

# Strategic Plan 2020-2024

DG Communications Networks, Content and Technology

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#### INTRODUCTION

A Europe fit for the digital age is one of six headline ambitions of Commission President

Ursula von der Leyen, set out in her political guidelines and further developed in the mission letters to Executive Vice-President for A Europe Fit for the Digital Age, Margrethe Vestager, and the Commissioner for Internal Market, Thierry Breton.

I WANT EUROPE TO STRIVE FOR MORE BY

GRASPING THE OPPORTUNITIES

FROM THE DIGITAL AGE WITHIN

SAFE AND ETHICAL BOUNDERIES.

President Ursula von der Leyen

The strategic plan of the

Directorate-General for Communications Networks, Content and Technology (CONNECT) sets out how the DG is contributing to the achievement of the priorities of the Commission until 2024. CONNECT will focus on the general objective *A Europe Fit for the Digital Age* which it will implement through six specific objectives defined at DG level as set out in Part 1. Part 2 describes the efforts that the DG is making to modernise its way of working and to make the most efficient and effective use of resources.

Multiannual strategic plans and the annual management plans are building blocks of the strategic planning and programming cycle which is the Commission's performance management framework helping to ensure that the Commission achieves its objectives in an efficient and effective manner.

On 19 February 2020, the Commission adopted the *Shaping Europe's Digital Future* Communication which sets out the priorities for the years to come, based on four key elements (more and better connectivity, a stronger industrial and technological presence, a real data economy and a fairer and easier business environment) for which digital technologies are indispensable. The EU's digital strategy indicates the path that Europe needs to take to pursue its own way: a digital Europe that reflects the best of Europe.

The Commission proposed four funding programmes<sup>1</sup>, which are relevant for CONNECT:

- the new Digital Europe Programme (DEP), supporting digital capacities for high performance computing, Artificial Intelligence and cybersecurity as well as advanced digital skills and accelerating the adoption and best use of digital technologies;
- the new Connecting Europe Facility (CEF) 2 having a digital strand supporting strategic projects of common interest in digital infrastructure deployment;
- the new research and innovation framework programme Horizon Europe (2021-2027), with a strong part dedicated to digital technologies;
- the new Creative Europe programme with the MEDIA subprogramme.

<sup>&</sup>lt;sup>1</sup> In 2020, funding still comes from the 2013-2020 financial framework programmes Horizon 2020, the Connecting Europe Facility and the Creative Europe Programme.

The programmes will be complemented by various EU investment instruments.

The Next Generation EU Recovery Plan adopted in May 2020 established the twin transitions to a green and digital Europe as defining challenges of this generation. The recovery from the COVID-19 crisis should be used to build a smarter and more sustainable economy, for which digital technologies are indispensable. The reforms and investments needed, in particular through the EUR 672.5 billion strong Recovery and Resilience Facility, will be identified and supported in the context of the European Semester exercise. CONNECT will continue to contribute to the European Semester exercise, by providing country- and sector-specific knowledge through DESI and the work on ecosystems. It will help identify the main challenges and assess the investment needs in digital at national level.

The new programmes will be operational in 2021, once the Multiannual Financial Framework (MFF) has been adopted and the sectorial regulation has been approved...

# PART 1. Delivering on the Commission's priorities

#### A. Mission statement

CONNECT develops and implements policies to make Europe fit for the digital age.

We invest in research, innovation, deployment and uptake of trustworthy and green digital technologies that improve our economy and people's lives. Through funding, legislation and policy initiatives, we help ensure European leadership and independence in critical digital technologies (such as Artificial Intelligence, Common Data Spaces, high-performance computing, 5G, micro-electronics, blockchain and quantum). We work towards making Europe a global leader in the data economy and in cybersecurity.

We foster the internal market where all companies can invest and compete on equal terms, develop, market and use digital technologies, products and services and where the rights of creators and consumers are respected. We work on the deployment of very high-speed networks to all companies and households, as connectivity is key for digital transformation.

We promote the EU's human-centric model of an innovative, fair and sustainable digital transformation of society, which respects our democratic values, our fundamental rights and cultural diversity. We help bridge the digital divide by supporting digital literacy and skills of EU citizens.

# **B.** Operating context

Under the supervision of the College of Commissioners, the DG works with other Commission services to implement actions set out in the *Shaping Europe's Digital Future* Communication. When evaluating, reviewing, and consolidating existing legislation and proposing new rules, CONNECT is committed to ensuring that policy proposals and decisions are prepared in an open, transparent manner, informed by the best available evidence and backed by the comprehensive involvement of citizens and stakeholders. Making life easier for people and businesses, without adding excessive burdens on them, as well as reacting quickly and adequately to new challenges, is among the DG's key concerns. Any new legal initiatives proposed follows the Better Regulation principles. Close relations with the Commission's institutional partners and the Member States facilitate agreement by the colegislators and implementation of European policies.

CONNECT is engaged in various EU policy areas, such as the Internal Market, Competitiveness of the EU Industry, Research and technological Development, Trans-European networks, and Culture. CONNECT works closely with the Directorates-General Internal Market, Industry, Entrepreneurship and SMEs (DG GROW) and Defence Industry and Space (DG DEFIS), which are all operating under the political responsibility of the Commissioner for the Internal Market. CONNECT monitors the implementation and enforcement of EU laws in Member States (such as the Regulatory Framework for Electronic Communications, the Audiovisual Media Services Directive, the e-Commerce Directive, the copyright Directive, the Portability Regulation, the Roaming Regulation) and is responsible for scrutinising draft regulatory measures by national regulatory authorities in the field of electronic communications.

The fast changes in the daily lives of people and business and the challenges brought about by the COVID-19 crisis highlighted the importance of CONNECT's activities (such as data, connectivity, e-Government, e-Health, e-Commerce, cybersecurity, and tackling disinformation). The immediate lessons from this unprecedented period will guide actions of the DG directly linked to the recovery phase.

The funding and investment instruments available to CONNECT serve the achievement of its policy work. CONNECT will set the strategy for research and innovation related to digital technologies in the Horizon Europe (2021-2027) framework programme and will be responsible for the digital strand of the new Connecting Europe Facility 2. CONNECT will be in the lead for the new Digital Europe Programme. For the implementation of most programmes, CONNECT will draw on executive agencies; also indirect management in particular through Joint Undertakings such as Electronic Components and Systems for European Leadership (ECSEL), which is to become the Key Digital Technologies (KDT) Partnership, a revised European High Performance Computing (EuroHPC) for advanced computing, and Smart Networks and Services for innovation in 5G and beyond is envisaged. CONNECT is involved in various EU investment instruments. CONNECT manages the Media part of the Creative Europe programme with the support of the Education, Audio-visual and Culture Executive Agency.

CONNECT is partner DG of the European Union Agency for Cybersecurity (ENISA) and the office of BEREC (Body of European Regulators in Electronic Communications).

CONNECT ensures close cooperation with the European External Action Service (EEAS) and other DGs on international aspects of digital policies.

# C. Strategy

# General Objective: A Europe fit for the Digital Age

CONNECT contributes to the Commission general objective 2, **A Europe fit for the digital age**.

# **DG CONNECT**

STRATEGIC PRIORITIES
2020-2024

# GENERAL OBJECTIVE A Europe Fit for the Digital Age

#### **SPECIFIC OBJECTIVE 1**

Europe's strategic autonomy is ensured in critical technology areas

#### **SPECIFIC OBJECTIVE 3**

Artificial intelligence that is human-centric, ethical, sustainable and that respects EU values

#### **SPECIFIC OBJECTIVE 5**

A cyber resilient Europe, promoting digital identities for all Europeans, while protecting their e-privacy

#### SPECIFIC OBJECTIVE 2

A European single market for data where data can flow for the benefit of all and where the rules for access and use of data are fair, practical and clear

#### **SPECIFIC OBJECTIVE 4**

A fair, competitive and resource efficient digital economy

#### **SPECIFIC OBJECTIVE 6**

A modern, open and pluralistic society in the digital age where online disinformation is countered and diverse cultural content is available to all Europeans

Digital technologies are profoundly changing our daily life, our way of working and doing business, and the way people travel, communicate and relate with each other. Digital

communication, social media interaction, e-commerce, and digital enterprises are steadily transforming our world.

CONNECT implements the general objective through actions implementing six specific objectives through a holistic approach integrating policy making and funding in particular research, development & innovation and deployment as mutually supporting instruments.

The impact of CONNECT's intervention will be measured through the Digital Economy and Society Index (DESI) which combines more than 30 indicators and uses a weighting system to rank each country based on its digital performance. It is also the main analytical tool providing evidence input for the CONNECT European Semester contributions.

In relation to external communications, CONNECT supports all the corporate campaigns led by the Directorate-General Communication (DG COMM) on the Green Deal, EU in the World and on the Recovery and will co-lead with DG COMM the corporate communication campaign on Digital (expected to start at end of 2021). CONNECT's communications activities also aim at increasing the visibility of all digital policies covered in the objective A Europe Fit for the Digital Age by making most use of the different communication channels available such as the internet, different social media platforms, audiovisual and press. CONNECT plans to do a thorough communication analysis in several Member States on priority topics that cover the six specific objectives of the DG, which will lead to targeted communication actions for each of them.

On high level events like the ICT Conference, Digital Day and Digital Assembly, CONNECT uses these events, apart from securing tangible commitment from stakeholders, for communication purposes using the panoply of communication channels available.

# Specific objective 1: Europe's strategic autonomy is ensured in critical technology areas

The Recovery Plan underlined the need to strengthen Europe's resilience to external shocks, contributing thereby to the objective of open strategic autonomy. The COVID-19 related crisis revealed a number of vulnerabilities, including dependencies on imports from non EU-Member States, in a number of areas. With view to addressing some of these vulnerabilities, CONNECT will be instrumental in building and deploying cutting-edge joint digital capacities in the areas of Artificial Intelligence, cyber, super- and quantum computing, quantum communication and blockchain.

CONNECT will elaborate a revision of the Regulation on the **EuroHPC Joint Undertaking**, with the purpose to extend its mission in the new Multiannual Financial Framework. The aim of the revised regulation is to equip Europe, by 2027, with a state-of-the-art hyperconnected and federated HPC and quantum computing service and data infrastructure fit for the digital age, and to develop and support a highly competitive and innovative European High Performance Computing (HPC) ecosystem, including the development of HPC technologies and a wide range of applications and the support of key HPC skills and services for European science and industry.

