European Commission

ROADMAP	
Roadmaps aim to inform citizens and stakeholders about the Commission's work in order to allow them to provide feedback and to participate effectively in future consultation activities. Citizens and stakeholders are in particular invited to provide views on the Commission's understanding of the problem and possible solutions and to make available any relevant information that they may have.	
TITLE OF THE INITIATIVE	Communication on a Europe's digital decade: 2030 digital targets
LEAD DG – RESPONSIBLE UNIT	DG CONNECT – D1 and B1
LIKELY TYPE OF INITIATIVE	Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions
INDICATIVE PLANNING	Q1 2021
ADDITIONAL INFORMATION	
This Roadmap is provided for information purposes only and its content might change. It does not prejudge the final decision of the Commission on whether this initiative will be pursued or on its final content. All elements of the initiative described by the Roadmap, including its timing, are subject to change.	

A. Context, Problem definition and Subsidiarity Check

Context

Europe's future is determined by the successful achievement of the twin digital and green transitions. The COVID-19 pandemic and its impact on economy and society have underlined the crucial role of digital technologies for people and businesses. Digital technologies are critical to recover from the crisis, to ensure that everybody and everywhere can benefit from digital opportunities, to foster EU's resilience and address the risks and dependencies on third countries, as well as to influence EU's positioning on the global stage. Digital technologies are also essential to achieve sustainability goals.

In the Communication on "**Shaping Europe's digital future**", the Commission has already defined its strategy and actions for the next five years of the digital transformation. Four major legislative initiatives were adopted last year (Data Governance Act, Digital Services Act, Digital Markets Act and Cybersecurity Act). A new paradigm on the financing side for the digital transformation has been set; with a 20% minimum expenditure target for each national plan to be financed with the Recovery and Resilience Facility (RRF), accompanying the digital component of the 2021-2027 Multiannual Financial Framework (MFF).

A successful digital transformation needs to be based on a clear vision of a common future including all Europeans, of a pathway to economic prosperity, environmental sustainability and resilience, as well as of ways to strengthen the EU's leadership role in the international context. Such vision is based on digital leadership and technological excellence in Europe and abroad, while empowering all EU citizens and businesses to access and use the technology and data they need, and ensuring that the benefits of the digital transition materialize across all sectors and regions in Europe, including remote and rural areas. This includes also the empowered and confident European citizens, who have the necessary level of digital skills and competences to live and work in the digital decade.

In September 2020, the President of the Commission announced in her State of the Union Address that Europe should demonstrate greater leadership in digital with a common plan towards 2030, based on clear goals and clear principles such as high connectivity level and the respect of the right to privacy and freedom of speech,. As a concrete follow up, the Letter of Intent to President Sassoli and Chancellor Merkel announced this Communication to prepare Europe's digital decade towards 2030. In its conclusions of 1-2 October 2020, the European Council invited the Commission to present, by March 2021, a comprehensive Digital Compass which sets out the EU's concrete digital ambitions for 2030. Such a Compass should establish a monitoring system for European strategic digital capacities and capabilities, and outline the means and key milestones to achieve EU's ambition.

Problem the initiative aims to tackle

This Communication will complement and build on the Commission's existing policies, budget programmes and strategies, and on the Recovery Plans, with emphasis on the digital and green transition. The proposed Communication aims at charting the pathway to a common digital decade vision for the EU, Member States, and most importantly, citizens. A clear vision for the goals and direction of this transition is needed to lead our continent over 10 years' time and to define the path on how to get there. This includes the following issues to address:

1) Faced with accelerated digital transformation and the durable circumstances amplified by the COVID crisis, the EU

should be able to shape its own future, demonstrating **coherence and visibility of the EU's digital goals** for the European economy and society towards 2030. This requires a vision based on a clear ambition **to foster digital leadership and citizenship based on fundamental rights and values,** and to step up the delivery in particular **of resilient infrastructures, digital skills and competences, digitalisation of all businesses and digital transformation of public administrations and public institutions.** Ambitious European targets pursued in full respect of legal rights, and established in conjunction with digital principles, have the capacity to improve the lives and wellbeing of EU citizens through improving the quality of the digital services and infrastructures they have access to and use.

The vision must be accompanied by specific instruments to deliver it for the benefit of EU citizens, leaving no territory and no individual behind. Such ambition requires setting concrete digital **targets** in cooperation with Member States and based on strong **principles**, and a system to **monitor progress towards the objectives of the Digital Decade**.

