# Characteristics of data spaces

## Guiding principles and legislation

* The data space promotes the continuous and sustainable creation of products and services around data.
* The data space supports specific compliance with EU legislation, in particular personal data protection, consumer protection legislation and antitrust laws.
* The data space fosters stakeholder trust by generating value-added relationships and enabling data processing ethics.
* The data space guarantees the sovereignty of participants over their data.
* The data space pays attention to all aspects of data security.

## Participants and roles

* The data space is open to the participation of any actor in the ecosystem committed to fulfilling its lines of operation, from the public or private sector to the third sector.
* The data space allows the various participants to play different roles: producers, consumers or providers of data.

## Governance

* The governance code of a data space will enable the inclusion of information access and use policies in the corresponding agreements.
* The data space will make it easier to find, access and use data, under FAIR principles (findable, accessible, interchangeable, reusable).
* The data space facilitates the development of semantics and vocabularies for common use.
* The data collected in the various data spaces are presented in formats accessible to people with disabilities.
* The contractual clauses of a data space use case may state the availability of the product, the totality of participants or its publication under an open data license.
* The operation of the data space as a whole may be subject to external audit.
* The data space shall ensure interoperability and synergies with other national or European sectoral data spaces.

## Technology

* The data space is intended to be independent of the underlying technological solution.
* The software components present in the data spaces will be created under licensing schemes that enable their knowledge and reuse.
* The data space makes use, if necessary, of innovative technologies, and the following situations of use can be outlined:
  + The deployment of advanced analytics services and tools will be facilitated.
  + The intensive use of privacy technologies (PET) will be promoted to guarantee the adequate treatment of information.
  + The deployment and intensive use of innovative federated learning models will be promoted.
  + Distributed registry technologies may be used to guarantee both the ownership of the data itself and its access rights.
  + "Digital wallet" (PIMS) technologies will be used, where the digitally identified citizen decides what use will be made of the information he/she provides.
  + The negotiation of the contract of adhesion to the space will be able to be done mostly online.