CONNECT will work on a **European strategy on quantum technologies**, focused on coordinated investment in three key domains: ambitious quantum computing,

communication and sensing infrastructures; research capable of achieving game-changing breakthroughs; and the development of a vibrant quantum industrial ecosystem in Europe. In cooperation with the Member States, the European Space Agency and DEFIS, CONNECT will also support the development and deployment in the EU in the next 10 years of a secure end-to-end quantum communication infrastructure (EuroQCI) to protect key digital assets of the EU and its Member States, based on quantum key distribution. This infrastructure will consist of a terrestrial segment linking strategic sites in all Member States at national and cross-border level, and a space segment cross-linking and covering the whole EU.

To ensure a European supply chain for the Internet of Things and increase the trust of consumers, CONNECT will pursue the development of an **EU cybersecurity certification scheme for IoT**, funding in research and development, the development of safety standards and legislative work around liability and safety.

CONNECT is planning to pursue the Destination Earth initiative to develop a high precision digital model of Earth (a "Digital Twin of the Earth") that would improve Europe's environmental prediction and crisis management capabilities.

CONNECT will prepare a **European Strategy on blockchain**, to reinforce European leadership in developing and deploying blockchain and its applications, exploiting the opportunities that they offer to citizens, businesses or other organisations in line with EU's values and interests, including data protection, security, sustainability and interoperability.

The evaluation of earlier generations of funding programmes and partnerships (for example the Electronic Components and Systems for European Leadership (ECSEL) – Joint Undertaking), as well as the public consultations provided evidence feeding into the impact assessments accompanying the development of the new policy initiatives and in particular the European partnerships to be funded under the Horizon Europe and the Digital Europe Programmes. **Public Private Partnerships** remain a cornerstone of EU research financing. The successful work of the ECSEL Joint Undertaking remains a cornerstone of supporting EU capacity in these key enabling technologies could possibly be continued by its successor, the Key Digital Technologies Partnership.

Another planned initiative that intends to restore Europe's strategic autonomy is a new **Important Project of Common European Interest (IPCEI) in microelectronics**. The key target of the new IPCEI on microelectronics are chips "made in Europe" that equip the EU to shape its own digital transformation and reap the opportunities that AI will bring to high-growth, high-margin markets such as automotive, healthcare and industrial manufacturing; and enable the EU to build the fastest supercomputers, secure telecom networks and data infrastructures, reliable aerospace and defence systems.



CONNECT will prepare a **Joint Undertaking on Smart Networks and Services** with the aim to strengthen the position of the European industry in the global race on "5G and beyond" and later "6G" network systems and associated service infrastructures. It is meant to bring together industry, Member States and the Commission in a coherent EU strategy for the next decade, spanning from research and innovation up to the development of ecosystems in strategic vertical

sectors through large commercial investment initiatives. The partnership should provide the basis to master the next wave of technology such as Terabit capacities and perceived zero-

latency leveraging opportunities of next-generation cloud and next-generation Internet of Things technologies.

Europe is well placed to excel in developing and commercialising future and emerging digital technologies of strategic importance for Europe. To achieve this, Europe has engaged in ambitious large scale research initiatives, namely the Quantum Technologies Flagship, Human Brain Project, the Graphene Flagship, and the new Batteries 2030+ initiative, which will be continued under the Horizon Europe Framework Programme.

In addition to the above flagship initiatives, we aim to support disruptive innovation in the context of two Horizon Europe Programmes: Emerging Enabling Technologies (part of the cluster on "Industry, digital and space") and the European Innovation Council (EIC) Pathfinder.

CONNECT will continue pursuing the **Next Generation Internet initiative** to foster highly innovative research and development to build the Internet of the future around people's needs and in line with European values and norms, while contributing to the strategic autonomy of Europe.

Under the new Multiannual Financial Framework, substantial funding to support the above mentioned policy initiatives is foreseen to come from the Horizon Europe Programme for Research and Innovation, from the Connecting Europe Facility 2 and from the new Digital Europe Programme which will support in particular deployment activities.<sup>2</sup> In addition, investment will be backed through the European Strategic Investment Fund and InvestEU.

In addition, the Communication *Shaping Europe's digital future* identifies an investment gap of EUR 65 billion per year for digital infrastructure and networks alone in the EU. **Connectivity** is the most fundamental building block of the digital transformation. Gigabit

connectivity, powered with secure fibre and 5G infrastructures, is vital if we are to tap into Europe's digital growth potential. To this end, adequate investments at EU, national and regional levels are necessary to achieve the EU 2025 Gigabit connectivity objectives. The Commission plans pro-investment Connectivity measures for adoption in 2020 and 2021 which aim at further incentivizing investments into new and upgraded Gigabit capable electronic communications networks.



Specific objective 2: A European single market for data where data can flow for the benefit of all and where the rules for access and use of data are fair, practical and clear

CONNECT will roll out the different streams of actions set out in the **European strategy for data** adopted in February 2020 which endeavours to create a single market for data, where data can flow within the EU and across sectors, for the benefit of all, where

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<sup>&</sup>lt;sup>2</sup> In 2020, funding still comes from Horizon 2020 and the Connecting Europe Facility.

European rules, in particular privacy and data protection, as well as competition law, are fully respected; and where the rules for access and use of data are fair, practical and clear.

Several actions are defined to set up a cross-sectoral governance framework for data access and use:

- enabling legislative framework for the governance of common European data spaces;
- adopting an Implementing act on high-value data sets under the Open Data Directive, making these data sets available across the EU for free;
- exploring the need for legislative action on issues that affect relations between actors in the data-agile economy to provide incentives for horizontal data sharing across sectors, in a possible Data Act;
- analysing the importance of data in the digital economy and review of the existing policy framework in the context of the Digital Services Act package.

The core of this strategy will consist in investments in the strengthening of Europe's capabilities and infrastructures for hosting, processing and using data, and interoperability (enablers). CONNECT will:

- invest in a high impact project on European data spaces and federated cloud infrastructure and services, notably through sustainable interconnections among existing scattered cloud infrastructures across the EU;
- sign Memoranda of Understanding with Member States on cloud federation;
- launch a European online cloud services marketplace;
- create an EU (self-) regulatory cloud rulebook.

CONNECT will co-invest into a High Impact Project on European data spaces and federated cloud infrastructures and services (i.e. the **European Cloud Federation**). The project will fund infrastructures, data-sharing tools, architectures and governance mechanisms for thriving data-sharing and Artificial Intelligence ecosystems. For what relates to the Cloud Federation dimension of such High Impact Project, a proposal made by Member States and industry in close coordination with the Commission will foster a competitive, secure, trustworthy, sustainable, distributed, end-to-end data processing supply in the EU. It will build the federated infrastructure and service foundation for running European AI, hosting European data spaces, facilitating data access and sharing while enhancing European technological sovereignty. It will foster access to high performance computing built in Europe and accelerate the gradual rebalancing between centralised data infrastructure in the cloud and highly distributed and smart data processing at the edge. The European Cloud Federation will thus respond to industrial and public needs by offering the next generation of data, cloud and edge infrastructures and services in a secure, energy-efficient and sustainable manner, contributing directly to the objectives of the Green Deal.

CONNECT will also work to empower individuals, investing in skills and in SMEs (competences), by exploring ways of enhancing the portability right for individuals under the General Data Protection Regulation giving them more control over who can access and use machine-generated data (possibly as part of the Data Act).

Common European data spaces in strategic sectors and domains of public interest will be created. In particular, CONNECT will prepare a legislative framework for the governance of

common European data spaces, to support decisions on what data can be used in what situations, facilitate cross-border data use, and prioritise interoperability requirements and standards within and across sectors.

The **European Open Science Cloud** (EOSC) will offer, from 2024 onwards, European researchers access to an open digital infrastructure, providing data, tools and services for the entire research life-cycle (storage, management, analysis and re-use) for promoting open science and large-scale interdisciplinary scientific cooperation in Europe. The implementation (with the participation of Directorate-General Research and Innovation - DG RTD) that started under Horizon 2020 with Member States and large scientific communities and research infrastructures will continue in Horizon Europe. A co-programmed partnership in EOSC under Horizon Europe will also be launched, including all the major research stakeholders and research infrastructures, in order to promote a fair web of data and services.

CONNECT, in close coordination with Directorate-General Health and Food Safety (DG SANTE), will contribute to a European health data space to improve safe and secure accessibility of health data allowing for targeted and faster research, diagnosis and treatment. CONNECT will promote electronic health records based on a common European exchange format to give European citizens secure access to, and exchange of, health data across the EU. Investments in this area, and in the digital transformation of health and care will mostly take place under the proposed EU4Health programme, complementing the Digital Europe Programme that will cover Artificial Intelligence aspects of health data.

The actions will be complemented by an open and proactive international approach, notably to create a framework to measure data flows and estimate their economic value within Europe, as well as between Europe and the rest of the world.

The results of the public consultation on the European Data Strategy carried out in the first half of 2020 will feed into the development of possible Commission initiatives on access to and re-use of data. While preparing the new legal proposals and their impact assessments, CONNECT draws evidence from an in-depth study on the subject. Other sources will include earlier studies (for example, on data sharing among companies in Europe, and on emerging issues of data ownership, reusability and access to data) and stakeholder consultations.

Specific objective 3: Artificial intelligence that is human-centric, ethical, sustainable and that respects EU values

President Ursula von der Leyen announced in her political quidelines a coordinated European approach on the human and ethical implications of Artificial Intelligence (AI) as well as a reflection on the better use of bia data for innovation. Commission The supports regulatory a investment oriented approach with the twin objective of promoting the uptake of AI and of addressing the

"Our society is generating a huge wave of industrial and public data, which will transform the way we produce, consume and live. I want European businesses and our many SMEs to access this data and create value for Europeans – including by developing Artificial Intelligence applications."

Commissioner Thierry Breton

risks associated with certain uses of this new technology.

The White Paper on Artificial Intelligence – A European approach to excellence and trust launched in February 2020 sets out options for both investment promotion and a legislative framework for trustworthy Artificial Intelligence, with a follow-up on safety, liability, fundamental rights and data, to be adopted in Q1 2021 in line with the adjusted Commission Work Programme for 2020. For this, CONNECT will work closely with Directorate-General Justice and Consumers (DG JUST).