2) This vision should take into account challenges linked to the digital transformation of the single market and the still limited convergence across Member States including a different pace of implementation of essential EU legislation. In addition, so far, the EU trajectory is not catching up with that of its key competitors, notably China and the US, accelerating far more sharply since 2017.

3) The rise of digital technology has deeply changed the conditions under which fundamental rights are protected and exercised. People need to be closely involved in defining a **specifically European way to manage the digital transition that is anchored in fundamental rights and common EU values**. The COVID-19 crisis has also shown the risks of inequality of personal experiences during a time of crisis. For this to be Europe's Digital Decade, everyone must be able to benefit from the digital transition. Such digital rights should be complementary to the charter of fundamental rights. To meet expectations of our citizens who attach great importance to values, we need to lift up digital rights and principles in all Member States towards high levels of quality in a digital economy and society. The EU citizens should be able to see more clearly how their rights are protected and be reassured that their aspirations are pursued by EU- and national policy makers.

4) **The EU should have the capacity to develop and deploy strategic cutting-edge digital technologies at sufficient scale,** to empower and offer a wider choice to our society. Resilient, secure, sustainable and trustworthy infrastructures and technologies are indispensable to ensure respect of European rules and values. Today, digital technologies are mostly developed outside the EU. While a strong single market, open competition and trade policy are critical assets for the EU's economic success and resilience, a massive scale-up of investments is also necessary. This can only be ensured by means of coordinated and joint investments between the EU and the Member States, focusing on a few critical areas and building on the various streams of support for digital infrastructures under the current MFF. This should also exploit the synergies between the green and digital transitions and the opportunities of digitalization for environmental protection, climate action and nature conservation. This applies to investments within and outside the EU, including in our neighborhood and in fast-growing regions such as Africa.

5) The EU can only succeed in its digital transformation if it builds its Digital Decade in an outward looking manner, taking full account of a global environment that is increasingly, fiercely competitive and sometimes challenging the EU's values-based approach to digitalisation. The EU needs to **strengthen its capacity to project** its digital goals into its **international cooperation** promoting its human-centric, rules-based approach. This requires the development of partnerships and alliances that can underpin European investment in infrastructure, capacity building and the enabling environment, as well as fostering regulatory cooperation notably with like-minded partners.

Basis for EU intervention (legal basis and subsidiarity check)

The initiative is in an area of shared competence with relevant cross-border and transnational problems to address.

The digital transformation concerns all policy areas and requires joint actions from a variety of stakeholders, and in particular the engagement of the Member States, regions and cities. It also requires consistent interpretation and enforcement of people's rights across the continent. The challenges outlined above require a rapid and coordinated response of the EU. Subscribing to common principles, pooling our resources, building capacity and deploying technologies broadly across the Union can strengthen the entire European economy and would allow us to compete globally and shape the global digital transformation in a more "European way" anchored in our common values and fundamental rights. Failure to invest and deploy technologies, and to develop digital skills of citizens to empower them to fully benefit from digital technologies could jeopardise our opportunities to address the pressing climate and other sustainability challenges.

Action at EU level can clearly best drive European actors towards common visions and, as shown by the EU's General Data Protection Regulation, it can transform into global standards and norms. This is key to generate economies of scale and economies of scope, limiting, if not avoiding, EU fragmentation of efforts and suboptimal national solutions.

A Communication is an appropriate mean to launch the process for refining the European way on digital and to propose some instruments to deliver a vision and targets for 2030.

B. What does the initiative aim to achieve and how

The aim of this Communication would be to provide a roadmap and launch an inclusive consultation process towards **a clear vision for Europe's digital transformation by 2030** drawing on in particular the 'Shaping Europe's digital future' Communication, the Data Strategy, the New industrial policy, the White paper on AI, the Recovery Plan for Europe and the

Recovery and Resilience Facility and taking into account EU funded instruments. It will give coherence and visibility in Europe and abroad to our digital ambition including at an international level with the aim to reinforce EU's technological leadership. It aims to propose a system to monitor progress towards achieving such ambition together with the EU's Member States, and it aims to put in place the new necessary tools to **put people at the centre** of the digital transition and to **accelerate collaboration** for enhanced technological sovereignty.

