

EUROPEAN DATA STRATEGY

Policy brief

Weblink	https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/european-data-strategy_en
Relevance	<input type="checkbox"/> National policy <input checked="" type="checkbox"/> EU policy <input type="checkbox"/> other: EU strategy
Briefing done by	Eleni Chaniotaki

Short summary of the policy

The European strategy for data aims at creating a single market for data that will ensure Europe’s global competitiveness and data sovereignty. This will lead to the creation of Common European Data Spaces. They will ensure that more data becomes available for use in the economy and society, while keeping the companies and individuals who generate the data in control.

In 2020, the Commission has published a report on Business-to-Government (B2G) data sharing. Originating from a high-level Expert Group, the report presents a series of policy, legal, and funding recommendations aimed at facilitating the scaling, responsible, and sustainable implementation of B2G data sharing in the public interest within the EU.

Two critical pieces of legislation have been put in place to protect the rights and interests of citizens while simultaneously fostering industrial and technological development. They play a vital role in laying the foundation for achieving the objectives outlined in the European data strategy:

- The Data Governance Act (DGA) is a comprehensive tool designed to oversee the reuse of publicly or protected data across various sectors. It aims to facilitate data sharing by regulating new entities known as data intermediaries and promoting data sharing for altruistic reasons. The DGA covers both personal and non-personal data, with the General Data Protection Regulation (GDPR) applying whenever personal data is involved. The inclusion of built-in safeguards, in addition to GDPR, is intended to enhance trust in the sharing and reuse of data. This trust-building is crucial for increasing the availability of data in the market.
- The Data Act entered into force on 11 January 2024. It is a pillar of the European strategy for data. Its main objective is to make Europe a leader in the data economy by harnessing the potential of the ever-increasing amount of industrial data, in order to benefit the European economy and society.

Main objectives of the policy (in bullet points)

To further ensure the EU’s leadership in the global data economy the European strategy for data intends to:

- adopt legislative measures on data governance, access and reuse. For example, for business-to-government data sharing for the public interest;
- make data more widely available by opening up high-value publicly held datasets across the EU and allowing their reuse for free;

- invest €2 billion in a European High Impact Project to develop data processing infrastructures, data sharing tools, architectures and governance mechanisms for thriving data sharing and to federate energy-efficient and trustworthy cloud infrastructures and related services;
- enable access to secure, fair and competitive cloud services by facilitating the set-up of a procurement marketplace for data processing services and creating clarity about the applicable regulatory framework on cloud framework of rules on cloud.

Context and relation to DIGITAL EUROPE

The Digital Europe Programme will support the development and roll-out of ‘personal data spaces’, which is a fundamental element in the third pillar of the strategy, namely ‘competences’. The funding dedicated to skills under the Digital Europe programme will contribute to narrowing the gap in terms of big data and analytics capacities. The programme will make funding available to expand the digital talent pool with in the order of 250 000 people who will be able to deploy the latest technologies in businesses throughout the EU. Given the importance of data in the digital economy, many of these are likely to be related to data. Additionally, the Digital Europe Programme will create opportunities for SMEs in the data economy, to have better access to data and to develop new services and applications based on data, inter alia through incubation schemes.

What parts of the Policy are directly related to specific objectives (SO) in DEP

SO1: High Performance Computing (HPC)

Relevant sections of the European Data Strategy:

The European Data Strategy paper mentions that in 2021-2027 the Commission will invest in a High Impact Project on European Data Spaces and federated cloud infrastructures. Apart from the development of Common European data spaces, investments may cover the interconnection of existing computing capacities at national and European level, including High Performance Computing capacities and will – where needed – bring together the capacity of data processing resources. Furthermore, the private sector, inc. SMEs, will benefit from data and cloud infrastructures and services. The investment will bring together private actors with public support to develop common platforms offering access to a large diversity of cloud services for secure data sharing and storage as well as numerous applications, including high performance computing. Over time, the project should enable access to top-end high-performance computers and its integration with mainstream data processing services.

SO2: Artificial Intelligence (AI)

Relevant sections of the policy:

- Proposes a legislative framework for the governance of common European data spaces, Q4 2020
- Adopts an implementing act on high-value data-sets, Q1 2021
- Proposes, as appropriate, a Data Act, 2021
- Analysis of the importance of data in the digital economy (e.g. through the Observatory of the Online Platform Economy), and review of the existing policy framework in the context of the Digital Services Act package (Q4 2020).
- Invest in a High Impact project on European data spaces, encompassing data sharing architectures (including standards for data sharing, best practices, tools) and governance mechanisms, as well as the European federation of energy-efficient and trustworthy cloud infrastructures and related services, with a view to facilitating combined investments of €4-6 billion, of which the Commission could aim at investing €2 billion. First implementation phase foreseen for 2022;
- Sign Memoranda of Understanding with Member States on cloud federation, Q3 2020;
- Launch a European cloud services marketplace, integrating the full stack of cloud service offering, Q4 2022;
- Create an EU (self-)regulatory cloud rulebook, Q2 2022.

SO3: Cybersecurity

Relevant sections of the European Data Strategy:

In the area of cybersecurity Europe has developed an already comprehensive framework to support Member States, businesses and citizens to tackle cybersecurity threats and attacks, and Europe will continue to develop and improve its mechanisms to protect its data and the services building on it. The safe and widespread use of data-fuelled products and services will also depend on the highest cybersecurity standards. The EU Cybersecurity Certification Framework and the EU Agency for Cybersecurity (ENISA) are expected to play an important role towards that endeavour.