CONNECT will also prepare a revision of the 2018 *Coordinated Plan on Artificial Intelligence*, taking into account the results of the public consultation on the White Paper. It will facilitate the creation of excellence and testing centres that can combine European, national and private investments, possibly accompanied by a new legal instrument. The Commission has proposed an ambitious and dedicated amount to support world reference testing centres in Europe under the Digital Europe Programme and complemented where appropriate by research and innovation actions of Horizon Europe.

CONNECT will establish and support through the advanced skills pillar of the Digital Europe Programme networks of leading universities and higher education institutes to attract the best professors and scientists and offer world-leading masters programmes in Al.



CONNECT will work with Member States to ensure that at least one digital innovation hub per Member State has a high degree of specialisation on AI. The hubs will be supported under the Digital Europe Programme. The Commission and the European Investment Fund launched a pilot scheme of EUR 100 million to provide equity financing for innovative developments in AI. InvestEU could scale up this initiative.

In the context of Horizon Europe, CONNECT will prepare a new public private partnership in AI, data and robotics to combine efforts, ensure coordination of research and innovation in AI, collaborate with other public-private partnerships in Horizon Europe and work together with the testing facilities and the Digital Innovation Hubs.

CONNECT will prepare open and transparent sector dialogues giving priority to healthcare, rural administrations and public service operators in order to present an action plan to facilitate development, experimentation and adoption. The sector dialogues will be used to prepare a specific 'Adopt AI programme' that will support public procurement of AI systems, and help to transform public procurement processes themselves.

When developing the Commission initiatives and accompanying impact assessments, CONNECT draws in particular from the results of the public consultation on the White Paper on Artificial Intelligence and the piloting of the assessment list of the trustworthy AI Ethics guidelines prepared by the High Level Group on AI.

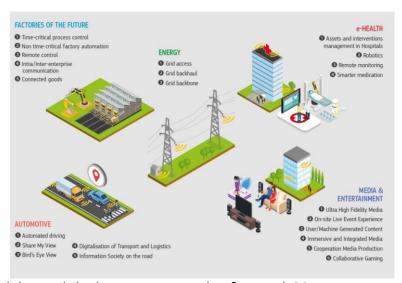
# Specific objective 4: A fair, competitive and resource efficient digital economy

As part of the **Digital Services Act package**, CONNECT will update the legal framework for the provision of digital services across the EU single market in accordance with the rules

of the place of establishment and a broad limitation of liability for content created by users. CONNECT will propose clearer and modern rules concerning the role and obligations of online intermediaries while guaranteeing the respect of fundamental rights. Furthermore, CONNECT will consider putting forward ex ante rules to ensure that markets characterised by large platforms with significant network effects acting as gate-keepers, remain fair and contestable for innovators, businesses, and new market entrants.

The **radio spectrum**, the range of electromagnetic frequencies used for telecommunications (e.g. 5G mobile networks), media broadcasting and many other services, is a scarce resource that needs to be used efficiently. Priorities will be a technical harmonisation and assignment to operators of spectrum bands for 5G, an implementing act to facilitate the deployment of small cells for 5G wireless communications and the harmonisation of spectrum for unlicensed use. In the international arena, CONNECT will coordinate and promote the EU spectrum interests in the International Telecommunication Union and the World Radiocommunication Conferences. The 2012 **multi-annual Radio Spectrum Policy Programme** will have to be updated.

CONNECT will continue its proactive support of pan European deployment of networks through stimulation of actions Member State level and at European level, with a focus to deploy 5G in urban along main areas and transport paths by 2025, as targeted by the 5G action plan. The strategy aims at 5G deployment alono crossborder corridors. enabling



Connected and Autonomous Mobility with high impact on road safety and CO<sub>2</sub> emissions. A **new strategy concerning 5G deployment and a technology roadmap towards 6G** will further help to define a stepped up policy agenda taking into account latest policy developments, e.g. investment gap in light of COVID-19 and 5G cyber-security toolbox.

The **European Electronic Communications Code** (EECC) has to be transposed by the Member States into national law by 21 December 2020. CONNECT will support the timely and correct transposition of the new rules and work in close cooperation with BEREC to ensure regulatory predictability and removing barriers to the single market. CONNECT will also review existing access recommendations to make them compatible with the provisions of the Code and refocused on regulatory incentives for investments into very high capacity networks

CONNECT will **review the Roaming Regulation** which is due to expire on 30 June 2022. The 2019 review report on the roaming markets concluded that there is a substantial risk that the roam-like-at-home pricing will not be sustained unless the regulation is prolonged. The primary objective is to ensure the continuation of the roam-like-at-home benefits for the European citizens and SMEs.

CONNECT will review (REFIT) the Broadband Cost Reduction Directive (Directive 2014/61/EU). The 2018 implementation report identified areas for improvement. A review could further simplify and remove bottlenecks to network deployment such as by enhancing availability of information, improving coordination of civil works and further streamlining permit granting procedures. Moreover, it should be adjusted to new technological and market developments such as 5G and the need for very high capacity connectivity. The review could address new areas (for example to cover green measures) and ensure a proper fit with the EECC, by eliminating overlaps and enabling synergies.

Through the review of legislation in this area, CONNECT will apply the evaluation findings to make sure that benefits already provided by the legislation to businesses and citizens are not diminished and that barriers for network development are removed. New initiatives under this objective - like the Digital Services Act - will also build on the findings of evaluation, in particular the assessment of current implementation of the e-Commerce Directive, as well as on results of public consultation and a series of targeted consultation tools, including expert workshops and an exchange of experience with Member States.

As part of the Green Deal, CONNECT is working on assessing transparency measures on the environmental footprint of electronic communications services and networks, which may include soft measures that can contribute to the reduction of Green House Gas emissions by influencing end-user behaviour in terms of provider choice and service consumption. An assessment of the different options, such as additional positive incentives for new, environmentally sustainable networks can also be considered, for instance by ensuring accelerated administrative procedures for the deployment of these networks.

As stated in the European Green Deal, Europe needs a digital sector that puts sustainability at its heart. Digital technologies will play a fundamental role in achieving the sustainability goals of the European Green Deal. At the same time, the ICT sector has to become 'green' itself. When it comes to the sector's energy consumption, data centres make up the biggest piece of the pie. CONNECT will develop measures to improve the energy efficiency of data centres and cloud services and to reduce the sector's carbon footprint. Such measures may include new soft instrument and/or legislation, based on an impact assessment to be carried out, on areas such as methods to assess and benchmark the energy performance of a data centre in a harmonised way, promoting the EU Code of Conduct on Energy Efficiency in Data Centres and Green Public Procurement criteria, transparency measures, supporting investment in green technologies and solutions, studies, awareness raising and stakeholder engagement.

A circular electronics initiative, mobilizing existing and new instruments in line with the sustainable products policy framework of the circular economy action plan of March 2020, to ensure that devices are designed for durability, maintenance, disassembly, dismantling, reuse and recycling and including a right to repair or upgrade to extend the lifetime of electronic devices and to avoid premature obsolescence (by the end 2021).

The key objective of the internet governance policy will be to improve global digital cooperation and the governance of key internet infrastructures, services and technologies, allowing the promotion of EU values and norms and a living dialogue with multiple internet stakeholders.



The longer term policy objective is that **.eu top-level-domain** becomes a tool to support the European identity online. In line with Regulation

2019/517 on the implementation and functioning of the .eu top-level domain name, the new contract with the .eu Registry will enter into application on 13 October 2022. The selection of the Registry will be based on an open, inclusive, transparent and competitive process. CONNECT will assess how the .eu Registry could combat speculative and abusive registrations of domain names. CONNECT will also assess whether the characteristics of the Registry should be extended and may prepare a legislative proposal.

**The Digitising European Industry initiative** continues to propose actions for digital leadership in research and innovation and for the uptake of digital innovations by any businesses across the EU. It does so by focussing partnerships with industry on strategic digital R&I priorities and launching Digital Innovation Hubs projects. As announced in the Industrial Strategy Communication, a review of the Digitising European Industry initiative is to be prepared in 2020-2021.

CONNECT will work towards a large coverage of EU regions with **Digital Innovation Hubs**, which will be instrumental in the deployment of digital capacities under the *Digital Europe* Programme on HPC, AI and Cybersecurity. The network of the hubs will aim to reach out to all relevant private and public regional economic actors. They should actively engage with sectors of the economy that are related to their specialisation and plan support for the digitalisation of those sectors, especially taking into account the needs of the SMEs. In line with the Communication *Tourism and transport in 2020 and beyond*, Hubs will support local tourism businesses to use digital innovations, including as an answer to COVID-19 (robots for disinfecting and cleaning, crowd management, smart booking systems etc.).

Digital Innovation Hubs will be financed through the Digital Europe Programme and Horizon Europe. Member States will designate the hubs that they would like to co-invest in together with the Union. The Commission will evaluate the eligibility of the designated hubs and select the entities that will form part of the initial network of European Digital Innovation Hubs. In 2021-2024, further calls to fund European Digital Innovation Hubs of the initial network will be issued, with 2024 being open to all hubs.

In order to support companies to do more with industrial data, not only when produced during the life cycle of the products and services but also when used across value chains, CONNECT plans to support the development and take-up of distributed data infrastructures.

CONNECT plans to support **smart and sustainable cities and communities** to fully benefit from the potential of data and Artificial Intelligence, by various measures, including a smart communities' dataspace. These actions will also support the Green Deal.

CONNECT will work, together with Directorate-General Internal Market, Industry, Entrepreneurship and SMEs (DG GROW), on a **strategy for standardisation**, which will aim at having a European Standardisation System fit for purpose to support EU policies and legislations, allowing for the deployment of interoperable technologies respecting EU values. The strategy will propose a set of actions needed to (i) strengthen stakeholder engagement and improve priority setting, (ii) improve the standardisation system's agility, reactiveness, efficiency, timeliness and (iii) enhance European technological sovereignty whilst improving the EU role in international standardisation.

CONNECT will also contribute to the updated **Skills Agenda for Europe** and the reinforced **Youth Guarantee**, to improve digital skills throughout society, with a particular focus on the skills to use advanced digital technologies.

Specific objective 5: A cyber resilient Europe, promoting digital identities for all Europeans, while protecting their e-privacy

As stated by President Ursula von der Leyen, "Digitalisation and cyber are two sides of the same coin". Cyber security must be at the heart of the development of the digital single market, with a strong European cyber security industry to ensure its industrial autonomy in this critical field and to protect not only its citizens or its industry, but also its values. Enhanced **cybersecurity** is essential for the protection of European citizens and companies from attacks by criminals and foreign powers, which may cause considerable harm to the European society and economy. Beyond important financial damages caused to attacked companies, such



attacks may affect entire value chains. Moreover, such attacks may target essential services and infrastructures, such as electricity grids, airports, hospitals and financial institutions. Effective cybersecurity and privacy also contribute to prevent theft of intellectual property and business secrets. Moreover, strong protection of **privacy and confidentiality of communications** are indispensable elements for building **trust** in the digital economy. They therefore help European companies, in particular startups, to bring their online products and services to the market and to create European "unicorns" in the digital value chain.