The roadmap would include setting up our common ambition for digital leadership, principles, and measurable targets at EU level combined with monitoring at national level, supported by a governance including a mechanism to ensure that progress towards the envisaged targets and principles can be tracked and that major milestones are identified along the way. An important element of the initiative will be to reach out to society at-large to ensure that principles and targets adequately represent societal needs, as well as to send a signal of determination to stimulate private digital investment in Europe and abroad.

The Communication aims to provide:

1. **A vision of what a successful digital transformation means for Europeans by 2030 and a pathway to achieve it**. Conscious of the era opened by the COVID-19 consequences on our societies, business and people, the vision will describe the conditions which are necessary to ensure that the European society has, collectively, the effective capacity and skills to take its own decisions on technologies, values and societies. This decade should be used to gather energy and focus minds on a long-term plan to shape the sustainable digital transformation we want by design, in Europe and abroad.

   Europe's digital ambition has **a strong focus on people's needs and expectations** ensuring that the digital transformation has humans at its centre and it will be based on a renewed understanding of European digital citizenship.

2. **To reach this vision, the EU would** be called to raise its **ambition for its digital future** towards 2030 in particular in four areas to ensure synergies between digital and green transitions and between the domestic and the external dimensions:

   - **Building capacities, in particular:**
     - **Digital infrastructure and capacity** – in the whole supply chain from connectivity, high performance computing (HPC), to semiconductors and cloud, while also being mindful of their environmental footprint; this ambition needs to take account of the EU's interest in international connectivity and global supply chains;
     - **Digital education and skills** ensuring that Europe trains enough of and offers best opportunities for digital engineers and specialists to deliver on EU's digital ambition;
   - **Fostering the digital transformation of European business and public administration**
     - **Digital transformation of business,** in particular SMEs everywhere in Europe, and innovation in business models including scaling-up opportunities thanks to fair access to connectivity, big data and cloud, supercomputing use, as well as the use of other disruptive digital technologies;
     - **Digital government** fostering a transformation of public administration and public institutions to the benefit of citizens, businesses, researchers, and law enforcement.

Europe's objectives would require new, concrete and visible action:

3. **Common digital targets** which would capture EU's common ambition. In particular, they could encompass the four identified dimensions: 1. digital infrastructures and capacity (e.g. connectivity, data including computing power), 2. digital education and skills (e.g. skills and competences, for example for engineers) 3. digital transformation of business (e.g. use of technologies by businesses and share of EU's companies amongst the first 100 biggest disruptive innovators), and 4. digital government (e.g. access to digital public services, e-health). The proposed targets will notably contribute to foster European digital citizenship and contribute to digitalisation as a driver for sustainability. These targets, notably based on DESI, would start from an EU-level perspective to create a single, clear and compelling ambition for Europe's digital decade. Targets should notably be used as a basis for regular engagement of Member States on their trajectory, assessed against quantitative indicators at EU level and/or for Member States. The final list of targets, as well as this process, would be formalised after consultations, including with Member States, by a policy programme decision and would seek to ensure a streamlined structure around a limited number of lead targets.

4. **A first proposal of a Charter of Digital principles at the service of people.** These principles would set the European standard for ethical and fundamental values and human rights in digital space. They would be the guiding principles for the EU and its Member States in both the design of policies and the enforcement activities, to ensure that the benefits of digitalisation materialise for all citizens, that they have the necessary skills to profit of the digital transformation, and that they are empowered to exercise their rights online as well as offline. These principles would be identified through wide societal discussion and in consultation with the other EU institutions, and could be enshrined in an inter-institutional solemn declaration. Together with the targets, the Charter will set

the standards against which to monitor the effectiveness of European digital citizenship.

5. Furthermore, the Communication would initiate a process aiming at setting out a **"2030 Digital Compass". For this purpose, the Communication would sketch out a preliminary outline of:**

- **A robust governance structure** for a trustful delivery of EU's ambition including a monitoring system, which would enable all parties, in particular the Union and Member States to follow trajectories, reach milestones, identify gaps in strategic dependencies and adjust actions accordingly. This monitoring would be instrumental in measuring progress towards the achievement of the 2030 targets, as well as the respect of digital principles, through quantitative indicators and scoreboards.

