) Which public and/or private initiatives would best facilitate your SME's transition to a business model that seizes the full benefits of the digital transformation? Please indicate key actions and circumstances which, in your view, would be helpful:

500 character(s) maximum

38) Which public and/or private initiatives would best incentivise your SME's use of digital technologies to improve business performance and help customers? Please indicate key actions and circumstances which, in your view, would be helpful:

500 character(s) maximum

39) If your company is a start-up, which public and/or private initiatives would be most supportive to scaling up its activities? Please indicate key actions and circumstances which, in your view, would be helpful:

500 character(s) maximum

40) If your company is a unicorn, which public and/or private initiatives would be most supportive to scaling up its activities? Please indicate key actions and circumstances which, in your view, would be helpful:

500 character(s) maximum

By unicorn we understand here both: 1) realised unicorn, i.e. companies founded after 1990 that have had an IPO or trade sale above \$1 billion and 2) unrealised unicorn, i.e. companies that have been valued at or over \$1 billion in their last private venture funding round (meaning the valuation has not been confirmed in a secondary transaction).

IId) Digitalisation of public services

By 2030, the EU's objective is to ensure that democratic life and public services will be fully accessible for everyone online, including persons with disabilities. European citizens and business should benefit from a best-in-class digital environment providing for easy-to-use, efficient and personalized services and tools with high security and data protection and privacy standards, including electronic medical records and a digital ID solution.

41) In your opinion, how challenging will it be to achieve the proposed EU targets by 2030? Please rank on a scale of 1-5 (1=not challenging at all, 5= very challenging).

"Key public services" are services related to the following "life events": Regular Business Operations, Moving, Owning and Driving a Car, Starting a Small Claims Procedure, Business StartUp, Family life, Losing and Finding a Job and Studying.

	1	2	3	4	5
All key public services for citizens (2020: 75%) and businesses (2020: 84%) are available online	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

All citizens have access to electronic medical records	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
80% of citizens use a digital ID solution	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

42) In your experience, what are the biggest barriers and bottlenecks regarding the digitalisation of public services?

500 character(s) maximum

43) How important for you/your organisation would be the following digital public services? Please rank on a scale of 1-5 (1=very important, 5=not important).

	1	2	3	4	5
Adequate digital ID solutions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Enhanced cross-border access to electronic medical records	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If you would like to include another service or present additional comments or specifications, please add:

500 character(s) maximum

44) In your opinion, how would the introduction of a [European Digital Identity](#) contribute to the digitalisation of public services and trust in digital public services?

500 character(s) maximum

45) What is today needed the most to achieve the 2030 targets? Please rank interventions in order of importance to achieve each proposed target (1=most important, 6= least important).

45a)

“Key public services” are services related to the following “life events”: Regular Business Operations, Moving, Owning and Driving a Car, Starting a Small Claims Procedure, Business StartUp, Family life, Losing and Finding a Job and Studying.

All key public services are available online	1	2	3	4	5	6
More public investment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stimulation of more private investment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More public-private cooperation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Additional regulation to advance the Single Market	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Better implementation and enforcement of existing regulation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More robust governance to steer EU and Member State actions on digital	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

45b)

All citizens have access to electronic medical records	1	2	3	4	5	6
More public investment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stimulation of more private investment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More public-private cooperation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Additional regulation to advance the Single Market	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Better implementation and enforcement of existing regulation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More robust governance to steer EU and Member State actions on digital	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

45c)

80% of citizens use a digital ID solution	1	2	3	4	5	6
More public investment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stimulation of more private investment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More public-private cooperation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Additional regulation to advance the Single Market	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Better implementation and enforcement of existing regulation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More robust governance to steer EU and Member State actions on digital	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please indicate specific areas where the interventions you identified as important are needed and specify how, or present other interventions to achieve the proposed targets for the digitisation of public services:

500 character(s) maximum

46) Do you/does your organisation have experience with national and/or European initiatives in the area of digital public services? If yes, please indicate which initiatives and share best practices and issues you have encountered:

500 character(s) maximum

47) Do you/does your organisation expect to engage in national and/or European initiatives in the area of digital public services in the coming three years? Please indicate key actions and circumstances which, in your view, would incentivize such use:

500 character(s) maximum

48) In your opinion, which priority action should the EU undertake to accelerate and improve the digitalisation of public services?