If adopted, CONNECT would set up with the Member States a strong coordination network around the **European Cyber Security Competence Centre** and the **network of the national coordination centres** proposed in 2018. This network would enable the Commission to coordinate its investment both in the research field and the deployment of key infrastructures.

The Commission Recommendation on 5G cybersecurity adopted in March 2019 set up a process to establish and implement a common EU approach to assess and mitigate cybersecurity risks related to the deployment of 5G networks which is mainly under Member States' responsibility. This led to an EU risk assessment (October 2019) and a **Toolbox** of mitigating measures (January 2020). The member States, with the help of the Commission and ENISA, will adopt a report in July on its implementation. The recommendation will be reviewed towards the end of 2020.

CONNECT will develop a European cybersecurity strategy communication, that will accompany the review of the **Security of Network and Information Systems (NIS) Directive** based on an evaluation of the functioning of the Directive, a public consultation and an impact assessment, possibly accompanied by proposals for amendments, in line with the Commission Work Programme 2020.

The revision of the **Regulation on electronic identification and trust services for electronic transactions in the internal market (eIDAS Regulation)** will improve its

effectiveness, extend its benefits to the private sector and promote trusted digital identities for all Europeans.

The thorough evaluation of the legislation in this area such as the above NIS Directive and eIDAS Regulation will provide CONNECT with tangible evidence for their review in line with Better Regulation principles. The reviews will look into the reduction of administrative burden and compliance cost (NIS Directive) and an improved accessibility of online services (eIDAS Regulation).



CONNECT will do its utmost to secure agreement on the 2017 Commission's proposal for a Regulation on Privacy and Electronic Communications (**ePrivacy Regulation**) to provide for future-proof rules adjusted to developing technology and the broader scope of services covered, and ensuring the protection of privacy for individuals and businesses.

Giving a push to the single market for cybersecurity, in line with the Regulation (EU) 2019/881, CONNECT will adopt the Union Rolling Working Programme that will list requests for the preparation of **certification schemes**, which will increase the security level of equipment and services, to be then defined with the support of the EU Agency for Cybersecurity (ENISA).

CONNECT will contribute to the work on a reinforced EU **governments interoperability strategy** to ensure coordination and common standards for secure and borderless public sector data flows and services.

These initiatives will be supported by funding from the Digital Europe Programme.

Specific objective 6: A modern, open and pluralistic society in the digital age where online disinformation is countered and diverse cultural content is available to all Europeans

**Digitisation of cultural heritage** offers solutions for preservation, conservation, renovation, study and promotion of European cultural assets. The indepth evaluation of the 2011 *Recommendation on the digitisation and online accessibility of cultural material and digital preservation* will feed into its review, aiming to reduce the cost of digitisation by promoting the up-to-date quality standards and best practices, and to improve accessibility to the cultural heritage and to respond to the needs of the cultural heritage institutions in the digital age. The pan-European inititiative laid out in the 2019 Declaration of cooperation on advancing digitisation of cultural heritage will provide an overarching vision to further digitise cultural heritage to ensure its preservation, conservation, scientific and academic research and re-use by people and different sectors with a particular focus on 3D digitisation, re-use of digitised cultural resources for citizen engagement and innovative use and spill-overs in other sectors.

To enhance cross-sector and cross-border cooperation and capacity building in the sector of digitised cultural heritage, CONNECT will align the **Europeana strategy** to fit the vision of

the 2018 Commission Report on Europeana, which should become a facilitator of digital transformation for cultural heritage institutions.

Europeana will also contribute to supporting Europe's tourism after the COVID-19 crisis, in the framework of the recent transport and tourism package, showcasing European cultural jewels and hidden gems.

CONNECT, toguether with the Directorate-General Education and Culture (DG EAC), will contribute to the **update of the Digital Education Action Plan to boost** digital literacy and competences at all levels of education with further measures to modernise education systems through the use of digital technologies and high speed connectivity of schools. CONNECT will continue to support research, inovation and deployment of technologies for better teaching, learning and student mobility under the Horizon Europe, Digital Europe and Connecting Europe Facility programmes.

The COVID-19 school and university closures show the Europe-wide differences in connectivity of schools and in access to online education for students and platforms and tools for educators. CONNECT will contribute to the development of a European education ecosystem focussing on online teaching and learning, in line with the actions in the revised Digital Education Action Plan.

CONNECT will support research and legislation to mainstream digital inclusion/web **accessibility**, meaning that technology, devices, applications and content meet the needs of persons with disabilities and are designed in a way enabling autonomy and participation. This will include an evaluation and review of the Web Accessibility Directive.

Protecting minors online requires continuous, multidisciplinary and transnational approaches. CONNECT will update the **Better Internet for Kids Strategy** and continue to support a pan-European network of Safer Internet Centres, whose main task is to raise awareness and foster digital literacy among minors, parents and teachers, offer helpline counselling for minors (Insafe) and tackle the dissemination of child sexual abuse material (INHOPE). CONNECT will continue to facilitate the **Alliance to better protect minors online**, a self-regulatory initiative aiming to improve the online environment for children and young people and gathering leading ICT and media companies, civil society and industry associations.

Thanks to recent progress in Artificial Intelligence, language technologies such as automatic translation, speech recognition or multilingual search help overcome language barriers. CONNECT, working closely with Directorate-General Translation (DGT), Directorate-General Interpretation (DG SCIC) and Directorate-General Informatics (DG DIGIT), will work on a **Strategy for Language Equality in the Digital Age**, aiming to maintain European autonomy in research, innovation and development in this sector, but also to deploy the solutions so that Europeans have access to information regardless of their mother tongue.

A **Media and Audiovisual Action Plan** will be developed to support digital transformation and competitiveness, to stimulate access to quality content and media pluralism. In the light of the COVID-19 crisis, which has hit the audiovisual and media industries particularly

hard, the Action Plan will combine the different EU instruments to prioritise recovery and ensure the sustainability and autonomy of these strategic sectors in the longer term. The Audiovisual Media Services Directive aims to create a level playing field by covering new forms of digital audiovisual media. It seeks to guarantee protection against illegal and harmful content and to reinforce the protection against incitement to violence or hatred and public provocation to commit terrorist offences on TV and video on demand. In addition, it intends to preserve Europe's cultural diversity.

For achieving those objectives, CONNECT will prepare guidelines to aid consistent application of provisions related to video-sharing platforms and European works for the revised **Audiovisual Media Services Directive** 2018/1808. CONNECT will also explore possibilities to enhance cross-border cooperation by national regulatory authorities within the European Regulators Group for Audiovisual Media Services.

Media freedom and pluralism are essential to our democracies. Strengthening them goes hand in hand with the goals of the Media Action Plan, the European Democracy Action Plan and the new Rule of Law mechanism. CONNECT's aim is to contribute to the Rule of Law Report as well as to improve the outlook of the media sector by providing financial support to projects in the areas of media freedom and pluralism (such as the Media Pluralism Monitor), quality journalism and media literacy. Projects in this field will be supported for the first time by the Creative Europe Programme through its cross-sectoral strand.

In addition, the Commission will continue supporting the availability and access to European news content through the **Multimedia Actions** line which aims at providing citizens with information about European issues from pan-European points of view – i.e. showing more than just a national perspective. This line has been used to support TV product (through support to the TV broadcaster Euronews) as well as a radio network (Euranet Plus) and the production of data-driven news content across three European networks. CONNECT will draw from the results of the 2020 performance audit to maximize the impact of the funding and make the most of media convergence trends. New actions bringing together existing media organisations to gather, curate and circulate pan-European news content will be considered.

It is crucial for Europe's cultural and creative sector that right holders enjoy a high level of copyright protection in the EU and that the rules are fit for the digital environment. CONNECT will be carefully monitoring and assisting Member States in the **transposition of the 2019 Directive on copyright in the Digital Single Market** and the **Directive on online television and radio programmes** by June 2021. These new rules aiming at modernising the copyright framework will be important in view of their expected impact on the creative industries, ensuring amongst others better remuneration to authors and right holders and a better bargaining position towards certain online service providers. CONNECT will also continue to participate in the negotiations in the framework of the World Intellectual Property Organisation, in particular regarding the Broadcasting Treaty.

In line with the 2018 Action Plan against Disinformation and the 2018 Communication on **Tackling Online Disinformation:** A **European Approach**, the Commission will carry out actions aimed at protecting our democratic processes from the threats posed by disinformation. With the assistance of the European Regulators Group for Audiovisual

Media Services (ERGA), CONNECT is undertaking a comprehensive assessment of the effectiveness of the **Code of Practice on Disinformation** for online platforms and the advertising sector, based on the Code's first year of operation, foreseen to be published in the third quarter of 2020. As foreseen in the 2018 Communication, the European



Digital Media Observatory (EDMO) started its work in June 2020 focusing on fact-checking and research activities for combatting disinformation. A joint EC/EEAS Communication on *Tackling COVID-19 disinformation: Getting the facts right*, introduces commitments regarding COVID-19 related disinformation.

Financial support for the actions under this specific objective will come from the new Digital Europe Programme, Creative Europe and Horizon Europe.

# Contribution to other General Objectives of the Commission

The actions described above have clear links with several other general objectives. CONNECT therefore contributes, but not to the same degree, to other general objectives. In particular the following aspects can be highlighted:



To deliver on **A European Green Deal**, the General Objective 1, Europe needs a digital sector that puts sustainability at its heart. Digital technologies will play a fundamental role in achieving the EU's sustainability goals. CONNECT will notably support the creation of green data-services that combine

different datasets and use the power of data analytics and AI to ensure implementation and compliance with EU climate and environmental legislation and to facilitate circular systems and climate adaptation. At the same time, the ICT sector has to become "green" itself. CONNECT will work on measures to improve the energy efficiency of data centres and cloud services and to reduce the sector's carbon footprint based on an impact assessment to be carried out. Other actions include the promotion of smart and sustainable cities and communities and the circular electronics initiative.

connect will also contribute to the Commission's General Objective 3 of developing an economy that works for people. This will be done for example by ensuring a level playing field for all (big and small) businesses that take part or want to take part in the digital economy. With the DEP, CONNECT will put special focus on helping people develop their full potential and take full advantage of the possibilities that digital technologies bring to employment and entrepreneurship.