However, the new data paradigm where less data will be stored in data centres, and more data will be spread in a pervasive way closer to the user 'at the edge', brings new challenges for cybersecurity. It will be essential to preserve data security when data are being exchanged. Ensuring the continuity of access controls (i.e. how security attributes of data are managed and respected) across data value chains will be a key, but demanding, pre-requisite to foster data sharing and ensure trust among the different actors of European data ecosystems.

Furthermore, in the period 2021-2027 the European Commission will invest in a High Impact Project on European Data Spaces and federated cloud infrastructures. The project encompasses a number of EU strategic investments that are essential for the EU's data infrastructure of the future, to equip Europe, among others, with cybersecurity tools to process data.

SO4: Advanced Digital Skills

Relevant sections of the European Data Strategy:

One of the pillars of the strategy refers to competences and investing in skills. According to the strategy paper the funding dedicated to skills under the Digital Europe programme will contribute to narrowing the gap in terms of big data and analytics capacities. The programme will make funding available to expand the digital talent pool within the order of 250 000 people who will be able to deploy the latest technologies in businesses throughout the EU. Given the importance of data in the digital economy, many of these are likely to be related to data.

Overall, by 2025, the EU and the Member States should have halved the current gap of 1 million digital specialists, including by putting a focus on increasing the participation of women. The idea of a network of data stewards from across data-intensive organisations (both businesses and the public sector), put forward by the expert group on Business-to-Government data sharing, will be further explored.

In terms of general data literacy, the Reinforced Skills agenda will set out a pathway showing how EU and Member State action can increase the proportion of the EU population with basic digital skills, from the current 57% to 65% by 2025.

Big data and learning analytics offer new opportunities to capture, analyse and use data to improve education and training. The updated Digital Education Action Plan will reinforce better access to and use of data as one of its key priorities, in order to make education and training institutions fit for the digital age and equip them with the capabilities needed for making better decisions and improving skills and competences.

SO5: Deployment and Best Use of Digital Capacities and Interoperability

Relevant sections of the European Data Strategy:

The first pillar of the strategy includes putting into place an enabling legislative framework for the governance of common European data spaces, which, facilitates cross-border data use and prioritises interoperability requirements and standards within and across sectors. The framework will strengthen the governance mechanisms at EU level and in the Member States relevant for cross-sector data use and for data use in the common sectoral data spaces, involving both private and public players. This could include a mechanism to prioritise standardisation activities and to work towards a more harmonised description and overview of datasets, data objects and identifiers to foster data interoperability (i.e. their usability at a technical level³⁷) between sectors and, where relevant, within sectors³⁸. This can be done in line with the principles on Findability, Accessibility, Interoperability and Reusability (FAIR) of data taking into account the developments and decisions of sector-specific authorities.

The second pillar of the strategy, namely its enablers, includes investments in data and strengthening Europe's capabilities and infrastructures for hosting, processing and using data and interoperability. Within the framework of a High Impact Project that will take place between years 2020 and 2027, the Commission will fund establishment of EU-wide common, interoperable data spaces in strategic sectors. The spaces will include, among others, (iii) improving the availability, quality and interoperability of data – both in domain-specific settings and across sectors. The support for data spaces will also cover data processing and computing capacities that comply with essential requirements in terms of environmental performance, security, data protection, interoperability and scalability.

With focus on the areas where EU level support has clear added value, investments may also cover the interconnection of existing computing capacities at and European level, including High Performance Computing and will -where needed- bring together the capacity of data processing resources. The aim is to help common data and world class cloud infrastructures for the public good to emerge, enabling secure data storage and processing for the public sector and research institutions. Similar positive effects are expected from the interconnection with the European Open Science Cloud (EOSC) and the Data and Information Access Services (DIAS) cloud-based platform that provides access to services based on the Copernicus earth observation data. The private sector, including notably SMEs, also needs data and cloud infrastructures and services that provide the essential features of security, sustainability, interoperability and scalability.

Within the fourth pillar of the strategy, the development of Common European Data Spaces in strategic sectors and domains of public interest, there will be sectoral legislation for data access and use, and mechanisms for ensuring interoperability.

Which activities in the current DEP Work Programme contribute to meeting the objectives of the European Data Strategy

In continuation from WP 2021-2022, WP 2023-2024, WP 2023-2024 will provide funding for:

- further development of individual data spaces,
- the development of the common platform for European open data covering datasets from EU, national, local, regional and geo portals,
- a new action on Digital Product Passport.

Within WP 2023-2024 there will be topics for the development and deployment of the following data spaces under SO2:

- Data space for cultural heritage
- Data space for Tourism
- Language data space
- European green deal data space
- Data space for skills
- Energy data space
- Data space for manufacturing
- Agricultural data space
- Public procurement data space
- Common European mobility data space
- Health care data space

Please match any specific activity mentioned in the policy with concrete call topics from the current/upcoming DEP Work Programme

[Call for Pilots within the European data space for smart communities \(submission round 3\)](#) (SO2)

[Call for Pilots within the European data space for smart communities \(submission round 2\)](#) (SO2)

The following call topics appear by searching for 'Data security and privacy' and might be of interest:

[Support for Implementation of EU Legislation on Cybersecurity and National Cybersecurity Strategies \(2024\)](#) (SO3)

[Preparedness Support and Mutual Assistance, Targeting Larger Industrial Operations and Installations](#) (SO3)

[Development and Deployment of Advanced Key Technologies](#) (SO3)

[Enlarging existing or Launching New Cross-Border SOC Platforms](#) (SO3)

[Strengthening the SOC Ecosystem](#) (SO3)

Events

For finding related events, please check out the following online calenders: [Shaping Europe's digital future](#)