European data strategy &
common European data spaces

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European Commission priorities 2019-2024

EU digital transition is at the top of the policy agenda:

A European Green Deal
Europe aims to be the first climate-neutral continent by becoming a modern, resource-efficient economy.

A stronger Europe in the world
The EU will strengthen its voice in the world by championing multilateralism and a rules-based global order.

A Europe fit for the digital age
The EU’s digital strategy will empower people with a new generation of technologies.

Promoting our European way of life
Europe must protect the rule of law if it is to stand up for justice and the EU’s core values.

An economy that works for people
The EU must create a more attractive investment environment, and growth that creates quality jobs, especially for young people and small businesses.

A new push for European democracy
We need to give Europeans a bigger say and protect our democracy from external interference such as disinformation and online hate messages.

Data & EU Economy

- Data can transform all sectors of the economy and is crucial for AI
- Personal and non-personal data can be a source of innovation for new products and services
- Data can contribute to tackle societal challenges such as climate change, health, mobility, etc.
- Value of the EU data economy in 2025: €829 billion (from €301 billion in 2018)
Creating a single European market for data

**European Data Strategy**
- Published Feb 2020
- Create conditions to make data (re)use and sharing easier
- Facilitate cross-border and cross-sectoral data sharing
- *Genuine* internal data market built on EU values and rules

**A cross-sectoral legislative framework**
- [Data Governance Act](#) – Applicable since 24 September 2023
- [Data Act](#) – Proposal Feb 2022, political agreement June 2023, expected adoption end 2023
- [Implementing Act on High-value datasets](#) (Open Data Directive) – Adopted 21 December 2022, applicable from 9 June 2024

**Common European data spaces**
- Roll out of common European data spaces in sectors and domains of strategic interest
c) call for better exploiting the potential of data and digital technologies for the benefit of society, the environment and the economy, while upholding relevant data protection, privacy and other fundamental rights and ensuring the retention of data necessary for law enforcement and judicial authorities to exercise their lawful powers to combat serious crime; we recognise the need to accelerate the creation of common data spaces, including ensuring the access to and interoperability of data; we look forward to the Commission’s proposal for a regulatory framework for Artificial Intelligence, and the accompanying review of the coordinated plan, to accelerate the uptake of this technology while ensuring safety and full respect of fundamental rights; we invite the Commission to swiftly present the progress made and the remaining measures necessary to establish the sectoral data spaces announced in the European strategy for data of February 2020;
The creation of EU-wide common, interoperable data spaces in strategic sectors aims at overcoming legal and technical barriers to data sharing by combining the necessary tools and infrastructures and addressing issues of trust by way of common rules.

A common European data space brings together relevant data infrastructures and governance frameworks in order to facilitate data pooling and sharing.
A secure and privacy-preserving IT infrastructure to pool, access, process, use and share data.

A data governance mechanism, comprising a set of rules of administrative and contractual nature that determine the rights to access, process, use and share data in a trustful, transparent manner and in compliance with existing legislations.

Data holders are in control of who can have access to their data, for which purpose and under which conditions it can be used.

Presence of vast amounts of data that are made available on a voluntary basis and can be reused against remuneration or for free, depending on the data holder’s decision.

Participation by an open number of organisations/individuals in full respect of competition rules and ensuring non-discriminatory access for all participants.
A data space can be defined as a federated data ecosystem based on shared policies and rules. The users of such data spaces are enabled to access data in a secure, transparent, trusted, easy and unified fashion.

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From a technical perspective, a data space can be seen as a data integration concept which does not require common database schemas and physical data integration, but is rather based on distributed data stores and integration on an “as needed” basis.
EC support for common European data spaces

Bring stakeholders together with a common EU data policy

Support the Commission in:

- **Issuing guidelines** to facilitate the development of the common European data spaces
- Identifying the relevant standards and interoperability requirements for cross-sector data sharing

Work with stakeholders

Data Governance Act

Europian Data Innovation Board (EDIB)

Data Act

Offer a technical solution

Funding

Ensure TRUST in data transactions, e.g. neutral data intermediaries

Ensure FAIRNESS in the allocation of data value among the actors of the data economy

EU financial contribution (notably DIGITAL) to deploy common European data spaces in specific sectors/domains

Simpl Smart Middleware solution DIGIT building blocks
Data Governance Act – ensure trust

Leveraging the potential of data for the economy and society

Pillar 1: Re-use of sensitive data held by public sector bodies

Pillar 2: Framework for trusted data intermediaries in the Single Market

Pillar 3: Corporate and Individual data altruism for purposes of general interest

Pillar 4: Co-ordination and interoperability: European Data Innovation Board

Horizontal framework for the creation of a single market for data
Data Act – ensure fairness

Better access to IoT data

**Manufacturers of IoT objects** need to allow access & can use the data

**Users of IoT objects** get right to access and port data

**3rd parties** can use the data to offer services (SMEs get special conditions)

Tackle contractual unfairness

**Companies** are prohibited from unilaterally imposing unfair contractual clauses related to data sharing on **SMEs**

Make business data available for the common good

**Companies** must make data available to **public sector bodies** in case of emergencies and other exceptional needs

Facilitate data flows through technical standards and interoperability

**European Commission** may adopt technical specifications if necessary to ensure interoperability

Easier switching between cloud services

**Cloud service providers** must ensure easy switching conditions for **customers**

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Funding Common European data spaces