For a **stronger Europe in the world**, Commission General Objective 4, CONNECT will put into action the strong international strand of the *Shaping Europe's Digital Future Communication*, which envisages the EU to become a global role model for the digital

economy, support developing economies in going digital and develop digital standards and promote them internationally.

The Commission will adopt a Communication on Global Digital Cooperation. The strategy will set out a number of concrete initiatives based on two principles: i) a "Team Europe" approach, based on close coordination between EU Member States, EU financial institutions, EU private and public sector, academia and civil society in each partner country is essential; ii) a model of open **strategic autonomy**, by strengthening the EU's capacity to pursue its own interests independently and assertively, protecting ourselves from unfair and abusive practices, while continuing to work with like-minded partners around the world to deliver global solutions to global challenges while protecting ourselves from unfair and abusive practices.

The Digital for Development Hub will build and consolidate a whole-of-EU approach promoting European and universal values and mobilising EU member states and EU industry, Civil Society Organisations, financial institutions, expertise and technologies in digitisation. The Hub will act globally, adapting approaches and policies to the specificities in low and mid-income countries to support building partnerships and digital ecosystems of common interests.

Support to free and independent media is part of the Commission's General Objective 6, a **new push for European democracy**. CONNECT will participate both in the new Rule of Law mechanism and in the European Democracy Action Plan as regards the situation of media freedom and pluralism in Member States.

# D. Key performance indicators

Key Performance Indicators (KPI) reflect the core aspects of a service's performance.

CONNECT has selected the following ones as its KPI for the 2020-2024 period:

- Number of EuroHPC systems installed in the EU ranking among the top 10 in the world (result indicator 1.1);
- Impact of the data economy on EU GDP (result indicator 2.1);
- Number of testing and experimentation facilities in AI supported through the Digital Europe Programme (result indicator 3.3);
- Number of actions launched under the Cyber Security Competence Centre, including the deployment of common cyber infrastructures (result indicator 5.2);
- The estimated risk at closure<sup>3</sup>.

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<sup>&</sup>lt;sup>3</sup> The estimated risk at closure is the estimation of the expenditure authorised during the year which would still be in breach of applicable regulatory and contractual provisions by the end of the implementation of the programmes managed by the DG, in value terms. It is calculated by subtracting the estimated future corrections from the estimated overall risk at payment. The indicator is expressed in % of the relevant expenditure.

# **PART 2. Modernising the administration**

As a modern public administration, the Commission implements an internal control framework inspired by the highest international standards. The Commission's system covers all the principles of internal control identified in the Committee of Sponsoring Organizations of the Treadway Commission 2013 Internal Control framework, including financial control, risk management, human resource management, communication and the safeguarding and protection of information. CONNECT established an internal control system tailored to its particular characteristics and circumstances and regularly assesses its implementation and overall functioning. This assessment is based on indicators, the most strategic of which are listed in this section of the strategic plan.

# A. Human resource management

Taking into account Commission's corporate policies and human resources (HR) delivery model, our mission is to endeavour that CONNECT has adequately skilled and committed people to enable the DG to fulfil its mandate and reach its objectives while promoting diversity, equality, trust and respect.

In order to ensure the effective management of human resources and to optimise the capacity to deliver on priorities in this strategic plan, CONNECT will develop a local HR strategy with a medium to long-term outlook (3–5 years) consistent with the overall corporate HR strategy.

Recognising the specifically challenging times for HR management – in particular in this transition period to the Multiannual Financial Framework 2021-2027 and the related decisions on the most efficient budget implementation modes – our DG's strategy will be consistent with a perspective of decreasing resources as a result of partial delegation of budget management and increasing workload on the policy front and includes actionable initiatives to seek to keep staff engagement and staff satisfaction as high as possible to ensure a timely and high-quality delivery of the political priorities defined by the College.

In addition, in order to nurture a culture of sharing and collaborative environment and to maintain high levels of staff engagement despite the impact of the COVID-19 pandemic, in particular on staff well-being and working conditions, CONNECT has kept close information channels and launched internal reflections to translate the lessons we have learnt into innovative ways of working as part of the "New Normal". The outcome of these reflections is being shared with Directorate-General Human Resources and Security (DG HR) in order to feed the Commission wide consultation on the new corporate HR Strategy, with a view to influence corporate rules and guidance. The latter, in particular in areas such working time, teleworking regime, office space arrangements, will in turn be applied in CONNECT and reflected in the local HR Strategy. Under the steer of DG HR, CONNECT will also support and feed the corporate reflections on modernisation efforts and streamlining of our support services, in particular in areas such as digitisation and greening of our administration, with a view to strive towards even more efficient and effective public service.

The local HR actions for the period 2020-2024 will focus on the following priorities:

(1) Effective organisation

The DG will ensure a flexible and optimal design and development of the DG's organisational structure, duly supported by HR data, aligned with the priorities set by the College and adapted to the changing environment, including the possible further delegation of budget management to external bodies (e.g. Executive Agencies, Joint Undertakings).

#### (2) Effective allocation of resources

Taking into account the possible reduction of human resources put at our disposal within the context of the new Multiannual Financial Framework, the DG will exhaust all internal redeployment possibilities and explore all possible internal efficiency gains with a view to make the best use of our (decreasing) available talents to deliver on our political and operational priorities.

#### (3) Skills development/task redefinition

In accordance with the Commission's corporate policies, CONNECT will seek to enable learning & development with emphasis on the most relevant skills required by the new legislative and policy-making activities resulting from new political priorities to make Europe fit for the Digital Age.

#### (4) Staff engagement

For the period 2020-2024, our DG will continue its focus on actions to maintain a high level of staff engagement to ensure that colleagues feel well and proud to be part of the DG and are willing to put in the discretionary effort to create together the workplace of the future. To this end, the DG will closely follow up on the 2018 Staff Survey outcome and build on its flagship initiative "We are Connect" promoting collaboration and knowledge-sharing.

#### (5) Women in management

While promoting diversity and inclusion principles, the DG will complement the corporate management development offer with targeted initiatives to build up a pipeline focusing, when relevant, on women in management as a key ingredient to successful implementation of our mission.

#### (6) Internal Communication

In cooperation with DG HR in its capacity of domain leader in internal communication, CONNECT will seek on both Brussels and Luxembourg sites:

- to actively support internal corporate policy;
- to promote a broad sharing of information and ideas across the DG as basis for all our work;
- to continue to empower staff and streamline the internal communication channels in the DG. This encompasses our DG specific collaborative and transparent ways of working, further capitalizing on CONNECTED as the main instrument of cultural change;
- to increase communication and knowledge sharing by keeping staff informed on DG's achievements.

Objective: CONNECT employs a competent and engaged workforce and contributes to gender equality at all levels of management to effectively deliver on the Commission's priorities and core business

| Indicator 1: Number and percentage of first female appointments to middle management positions   |  |  |
|--|--|--|
| Source of data: HR Reporting   |  |  |
| Baseline (female representation in management) (01/12/2019)  Target (2022 <sup>4</sup> )   |  |  |
| 37% (15 female middle managers)  | 3 first female appointments for CONNECT                              |  |
| Indicator 2: CONNECT staff engagement index  3 first female appointments for CONNECT  Source of data: Commission staff survey (data to be provided by DG HR) |  |  |
| Baseline (2018)  | <b>Target</b> (2024)   |  |
| 68% (EC average of 69%)  | Further increase and align with EC average in the next Staff Survey. |  |

# **B. Sound financial management**

CONNECT endeavours to achieve the right balance between maximum performance and value-added for its priority policies while ensuring sound financial management.

CONNECT has set up internal control processes aimed at ensuring the adequate management of the risks relating to the legality and regularity of the underlying transactions. Ex-ante controls are implemented for each transaction (commitments and payments), but the internal control system for direct management is designed to gain assurance mainly from ex-post audits. The Common Audit Service (CAS) of the Common Implementation Centre (CIC) is responsible for the implementation of the H2O2O and Horizon Europe audit strategy and appropriate audit arrangements are being sought for the implementation of the Digital Europe Programme.

CONNECT supervises and governs several executive agencies. It also is in charge of the ECSEL Joint Undertaking and the new EuroHPC Joint Undertaking. CONNECT holds responsibility for the Active and Assisted Living Joint Programme implemented by an Association, the European Union Agency ENISA and the BEREC Office. The DG acts as the designated service under a delegation agreement with the European Investment Bank (EIB) in the context of the CEF Financial Instruments and under a delegation agreement with the European Investment Fund (EIF) for the Cultural and Creative Sectors Guarantee Facility. In all these cases, the supervision arrangements are based on the principle of controlling 'with' the relevant entity.

CONNECT maintains organisational and governance structures as well as internal control systems based on a comprehensive risk analysis, which takes into account their cost-effectiveness. CONNECT established a set of cost-efficiency indicators to provide an overall

<sup>&</sup>lt;sup>4</sup> The target will be revised and extended for the period 2023-2024 by January 2023.

assessment of the costs and benefits of controls. These indicators allow management to support the allocation of control resources, to adapt the frequency and intensity of controls taking into account the risk level and to draw a conclusion on the control cost-effectiveness and efficiency. Further fine-tuning of the indicators may be done based on experience gathered.

In preparation of the new programmes, CONNECT is developing new monitoring and control mechanisms which aim to ensure the achievement of the related policy objectives in full compliance with the internal control objectives.

**Objective:** The authorising officer by delegation has reasonable assurance that resources have been used in accordance with the principles of sound financial management, and that cost-effective controls are in place which give the necessary guarantees concerning the legality and regularity of underlying transactions

Indicator: Estimated risk at closure

**Source of data:** Annual Activity Report

**Explanation:** This figure is the division of the overall amount of risk at closure by the total relevant

expenditure of the year

| Baseline                          | Target                       |
|-----------------------------------|------------------------------|
| (2019)                            | (2024)                       |
| 2.24% of the relevant expenditure | < 3% of relevant expenditure |

# C. Fraud risk management

The Commission adopted a new anti-fraud strategy and an action plan in 2019 in order to adapt and strengthen its anti-fraud activities and to accommodate the EU anti-fraud legislation adopted in 2017. The 2019 Commission Anti-Fraud Strategy<sup>5</sup> (CAFS) focuses on protecting the EU's financial interests from fraud, corruption and other intentional irregularities and on the risk of serious wrongdoing inside the EU's institutions and bodies.