- **A framework to foster scaling up European capacities, develop and deploy critical technologies including through Multi Country Projects**. Channelling resources across the continent to facilitate and accelerate cooperation between Member States on specific multi-country projects has proven challenging, due to the lack of a simple and ready-to-use mechanism to pool funding from multiple sources and to ensure seamless joint implementation and/or management of infrastructures capacities. The Communication will build on lessons learnt, including from the RRF with regards to facilitating the shaping and implementation of flagship projects, and propose options for the way forward, possibly including a pilot. These options will be tested and evaluated in consultation with Member States and stakeholders.

- **An agenda to empower people as a driving force for digital transformation**, involving more closely citizens and stakeholders in the design and implementation of digital policies, in particular during the monitoring of the EU's and Member States' trajectories in a stakeholder forum.

6. For the EU to lead the Digital Decade and strengthen its digital sovereignty, it needs to build its ambitions at home with an outward looking vision that will help the Union map a clear path to project and drive the EU's strategic interests and values at a global level. The EU's specific targets and principles need to include an external dimension building on strong multilateral fora, bilateral cooperation and likeminded partnership to be fully effective – be it for digital connectivity and infrastructure, skills, businesses or governance.

The Communication would be the starting point of a wide-ranging consultation during the first semester 2021 to assess options and help prepare the initiatives that would be necessary to develop the roadmap and implement the 2030 vision.

C. Better regulation

Consultation of citizens and stakeholders

Consultation on this roadmap will be open for 4 weeks. The Commission will encourage the public, both citizens and other stakeholders, to provide their input on the purpose and scope of the Digital Decade Communication. The main stakeholders involved are citizens, policymakers and politicians, governments of all levels, social partners, NGOs, businesses across all sectors including SMEs.

The Communication would be the starting point of a broader consultation during the first semester of 2021, which would aim at helping prepare the next steps and ensuring the widest possible engagement possible of society, of the European Parliament and Member States, of the public and private sector, in support of the roadmap and of its implementation. Among possible consultation activities, the Commission will launch a public consultation on the main elements of the Communication, organise discussions and workshops, circulate policy documents on targets and principles, and leverage citizen dialogues in Member States. This applies in particular to the several possible follow-up actions. On the basis of these broad consultations, the Commission will propose next steps to develop the vision set up in the Communication.

A Eurobarometer could be conducted in order to gather direct views from European citizens and fine-tune the analysis of their expectations vis-à-vis the digital transformation.

Evidence base and data collection

There is already a solid and wide set of evidence in support of the approach proposed in the Communication.

The latest and more comprehensive analysis has been released in September 2020, in the form of a major study undertaken by McKinsey, "Shaping the digital transformation in Europe" which presents an up-to-date and in-depth analysis of the challenges ahead for the EU on its digital transformation and of the actions needed to make the best of it.

Further studies and support actions will be launched to help develop further the vision, organise expert workshops and organise citizens' consultations.

On targets and indicators, the Communication will build on the important work done over the last decade as part of the Digital Economy and Society Index (DESI), which is a composite index that summarises relevant indicators on Europe's digital performance and tracks the evolution of EU Member States in digital competitiveness. DESI will be complemented with relevant Key Performance Indicators (KPI) to build a comprehensive monitoring framework for assessing progress in all dimensions of Digital Decade targets. The European Commission has also set out strategic guidance for the implementation of the Recovery and Resilience Facility in its 2021 Annual Sustainable Growth Strategy (ASGS), (Guidance to Member States for the Recovery and resilience Plans) which includes several areas for indicators.

The Communication will also build on the evidence and data collection drawn in the framework of the preparation of the

Green Deal, which have demonstrated the important role of digital in ensuring a successful green transition.

On digital principles, there is already a wide set of literature, data and analysis including existing legal texts, in first instance the Treaty and the Charter of fundamental rights as well as secondary legislations and policy proposals at national, European and international level. Reflections on identification of a set of comprehensive "digital rights" have recently intensified in academic, think-tanks and government fora, e.g. the Charter of Digital rights from EDRi (European Digital Rights network), various national declarations of digital rights adopted or being prepared in some Member States (e.g. Italy, Spain and Portugal), or the work on global digital cooperation undertaken by the United Nations based on the report of the High-level Panel on Digital Cooperation. The Communication will also build on evidence gathered at the occasion of the 10th anniversary of the Charter of the Fundamental rights.

The programming of investments under the EU's external cooperation instruments is carried out in full respect of the EU's Sustainable Development Goals.