500 character(s) maximum

49) In your opinion, which priority action should EU Member States undertake to accelerate and improve the digitalisation of public services?

500 character(s) maximum

III. Building a New Governance Framework

The proposed digital targets can only be achieved through close cooperation and coordination between the Commission and Member States, with the objective of adopting recommended actions including joint commitments, also taking into account the implementation of other digital policies and initiatives. To enable this, the Digital Compass policy programme will set up a robust governance structure with a comprehensive monitoring mechanism, annual reporting, and follow-up.

This section features general questions about the function and features of the proposed governance framework. It is targeted at all stakeholder groups.

50) What is your experience so far regarding the coordination of efforts between Member States and the European institutions relating to digital transformation? Please list concrete projects that you have been involved in or are aware of, specify their added value, and indicate issues you have encountered or best practices that you would like to share:

2000 character(s) maximum

51) In your opinion, what will be the key benefits of a robust governance framework for the EU's digital transformation?

	Not relevant	Slightly relevant	Relevant	Very relevant	Extremely relevant
Stimulate cooperation between Member States	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Send a clear signal to market actors to incentivise private investments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ensure the effective delivery of Digital Compass goals on EU level	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Support the development and implementation of Multi-Country Projects	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If you would like to include other benefits or elaborate or explain your answers further, please add:

500 character(s) maximum

52) Radio spectrum plays a key role as an enabling resource to reach many of the 2030 digital targets. In your view, would an evolving spectrum roadmap (e.g., addressing harmonised spectrum availability and coordinated use) as a guiding but non-mandatory monitoring mechanism integrating input from a broad range of relevant stakeholders (e.g., operators, industry and vertical-users, public services) increase the efficiency and effectiveness of spectrum management?

- Yes
- No

If you would like to elaborate or explain your answer further, please add:

Spectrum policy is too often determined absent a structured, properly consultative processes. Fundamental decisions (spectrum prices, spectrum reservations or facilitated market entry) are made without strong evidence (Cost Benefit analysis) or proper consultation by NRAs. Making the process “guiding but non-mandatory” is unlikely to improve this. NRAs should be made to explain the benefits of the peer-review mechanism in case of problematic auction-designs. Harmonization is a key challenge.

53) In your view, would a mechanism to assist national authorities (on a voluntary basis) in the spectrum authorisation process (e.g., providing background information, analyses and statistics and sharing best practices) be beneficial for timely spectrum availability and usage?

- Yes
- No

If you would like to elaborate or explain your answer further, please add:

500 character(s) maximum

A similar process (the peer review process) is already in place but failed to address any of the more problematic assignments in recent years as it is voluntary. The challenge for the Commission is to secure the confidence of Member States, that taking a more informed and directive approach to spectrum licensing in Member States would lead to better outcomes, both in terms of investor sentiment and ultimately investment in rolling out the networks needed to achieve the Digital Decade ambitions.

IIIa) Monitoring

The proposed governance structure is underpinned by a comprehensive monitoring mechanism with quantitative key performance indicators measuring the progress of the EU against the 2030 targets. The indicators for monitoring the targets at EU level and the digitalisation trends at national level will be part of an enhanced [Digital Economy and Society Index \(DESI\)](#) in order to align with and harness existing processes and methodologies.

54) In your opinion, what should be the focus of a comprehensive monitoring system?

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	Not relevant	Slightly relevant	Relevant	Very relevant	Extremely relevant
Measuring progress of the EU against the 2030 targets	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assessing areas with insufficient development at the level of Member States (e.g., due to insufficient investment and/or regulatory action)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Following digitalisation trends at the level of EU and Member States	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Following digitalisation trends at the level of EU and Member States, and comparing them with other global players (China, US)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ensuring a broader knowledge of EU's digital policies across Europe for citizens, Member States, and other stakeholders	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Showcasing best practices from Member States	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If you would like to present additional areas of focus or elaborate or explain your answers, please add:

500 character(s) maximum

55) How could the monitoring system based on DESI be enhanced to adequately measure progress towards the 2030 digital targets?