The strategy builds on the existing decentralised model of financial management, under which managers in the services are responsible for preventing, detecting, correcting and following-up on fraud and other irregularities, while the European Anti-Fraud Office (OLAF) provides oversight and helps to develop the methods that prevent and combat fraud. The new strategy allows the Commission services to better tailor anti-fraud controls to different policy areas and operations, thus increasing their effectiveness and efficiency.

CONNECT has developed and implemented its own anti-fraud strategy since 2009, on the basis of the methodology provided by OLAF. The strategy was last updated in February 2018 and will be updated again in 2021 based on the seven objectives mentioned in the new Commission Anti-Fraud Strategy. On that occasion, a new action plan will be developed. The aim is to keep CONNECT's Anti-Fraud Strategy and Action Plan up-to-date

<sup>&</sup>lt;sup>5</sup> https://ec.europa.eu/anti-fraud/sites/antifraud/files/2019\_commission\_anti\_fraud\_strategy\_en.pdf.

and aligned with the Commission Anti-Fraud Strategy and the Common Anti-Fraud Strategy in the Research Family during the whole strategic period.

Following the adoption of the Digital Europe and the Connecting Europe Facility 2 programmes, CONNECT will develop an anti-fraud strategy based on the requirements determined by the Regulations and on past experiences.

CONNECT will continue to implement awareness campaigns and deliver trainings on anti-fraud topics, especially related to procurement and grant management for all its programmes. Common training material of the Research Family, when available, will ensure a harmonised approach related to the fraud risk.

In terms of relations with other stakeholders, CONNECT will continue the good cooperation with the members of the Research Family, the Secretariat General and DG Budget, and will establish cooperation processes, also in the anti-fraud area, with the services participating in the Digital Europe Programme. CONNECT will work closely with OLAF in order to notify all suspicions of fraud and to implement the recommendations stemming from investigations.

DG CONNECT risk register which is regularly updated and discussed at senior management level also covers the fraud aspects.

**Objective:** The risk of fraud is minimised through the application of effective anti-fraud measures and the implementation of the Commission Anti-Fraud Strategy<sup>6</sup> aimed at the prevention, detection and correction<sup>7</sup> of fraud

Indicator: Implementation of the actions included in CONNECT's anti-fraud strategy over the whole strategic plan lifecycle (2020-2024)

Source of data: CONNECT's annual activity report, CONNECT's anti-fraud strategy, OLAF reporting

| Baseline | Target                              |
|----------|-------------------------------------|
| (2018)   | (2024)                              |
| 100%     | 100% of actions implemented in time |

# D. Digital transformation and information management

Most of CONNECT policies and regulations heavily rely on data, information and knowledge: from supporting broadband infrastructures to fostering digital skills, from funding research and innovation, to regulating the internet and media. Data, information and knowledge are therefore critical assets for the DG and are carefully managed using the appropriate infrastructures, tools, processes and skills. In this regard, the role of digital systems and processes in support to the policy making and implementation activities of the DG will

<sup>7</sup> Correction of fraud is an umbrella term, which notably refers to the recovery of amounts unduly spent and to administrative sanctions.

<sup>&</sup>lt;sup>6</sup> Communication from the Commission 'Commission Anti-Fraud Strategy: enhanced action to protect the EU budget", COM(2019) 176 of 29 April 2019 – 'the CAFS Communication' – and the accompanying action plan, SWD(2019) 170 – 'the CAFS Action Plan'.

increase. This will be associated to a growing demand for more specialised skills and competences, such as data scientists, AI and information security professionals.

All this will be organised and managed in the framework of the implementation of the Commission Digital Strategy<sup>8</sup> and, in particular, the delivery of a Digital Strategy Modernisation Plan (DSMP) due by the end of 2020. CONNECT is actively participating in the definition of the DSMP and contributed to several priority initiatives (the right to innovate - digital marketplace, unified stakeholder engagement; paperless organisation and data for policy) to accelerate the digital transformation at both DG and corporate level.

Concerning digital and paperless processes, CONNECT devised an approach focusing on multiple aspects, including:

- (1) hardware, by enforcing the removal/non-replacement of personal printers;
- (2) people, with an upcoming campaign on information and document security;
- (3) software, by advocating collaborative solutions, like *CONNECTED* and the Office 365 pilot.

The DG was the first to implement a "Digital First" communication strategy, cutting the use of paper to one of the lowest levels in the Commission and developing a web site with 95% less content, but managed by a professional editorial process that is now the model for Europa 2.0.

CONNECT participated, via the Local Data Coordinator, in the first wave of DGs to create an inventory of its data assets and will complete and review its data inventory according to the revised template. This corresponds to the first strategic principle included in the Commission's Data Strategy. CONNECT will achieve further compliance with the strategic principles including the nomination of data stewards for each dataset and improve the availability of metadata. By 2024 CONNECT aims to respect the target of implementing 80% of the strategic principles.

Equally, CONNECT will offer its experience in implementing solutions for advanced data analytics and business intelligence (like DORIS toolkit or Stakeholder Relationship Management).

Besides the key corporate tools to manage information and documents, CONNECT's data, information and knowledge assets are managed through the social intranet and collaborative platform *CONNECTED* shared with the JRC, DG HR and Directorate-General Informatics (DG DIGIT). In CONNECT, it is also used for sharing information, encouraging cocreation and cross-silo working, discussions on policy issues, drafting of agendas and minutes of meeting, replies to European Parliament Questions and Commissioner correspondence, as well as mission and meeting reports.

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<sup>&</sup>lt;sup>8</sup> https://ec.europa.eu/info/sites/info/files/file\_import/digitally-transformed\_user-focused\_data-driven\_commission\_en.pdf.

A minor percentage of data is externalised to external suppliers, namely data for the Digital Agenda indicators and the Global Internet Policy Observatory platform to manage knowledge on Internet Governance.

CONNECT has a data analytics capacity to serve internal needs, for instance to process large quantities of stakeholder feedback data, to analyse grant deliverables and participants and extract strategic information, to support the impact assessment of policies and programmes. This capacity will be enhanced to cover the new Connecting Europe Facility, Horizon Europe and the Digital Europe Programme. As regards collaborative working, CONNECT has always been one of the most collaborative DGs and the management has walked the talk to encourage everyone to be collaborative. With CONNECTED as our collaborative intranet and SharePoint as main collaboration platform, M365 has easily gained ground in the DG. We intensively support uptake by colleagues with dedicated trainings and pilots.

The COVID-19 crisis and the sudden teleworking arrangement for all colleagues have shown how important is to ensure high quality connectivity, well-performing portable IT equipment and, last but not least, easy access to secure collaboration tools and video/web-conference systems. In this regard, CONNECT own video/web-conference infrastructure plays a key role in supporting business continuity.

Processes for document management rely on corporate practices. The Document Management Officer (DMO) and the network of DMOs are kept regularly informed and engaged in enforcing the application of corporate rules within the services.

Lastly, the new priorities of the Commission and the involvement of CONNECT in policies (Foreign Direct Investment Screening, Cybersecurity, Data, etc.) will require highly secure communication infrastructure and staff with security skills and expertise. An effort will be needed to professionalise staff on information security and support the information security activity of the DG with the necessary infrastructure and tools. In this regard, CONNECT will continue to cooperate closely with DGs GROW and DEFIS on establishing an information security plan based common principles as well as on creating a shared information security culture.<sup>2</sup> On the secure communication tools' side, CONNECT will soon be equipped with terminals to digitally access classified documents.

#### Data protection

Protection of personal data is a fundamental right guaranteed by Article 8 of the Charter of Fundamental Rights as well as by Article 16 of the Treaty on the Functioning on the European Union (TFEU). The Regulation 2018/1725 on the protection of personal data aligned the obligations of the European institutions with those applicable in the Member States. For the Commission, compliance is not only a legal obligation, but also a political commitment since our institution is determined to lead by example.

Under the Commission Data Protection Action Plan, services are required to set out a plan ensuring that all staff are aware of the requirements of the new Data Protection Regulation. This is in line with the new accountability principle (as the responsibility for compliance as well as for documenting and demonstrating compliance with data protection

rules). This principle, included in the new Regulation, has made clear that data protection is not a one-off exercise, but is to be understood as a continuous effort. The accountability principle calls for a higher degree of ownership for data protection by Commission's top managers and a more intense engagement of all Commission staff in ensuring and demonstrating compliance with the data protection rules in their daily tasks.

In the light of this, the Data Protection Coordinator (DPC) of CONNECT will design a training plan tailor made for the needs of the DG. This will include general as well as advanced training open to all staff members including a theoretical approach as well as case-studies based on in-house practical experiences. The DPC will keep an active space in CONNECT intranet where relevant data protection information is provided.

The managers are expected to encourage their staff to follow appropriate data protection training and internal awareness raising channels with information on how to document accountability obligations. The Commission Data Protection implementing rules assign the overall responsibility for compliance to "delegated controllers". This role is played by the Director-General. In addition, the implementing rules assign specific responsibilities to "operational controllers" who, in practice, will be undertaking the processing of personal data in the Commission departments.

The Director-General will designate an operational controller for each new record, and ensure, that the tasks of the delegated controller are implemented as appropriate for each processing activity. The DPC will closely guide the operational controllers in developing a data protection culture with direct impact in the way personal data is handled.

Given the special field of policy responsibility of CONNECT in areas directly intertwined with data protection (such as Artificial Intelligence, IoT, Blockchain, cybersecurity, e-Privacy, platforms, etc.) it is of particular relevance that the DG walks the talk on data protection compliance. This will also require a consistent approach when a legislative initiative elaborated in-house is related in any way to data protection; consultation of the European Data Protection Supervisor needs to be ensured in those cases.

**Objective:** CONNECT is using innovative, trusted digital solutions for better policy-shaping, information management and administrative processes to forge a truly digitally transformed, user-focused and data-driven Commission

Indicator 1: Degree of implementation of the digital strategy principles by the most important IT solutions<sup>9</sup>

ECDS recommends the production of a modernisation plan at DG family level (Knowledge Management and Innovation: RTD, JRC, OP, ESTAT, CONNECT).