- Driven by stakeholders
- Rich pool of data of varying degree of openness
- Sectoral data governance (access and usage rights)
- Technical infrastructure and tools for data access and sharing

Data Spaces Support Centre (dssc.eu)
- Coordinating the development of data spaces
- Common standards and interoperability

Technical infrastructure for data spaces
- Edge & cloud Services
- Smart Middleware solutions (Simpl)
- Marketplace
- High-Performance Computing
- AI on demand platform
- AI Testing and Experimentation Facilities
Funding – Data Spaces and infrastructure in DIGITAL

1. **European Data Spaces Technical Framework**
   - Edge and cloud services
   - Technical building blocks: Simpl Smart Middleware

2. **Data Spaces Support Centre (DSSC)**
   - Bring together stakeholders.
   - Identify the data infrastructure needs

3. **Sectoral Data Spaces**
   - Build the data spaces
Offer a technical solution – building blocks

Apart from EU policy and legislation on data, the Commission offers technical building blocks to create data spaces in a harmonised manner.

Choose your Building Block

A Building Block is an open and reusable digital solution. It can take the shape of a framework, a standard, a software, or a software as a service (SaaS), or any combination thereof.

Building Blocks are endorsed by the European Commission and ensure that your digital service will be fully compatible with others on the market. We offer support and guidance on your journey to an interoperable, EU-compliant final product. What’s your challenge?

**eDelivery**
Exchange electronic data and documents in an interoperable and secure way

[Learn more](#)

**eID**
Offer services capable of electronically identifying users across Europe

[Learn more](#)

**Once-Only Technical System (OOTS)**
Reduce administrative burden on citizens and businesses

[Learn more](#)

**eSignature**
Create and verify electronic, paperless signatures

[Learn more](#)

**eInvoicing**
Send and receive electronic invoices with automated processing, in line with the European standard

[Learn more](#)
Offer a technical solution – Simpl Smart Middleware

Simple deployment, easy to use and extend

Build security, trust, confidence and compliance with regulations into the system.

Ensure that data sets and their infrastructures can be seamlessly interconnected and made interoperable.

Allow the replacement or addition of components without affecting the rest of the system.

Ensure that data sets and their infrastructures can be seamlessly interconnected and made interoperable.

Allow for insights into all parts of the architecture (without any proprietary claims)

Simple

Interconnection and interoperability

Smart And modular

Open source

Secure

Green, scalable and elastic

Simpl will enable cloud-to-edge federations and support the common European data spaces

Offer a technical solution – Simpl Smart Middleware
Data Spaces Support Centre – key features

- Coordination and Support Action
- Project duration: 42 months
- Start date: 01/10/2022
- End date: 31/03/2026
- Consortium of 12 partners
- Coordination: Fraunhofer (DE)
- 16 associated partners
- Budget: 14 mln euros
- 100% funded by the DIGITAL Europe programme
Consortium members

BDV Big Data Value Association
Capgemini Invent
FIWARE Foundation
Fraunhofer
Gaia-X
International Data Spaces Association
KU Leuven
MyData
Ollscoil na Gáillimhe University of Galway
Sitra
TNO Innovation for Life
VTT
Associated and collaboration partners
DSSC mission

- Coordinate the coherent development of common European data spaces
- Enable new European data spaces to a fast start and scale-up
- Provide the tools to address the basic organisational and technical matters, required by every data space
- This includes a blueprint, best practices, common standards and reference implementations which are developed according to a co-creation process
- Enable data spaces to focus on their domain-specific business challenges and provide business benefits to their participants
DSSC Assets - Blueprint v0.5 just released

https://dssc.eu/page/knowledge-base
Common European data space actors

Data Spaces Support Centre (DSSC)
- coordination of all relevant actions on sectoral data spaces in Europe
- blueprint, best practices, common standards, support activities and knowledge transfer
- funded by the DIGITAL Europe Programme

Data Space Preparatory and Deployment Actions
- for sectoral/domain-specific data spaces
- community of practice, priority datasets, stakeholder engagement, governance/business models, roadmap, deployment
- funded by the DIGITAL Europe Programme

European Data Innovation Board (EDIB)
- Consultative and advisory body established by the Data Governance Act
- guidelines for interoperability of common European data spaces
Stay up to date / get involved

FOLLOW AND CONTACT THE DATA SPACE INITIATIVES

Sector-/domain-specific, e.g. Green Deal data space (GREAT)

DSSC
- News and publications at dssc.eu
  - Get support
- Join the Thematic Groups
  - Knowledge base and periodic meetings
  - Get involved
- Monthly DSSC Insights Series
  - The latest dedicated to the Blueprint.
  - Recordings available at https://www.youtube.com/@eudataspacesupportcentre
- Next Data Spaces Symposium in March 2024
Thank you for your attention

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