500 character(s) maximum

GIGAEurope calls for a more coherent approach in reporting between DESI and Member States by harmonizing inputs. Different reporting approaches should be harmonized –certain reports come from government resources, others from national regulators. Any monitoring carried out by Member States should limit additional reporting burdens on companies. We find outcomes like country rankings on broadband or mobile performance quite hard to compare because of the variance of inputs.

56) Should DESI be complemented by other EU or international data sources to adequately measure progress towards the 2030 digital targets?

- Yes
- No

If yes, please indicate which data sources.

500 character(s) maximum

Enhanced DESI based monitoring should go hand in hand with EU taxonomy regulation, where data-driven solutions are recognized for contributing to GHG emissions reduction. Taxonomy and green investments can have a positive impact on the climate and the environment. When delivering Europe's Digital Decade, it is

crucial to ensure alignment between a sustainability enhanced DESI and taxonomy. This should also be reflected in the European Semester process.

IIIb) Reporting

The Commission will be responsible for analyzing the data gathered through the monitoring mechanism. It will publish annually the European State of the Digital Decade Report to present progress and identify deviations from the digital decade targets through a score of ‘traffic lights’.

57) In your opinion, what should be the focus/scope of the reporting activity and traffic light scoreboard?

	Not relevant	Slightly relevant	Relevant	Very relevant	Extremely relevant
Monitoring progress towards the 2030 targets on EU level	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Monitoring implementation of digital principles	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assessing general state of compliance with digital policies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tracking common cross-border projects /investments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Identifying deviations from the 2030 targets and digital principles at national level	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Proposing recommended actions including joint commitments to be discussed with Member States and the European Parliament	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feeding the European Semester process	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feeding the implementation of the Recovery and Resilience Facility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If you would like to elaborate or explain your answers further, please add:

500 character(s) maximum

IIIc) Collaborative analysis

The annual European State of the Digital Decade report will trigger a collaborative process to agree on recommended actions including joint commitments with the aim to address deviations from the trajectory towards the 2030 targets at EU and national level. The Communication states that the Commission will be empowered to lead this process in collaboration with Member States.

58) In your opinion, what would be the appropriate scope of recommended actions/EU guidance following from the report?

500 character(s) maximum

59) In your opinion, what should be done to ensure that different stakeholders commit to achieving the targets set out in the Digital Compass Communication? Please indicate concrete actions and circumstances:

500 character(s) maximum

60) The Digital Compass Communication also sets out the Commission's intention to propose a set of [European Digital Principles](#) in the form of a joint interinstitutional solemn declaration, with the objective of informing people and providing a reference for policy makers and digital operators for their actions in the digital environment. Digital Principles should be understood as essential concepts based on shared European values that define the path towards the human-centred, secure and open digital future operationalised in the Digital Compass, such as, e.g., universal access to internet services. The proposed governance framework would monitor the implementation of these digital principles. In your view, how could synergies be developed between the achievement of targets and the implementation of digital principles? What concrete tools and steps would you recommend to put in place?

500 character(s) maximum

61) What would be, in your view, an effective tool to monitor the implementation of Digital Principles?

500 character(s) maximum

III d) Stakeholder forum

The Commission will set up a stakeholder forum to support the implementation of the Digital Compass and ensure that it proceeds in consideration of the experiences, needs and interests of a wide range of public and private actors.

62) Regarding the composition of the stakeholder forum, who should participate in addition to the Commission and Member States? (multiple answers possible)

- No additional participants
- No additional participants but a mechanism to invite and hear stakeholders where needed
- European Social and Economic Committee, European Committee of the Regions
- Representatives of the European business sector
- Social, occupational, economic, educational and cultural organisations; and other representatives of minorities

If you would like to include additional stakeholders, please add:

500 character(s) maximum

63) In your opinion, how should the stakeholder forum reach out to representatives from business, social, occupational, economic, educational and cultural organisations and involve them in the governance process?