Source of data: Modernisation plan

Baseline (2019) Interim milestone
(2022)

**Target** 

(2024)

<sup>&</sup>lt;sup>9</sup> The European Commission Digital Strategy (C(2018)7118) calls on Commission services to digitally transform their business processes by developing new innovative digital solutions or make evolve the existing ones in line with the principles of the strategy. At the beginning of the year N+1, the Solution Owner and IT Investments Team will assess the progress made on the basis of the proposed modernisation plan. For each of the 3 solutions, a table will reflect – per principle - the progress achieved during the last year.

| 10%   | 50%  | 100%          |
|---|--|---------------|
| Indicator 2: Percentage of CONNECT's key data assets for which corporate principles for data governance have been implemented  Source of data: CONNECT          |  |               |
| Baseline  | Interim milestone  | Target        |
| (2019)  | (2022)   | (2024)        |
| 10% (Initial inventory)   | 50%  | 80%           |
| Indicator 3: Percentage of staff who attended awareness raising activities on data protection compliance  Source of data: CONNECT's Data Protection Coordinator |  |               |
| Baseline  | Interim milestone  | Target        |
| (2019)  | (2022)   | (2024)        |
| 24,31%  | 100% of middle and senior<br>management trained and 100%<br>of newcomers trained | 100% of staff |

# E. Sound environmental management

CONNECT will align with the Commission efforts to improve the environmental impact of its activities as an institution and employer and increase sound environmental management in the Commission.

The DG will be particularly active in these points of the EC environmental policy:

- Stimulating the sustainable behaviour of all staff and contractors through training, information and awareness-raising actions;
- Promoting transparent communication and dialogue with all interested parties, both internally and externally.

In view of minimizing and mitigating the environmental impacts of its activities delivering continuous improving in environment performance, the DG will be in constant contact with the commission's Eco-Management and Audit Scheme (EMAS) and will participate in specific initiatives flowing from the European Green Deal.

CONNECT will promote the EMAS corporate campaigns at local level and set local environmental actions, in order to support the Commission target of reaching Green House Gas emissions' neutrality by 2030.

CONNECT takes full account of its environmental footprint in all its actions and actively promotes measures to reduce the related day-to-day impact of the administration.

CONNECT will implement the measures locally in Brussels and Luxembourg to contribute to the sound environmental management in the Commission: GREEN@CONNECT as a dedicated space in the Intranet will be the main point for disseminating the information. A group of volunteers will be created and will meet regularly to set actions and priorities. The priority actions over the next five years will focus on energy savings, green-mobility (including commuting and missions), waste reduction (paper, food, plastics, digital and

electronic waste), responsible use of natural resources-paper and water, and promoting green-procurement.

The EMAS team, together with the correspondents and volunteers, will campaign for a culture of sustainable development and related behavioural change: to be aware, to care and be responsible for the environment and for improving the energy, waste and resource efficiency in the workplace should become a regular aspect in the daily work.

CONNECT'S EMAS team will work closely with other DGs to identify and improve procedures.

Greening CONNECT will not only deliver on mitigating the climate change and greening the Commission. It will contribute positively to the career of staff members by increasing their job satisfaction through creating an additional sense of purpose and belonging, and developing certain transversal skills.

#### **ANNEX: Performance tables**

# General objective: A Europe fit for the Digital Age

#### General objective 1: A Europe fit for the Digital Age

Impact indicator 1: Aggregate score in the Digital Economy and Society Index (DESI)

**Explanation:** DESI is a composite index that summarises relevant indicators on Europe's digital performance and tracks the evolution of EU Member States in digital competitiveness. Higher values indicate a better

**Origin of the indicator**: European Commission

Source of the data: DESI

**Methodology for calculating the indicator:** The DESI index is calculated as the weighted average of the five main DESI dimensions: 1 Connectivity (25%), 2 Human Capital (25%), 3 Use of Internet (15%), 4 Integration of Digital Technology (20%) and 5 Digital Public Services (15%)

| Baseline | Interim milestone | Target   |
|----------|-------------------|----------|
| (2019)   | (2022)            | (2024)   |
| 52.45    | Increase          | Increase |

Specific objective 1: Europe's strategic autonomy is ensured in critical technology areas

Related to spending programme(s): Horizon Europe, CEF 2, Digital Europe Programme, European Strategic Fund and InvestEU

Result indicator 1.1: Number of EuroHPC systems installed in the EU ranking among the top 10 in the world

**Explanation:** This indicator measures the number of EuroHPC supercomputers in the top 10 worldwide, acquired and operated by the EuroHPC Joint Undertaking set up between the Union and the Member States

Source of data: <a href="https://www.top500.org">https://www.top500.org</a>

| Baseline | Interim milestone | Target |
|----------|-------------------|--------|
| (2020)   | (2022)            | (2024) |
| 0        | 3                 | 4      |

Result indicator 1.2: Number of quantum computers interconnected in the EuroHPC Joint Undertaking infrastructure

**Explanation:** This indicator reflects the development of European quantum computing technologies, a key element in European strategic autonomy

Source of data: EuroHPC Joint Undertaking

| Baseline | Interim milestone | Target |
|----------|-------------------|--------|
| (2020)   | (2022)            | (2024) |
| 0        | 1                 | 5      |

Result indicator 1.3: Number of Member States having deployed QCI terrestrial networks

**Explanation:** All Member States should deploy terrestrial QCI networks protecting critical public assets, information and data and interconnected by a space segment, covering the entire EU

**Source of data:** Digital Europe Programme (DEP)

| Baseline | Interim milestone | Target           |
|----------|-------------------|------------------|
| (2020)   | (2022)            | (2024)*          |
| 0        | None              | 15 Member States |

Result indicator 1.4: Value of production of electronic components, including microprocessors, by EU companies

**Explanation:** Investment in electronic components and systems through the KDT JU and the IPCEIs in microelectronics is expected to leverage private investment and impact on revenues of EU companies

**Source of data:** Financial reports and SIA (Semiconductor Industry Association)

| Baseline       | Interim milestone | Target         |
|----------------|-------------------|----------------|
| (2020)         | (2022)            | (2024)         |
| EUR 40 billion | None              | EUR 60 billion |

Result indicator: Proportion of proposed legislative revisions that include burden reduction measures

**Explanation:** The indicator measures how the Commission upholds its commitment to ensure that proposals for legislative revisions incorporate burden reduction measures, in the broader context of REFIT programme and One-In, One-Out approach. The indicator shows how many proposed legislative revisions out of the total, for each relevant specific objective include measures that concretely reduce burden.

Source of data: CONNECT

| Baseline | Interim milestone | Target         |
|----------|-------------------|----------------|
| (N/A)    | (2022)            | (2024)         |
| (N/A)    | Positive trend    | Positive trend |

Specific objective 2: A European single market for data where data can flow for the benefit of all and where rules for access and use of data are fair, practical and clear

Related to spending programme(s): Horizon Europe and Digital Europe Programme

Result indicator 2.1: Impact of the data economy on EU GDP

**Explanation:** This indicator measures the contribution of the generation, collection, storage, processing, distribution, analysis elaboration, delivery, and exploitation of data enabled by digital technologies to EU GDP

Source of data: European data market monitoring tool

| Baseline<br>(2018)                                   | Interim milestone (2022) | <b>Target</b> (2024)  |
|--|--------------------------|---|
| Estimated impact of the data economy on EU GDP: 2.4% | None                     | Estimated impact of the data economy on EU GDP to at least 3.6% |

<sup>\*</sup> All Member States should deploy terrestrial QCI networks by 2027.

#### Result indicator 2.2: Aggregated data volume flowing among EU Member States

**Explanation:** Volume of data flowing among EU Member States evidences the creation of a trusted integrated single market for data

**Source of data:** IDC data in conjunction with JRC and Data Flow Mapping Study

| Baseline      | Interim milestone                     | Target                                |
|---------------|---------------------------------------|---------------------------------------|
| (2020)        | (2022)                                | (2024)                                |
| 10 Zettabytes | 15% increase compared to the baseline | 30% increase compared to the baseline |

Result indicator 2.3: Scale up cross-border exchange of health data; link and use, through secure, federated repositories, specific kinds of health information, such as EHRs and digital health images, in compliance with the GDPR

**Explanation:** This indicator describes the path towards interoperability and secure exchange of health data in **three new health domains** (laboratory results, medical images, and discharge letters) of the European Electronic Health Record Exchange Format

**Source of data:** Reports of the eHealth Network

| Baseline  | Interim milestone  | Target  |
|---|--|---|
| (2020)  | (2022)   | (2024)  |
| Some Member States exchange health data on e-prescriptions and patient summaries, however no exchange possible relating to laboratory tests, medical images and discharge letters | Common EU technical Specifications developed for the secure exchange of data in new health domains: laboratory tests, medical images and discharge letters | Start cross-border electronic<br>exchanges through eHDSI of<br>laboratory results, medical images,<br>and discharge letters |

#### Result indicator 2.4: Market share of European providers in the European cloud market

**Explanation:** To assess the level of European strategic autonomy in cloud technologies through the setting-up of an Important Project of Common European Interest on Data, Cloud Infrastructures and Services

Source of data: Synergy Research Group

| Baseline | Interim milestone | Target        |
|----------|-------------------|---------------|
| (2020)   | (2022)            | (2024)        |
| 1%       | More than 3%      | More than 5 % |

#### **Result indicator 2.5: Number of European Data Marketplaces**

**Explanation:** One of the main objective of European strategy for data is to promote access to data through the development of common data spaces. In the private sector data spaces can take the form of datamarkets: digital platforms where organisations buy and sell data

Source of data: European data market monitoring tool

| Baseline                      | Interim milestone             | Target                        |
|-------------------------------|-------------------------------|-------------------------------|
| (2019)                        | (2022)                        | (2024)                        |
| 12 European data marketplaces | 17 European data marketplaces | 30 European data marketplaces |

Result indicator: Proportion of proposed legislative revisions that include burden reduction measures

**Explanation:** The indicator measures how the Commission upholds its commitment to ensure that proposals for legislative revisions incorporate burden reduction measures, in the broader context of REFIT programme and One-In, One-Out approach. The indicator shows how many proposed legislative revisions out of the total, for each relevant specific objective include measures that concretely reduce burden

Source of data: CONNECT

| Baseline | Interim milestone | Target         |
|----------|-------------------|----------------|
| (N/A)    | (2022)            | (2024)         |
| (N/A)    | Positive trend    | Positive trend |

Specific objective 3: Artificial intelligence that is human-centric, ethical, sustainable and that respects EU values

Related to spending programme(s): Horizon Europe, Digital Europe Programme

#### Result indicator 3.1: The share of EU companies using AI

**Explanation:** Companies using AI are more productive and more competitive. The indicator measures the share of EU companies using at least two types of AI technologies out of a list of ten identified in the "European enterprise survey on the use of technologies based on artificial intelligence" (ref.: SMART 2019/0019)

Source of data: CONNECT

| Baseline | Interim milestone | Target |
|----------|-------------------|--------|
| (2020)   | (2022)            | (2024) |
| 25%      | Increase          | 35%    |

#### Result indicator 3.2: Number of EDIHs specialised in Al

**Explanation:** The EDIHs selected in Digital Europe Programme all have a specialisation. There should be at least one in every Member State that has a specialisation in AI, as mentioned in the White Paper on AI

Source of data: CONNECT

| Baseline | Interim milestone | Target   |
|----------|-------------------|--|
| (2020)   | (2022)            | (2024)   |
| 0        | 20                | 40, with at least one in every<br>Member State |

Result indicator 3.3: Number of testing and experimentation facility sites in AI supported through Digital Europe Programme

**Explanation:** The Digital Europe Programme will support testing and experimentation facilities (TEF) and TEF sites, which are expected to be instrumental in allowing the deployment of AI solutions in areas such as manufacturing, health, agriculture, and smart cities, as well as the advent of edge AI

Source of data: CONNECT

| Baseline | Interim milestone | Target |
|----------|-------------------|--------|
| (2020)   | (2022)            | (2024) |
| 0        | None              | 15     |

Result indicator 3.4: Number of new installations of industrial robots in the EU

Explanation: The support to research and innovation in robotics under the Horizon Europe programme is

expected to help strengthening the robotics sector. It is not be noted that, due to the COVID crisis, a significant drop in the number of new installations is expected in 2020.

**Source of data:** International Federation of Robotics (IFR)

| Baseline | Interim milestone | Target |
|----------|-------------------|--------|
| (2018)   | (2022)            | (2024) |
| 64.000   | None              | 75.000 |

Result indicator: Proportion of proposed legislative revisions that include burden reduction measures

**Explanation:** The indicator measures how the Commission upholds its commitment to ensure that proposals for legislative revisions incorporate burden reduction measures, in the broader context of REFIT programme and One-In, One-Out approach. The indicator shows how many proposed legislative revisions out of the total, for each relevant specific objective include measures that concretely reduce burden

Source of data: CONNECT

| Baseline | Interim milestone | Target         |
|----------|-------------------|----------------|
| (N/A)    | (2022)            | (2024)         |
| (N/A)    | Positive trend    | Positive trend |

Specific objective 4: A fair, competitive and resource efficient digital economy

Related to spending programme(s): Horizon Europe, Digital Europe Programme and InvestEU

Result indicator 4.1: Availability of 5G connectivity underpinning future Smart Network and Services platforms across Europe

**Explanation:** The indicator measures the 5G coverage of populated areas and businesses

**Source of data:** European 5G Observatory

| Baseline                                    | Interim milestone | Target |
|---|-------------------|--------|
| (2020)                                      | (2022)            | (2024) |
| 5G in at least one city per Member<br>State | 30%               | 85%    |

Result indicator 4.2: Increase of the energy efficiency of European data centres

**Explanation:** This measure indicates an increase of the efficiency of a data centre. The Power usage effectiveness (PUE) is the ratio between the data centre total energy consumption to energy consumption of the information technology equipment. The closest to 1 the more efficient is the data centre.

**Source of data:** JRC/EU Code of Conduct on Data Centre Energy Efficiency (reporting requirements)

| Baseline | Interim milestone | Target  |
|----------|-------------------|---------|
| (2019)   | (2022)            | (2024)  |
| PUE 1.8  | PUE 1.6           | PUE 1.3 |

Result indicator 4.3: Number of businesses and public sector entities which have used the European Digital Innovation Hub's services

**Explanation:** This indicator shows how many companies are using the European Digital Innovation Hubs to

improve their agility, resilience and competitively through digitalisation of their products, production processes and business models

Source of data: CONNECT

| Baseline | Interim milestone | Target |
|----------|-------------------|--------|
| (2021)   | (2022)            | (2024) |
| 1000     | 4000              | 28000  |

Result indicator 4.4: Number of persons who have received training to acquire advanced digital skills supported by the Digital Europe Programme

**Explanation:** The Digital Europe Programme will promote training in advanced digital skills to address the shortage of digital experts, particularly in key technological areas (AI, HPC, Cybersecurity). The Programme will thus contribute to increase the pool of experts needed to develp and operate key digital technologies

Source of data: CONNECT

| Baseline | Interim milestone | Target  |
|----------|-------------------|---------|
| (2019)   | (2022)            | (2024)  |
| 0        | 25.000            | 100.000 |

Result indicator: Proportion of proposed legislative revisions that include burden reduction measures

**Explanation:** The indicator measures how the Commission upholds its commitment to ensure that proposals for legislative revisions incorporate burden reduction measures, in the broader context of REFIT programme and One-In, One-Out approach. The indicator shows how many proposed legislative revisions out of the total, for each relevant specific objective include measures that concretely reduce burden

Source of data: CONNECT

| Baseline | Interim milestone | Target         |
|----------|-------------------|----------------|
| (N/A)    | (2022)            | (2024)         |
| (N/A)    | Positive trend    | Positive trend |

Specific objective 5: A cyber resilient Europe, promoting digital identities for all Europeans, while protecting their e-privacy

Related to spending programme(s): Horizon Europe, Digital Europe Programme and Invest EU

#### Result indicator 5.1: Market uptake of the European security certification scheme

**Explanation:** The indicator measures market penetration of the European certification schemes by looking at the relative increase over time in the number of certificied products circulating in the Single Market. We will monitor the overall number of valid cerificates under the European Cybersecurity Certification Framework on an annual basis.

**Source of data:** ENISA, national accreditation bodies, market studies

| Baseline<br>(2020)   | Interim milestone (2023)                               | <b>Target</b> (2024)                                   |
|--|--|--|
| Number of certificates issued in<br>the first year of the operation of<br>European cybersecurity<br>certification schemes (first | 15% increase in the total number of valid certificates | 25% increase in the total number of valid certificates |

schemes expected to to be operational in 2021)

Result indicator 5.2: Number of actions launched under the Cyber Security Competence Centre, including the deployment of common cyber infrastructures

**Explanation:** This indicator measures the number and maturity of cybersecurity infrastructures, services and/or tools supported with DEP funding

**Source of data:** Cyber competence centre reports

| Baseline<br>(2021) | Interim milestone (2022) | <b>Target</b> (2024) |
|--------------------|--------------------------|----------------------|
| 1 action launched  | 3 actions launched       | 7 actions launched   |

Result indicator: Proportion of proposed legislative revisions that include burden reduction measures

**Explanation:** The indicator measures how the Commission upholds its commitment to ensure that proposals for legislative revisions incorporate burden reduction measures, in the broader context of REFIT programme and One-In, One-Out approach. The indicator shows how many proposed legislative revisions out of the total, for each relevant specific objective include measures that concretely reduce burden

Source of data: CONNECT

| Baseline | Interim milestone | Target         |
|----------|-------------------|----------------|
| (N/A)    | (2022)            | (2024)         |
| (N/A)    | Positive trend    | Positive trend |

Specific objective 6: A modern, open and pluralistic society in the digital age where online disinformation is countered and diverse cultural content is available to all Europeans

Related to spending programme(s): Horizon Europe, Digital Europe Programme, CEF 2 and Creative Europe Media

#### Result indicator 6.1: Share of European films in the catalogue of on-demand services

**Explanation:**The support for the presence and promotion of European works online through Creative Europe will help achieve the target. Of particular relevance are the support to distribution and new models of distribution and support to VOD services

**Source of data:** European Audiovisual Observatory

| Baseline   | Interim milestone | Target  |
|--|-------------------|---|
| (2019)   | (2020)            | (2024)  |
| 21% average share of non<br>national European works<br>originating from ECTT countries, of<br>which 11,7% average share of<br>EU27 non national European works | None              | 25% average share of non national European works originating from ECTT countries,, of which 14% average share of EU27 non-national European works |

Result indicator 6.2: Impact of measures tackling online disinformation, including the implementation of the Code of Practice

**Explanation:** This indicator measures the effectiveness of the support measures under CEF and DEP to

ensure the presence of multi-disciplinary teams of fact-checkers and researchers across the EU, as a means to enhance citizens' awareness about disinformation and strengthen societal resilience

Source of data: CONNECT

| Baseline<br>(2020)   | Interim milestone (2021)                                | <b>Target</b> (2024)                                    |
|--|---|---|
| Establishment of European Digital<br>Media Observatory (central<br>platform) | Presence of national/regional hubs in 6-7 Member States | Presence of national/regional hubs in all Member States |
| No national/regional hub in any<br>Member State                              |   |   |

Result indicator 6.3: Public Sector Bodies with accessible websites and mobile applications (allowing persons with disabilities to navigate, understand and interact with the content and services offered by such websites and apps, on an equal basis with other users)

Explanation: The indicator will show the degree to which the websites and mobile applications of public sector bodies comply with the accessibility requirements set forth in the Web Accessibility Directive

Source: Member States' reports on monitoring, first due by December 2021 and every three years thereafter, based on the Web Accessibility Directive and Commission Implementing Decision (EU) 2018/1524 establishing a monitoring methodology and the arrangements for reporting by Member States

Source of data: CONNECT

| Baseline<br>(N/A) | Interim milestone (2022)  | <b>Target</b> (2024)  |
|-------------------|---|---|
| (N/A)             | First set of Member States' monitoring reports by Dec 2021, and every 3 years thereafter; availability of indicator in 2022 after analysis of Member States' reports together with results of review of Web Accessibility Directive, due by June 2022 | Positive trend, based on second set of Member States' monitoring reports, due in Dec 2024 |

Result indicator: Proportion of proposed legislative revisions that include burden reduction measures

**Explanation:** The indicator measures how the Commission upholds its commitment to ensure that proposals for legislative revisions incorporate burden reduction measures, in the broader context of REFIT programme and One-In, One-Out approach. The indicator shows how many proposed legislative revisions out of the total, for each relevant specific objective include measures that concretely reduce burden

Source of data: CONNECT

| Baseline | Interim milestone | Target         |
|----------|-------------------|----------------|
| (N/A)    | (2022)            | (2024)         |
| (N/A)    | Positive trend    | Positive trend |