500 character(s) maximum

64) In your view, on which aspects should the stakeholder forum be consulted? (multiple answers possible)

- General issues regarding aspects of the four dimensions of the Compass
- Thematic issues of the digitalisation of the EU
- The state of advancement of targets and principles
- Proposals for specific acts/reports/recommendations

If you would like to include additional aspects, please add:

500 character(s) maximum

IV. Developing a Mechanism to Operate and Deploy Multi-Country Projects

Achieving the Digital Compass objectives requires scaling up EU’s digital capacities and strengthening critical infrastructures linked to EU’s digital sovereignty. The Digital Compass Policy Programme will establish a mechanism for Member States to jointly address these challenges through Multi-Country Projects, building on lessons learnt from existing initiatives, including from the implementation of such projects under the Recovery and Resilience Facility.

This section features general questions about the function, features and possible directions for Multi-Country Projects. It is targeted at all stakeholder groups.

65) To what extent do you agree with the following statements?

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
In some critical digital areas, the EU needs to build up its digital capacities	●	●	●	●	●
There is a need to find solutions to accelerate and facilitate common digital projects	●	●	●	●	●
The scale of such projects cannot be operated by Member States alone and					

should benefit from common action at EU level	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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66) In your view, which of the below objectives of Multi-Country Projects are most important? Please rank on a scale of 1-5 (1=most important, 5=least important).

Objectives for Multi-Country Projects	1	2	3	4	5
Accelerate the green transition	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Accelerate the digital transition	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Address strategic dependencies to achieve EU digital sovereignty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

67) Possible directions for Multi-Country Projects have already been discussed with Member States as part of the preparation of the national recovery and resilience plans, under the Recovery and Resilience Facility, in the area of digital, under the flagships Connect, Scale Up, Modernise and Reskill and Upskill. Do you consider that the following digital areas should be prioritised as Multi Country Projects? Please evaluate on a scale of 1-5 (1 = most important, 5 = least important).

Areas for Multi-Country Projects	1	2	3	4	5
European Common Data Infrastructure and Services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Capabilities in electronics design and deployment of the next generation of low power trusted processors and other electronic components,	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pan-European deployment of 5G corridors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Acquisition of supercomputers and quantum computers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Developing and deploying an ultra-secure quantum communication infrastructure spanning the whole EU	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Deploying a network of Security Operations Centres	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Connected Public Administrations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
European Blockchain Services Infrastructure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
European Digital Innovation Hubs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
High tech partnerships for digital skills through Pact for Skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

For each area ranked “1”, please explain your answer. If you want to include other important areas, please add:

500 character(s) maximum

68) Do you/does your organisation have experience with implementing projects that involve multiple Member States? If yes, please indicate projects you know, bottlenecks you have encountered, and/or list best practices you would like to share:

500 character(s) maximum

69) Do you/does your organisation have experience with initiatives mobilising and combining investment from public and private sources? If yes, please indicate initiatives you know, bottlenecks you have encountered, and/or list best practices you would like to share:

500 character(s) maximum

70) In your opinion, which features of an instrument facilitating the implementation of Multi-Country Projects (including features not available under current instruments) would be vital? Please rate their importance on a scale from 1-5 (1=most important, 5=least important).

	1	2	3	4	5
Possibility to set up projects swiftly and flexibly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Legal capacity to procure and operate multi-country infrastructures and pan-European services of public interest	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Legal personality to act as data controllers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Legal personality to be liable for damages	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Standard governance arrangements, including variable geometry with defined role of different actors (Member States, industry, Commission)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bottom up approach to project pipeline, option for Member States to propose projects	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Top down approach to project pipeline, Member States to agree to the list proposed by the Commission	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Coordination with EU programmes and policies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Possibility to cover areas outside digital (e.g., green transition)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Facilitate the pooling of EU and national funding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Create incentives to crowd in private investments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Low administrative burden	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

71) In your opinion, what should be the appropriate framework for such a vehicle supporting Multi-Country Projects with the aim to support strategic interests such as security, safety, health and the green and digital transformation and reduce strategic dependencies?

500 character(s) maximum

Other Comments and Suggestions

Thank you for your answers. If you would like to share additional comments or suggestion, please add:

2000 character(s) maximum

You can also upload your file here (e.g., position paper):

Files of the type pdf,txt,doc,docx,odt,rtf are supported. The maximum file size is 1 MB.

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