



# Common European Data Spaces: The policy context



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Chiara Farné Fratini & Peter Steen Mikkelsen

DTU Sustain, Department of Environmental and Resource Engineering

Technical University of Denmark

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# Why are Data spaces needed?

- Data is an essential resource for economic growth, competitiveness, innovation, job creation and societal progress; therefore, it is important to ensure that the digital transition will be sustainable and beneficial for all (Otto, ten Hompel, and Wrobel 2022)
- Despite the exponential growth of data produced and the value potential they bear for society and the economy, the use of this data is suboptimal and therefore its value is not exploited.
- There are multiple reasons for this but the most critical are (Otto, ten Hompel, and Wrobel 2022):
  - Lack of trust between data providers and data users
  - Regulatory and technical issues around reuse of public sector data and around collecting data for the common good
  - Limited accessibility and availability of data
- The creation of common EU data spaces have a number of socio economic goals: the following 3 are the most important

# Goal 1:

## EU competitive advantage in the digital transformation

- **Developing a EU Competitive advantage in relation to non-European actors** (i.e. China and US) leading the digital transformation internationally today is important for 2 reasons (Negreiro 2022):
  1. A EU study on the 'Cost of Non-Europe' in the area of digital transformation estimated that the cost of not having EU digital players and platforms in driving digitalization in EU member states was € 315 billions already in 2021, with potentials to reach up to €1.3 trillions by 2033
  2. because of the inherent business model logic of Non-EU platforms – e.g. winner-takes-it-all effects and gatekeeping functionality – typical values of the Single European Market such as freedom of choice and a fair compensation for the data provider in secondary use scenarios are at risk in the data economy
- The intention is to build a fair and sustainable data economy for Europe, driven by EU companies
- This will be achieved by creating a single market for data that will ensure Europe's global competitiveness and data sovereignty (European Commission, 2020a)

## Goal 2: Promoting EU values and freedoms

- Ensuring that the digital transformation will **promote EU values and respect fundamental freedoms** – e.g. social justice, data protection and privacy (Negreiro 2022).
- This will be achieved by:
  1. supporting growth and gains for SMEs,
  2. ensuring cybersecurity for institutions and citizens,
  3. protecting users,
  4. ensuring equal access to data to all individuals and organizations in EU.

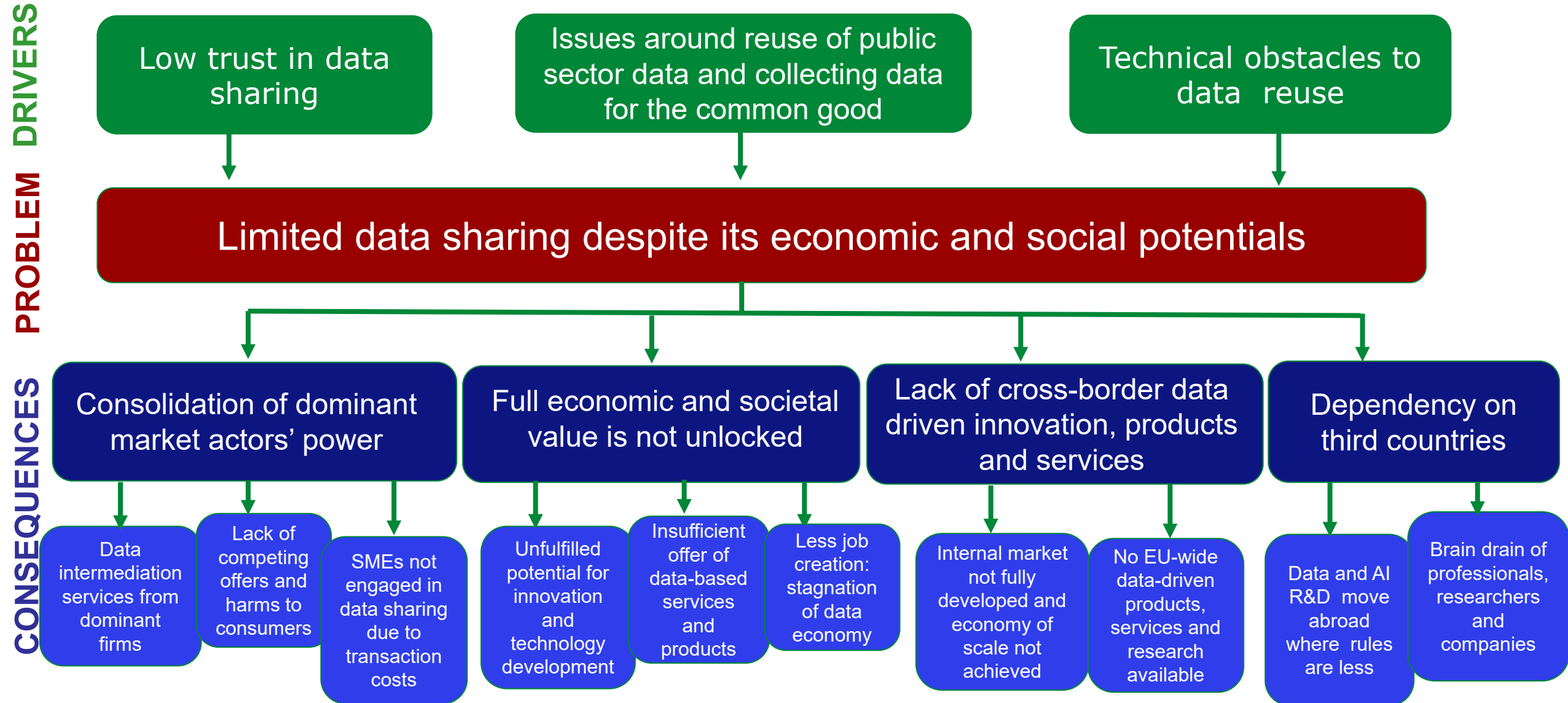
# Goal 3:

## Contributing to the Green Transition

(European Commission, 2020a)

- Making more data available and improving the way in which data is used is essential for tackling societal, climate and environment-related challenges, contributing to healthier, more prosperous and more sustainable societies. This will lead to **better policies to achieve the objectives of the European Green Deal**.
- The EU proposes green transformation measures for the ICT sector: the current environmental footprint of the ICT sector is estimated to be between 5 and 9% of the world's total electricity use and more than 2% of all emissions, a large part of which is due to data centres, cloud services and connectivity

# European Data Governance: problem tree (European Commission, 2020b)



# The vision: “A common EU Data Space”

*“a genuine single market for data, open to data from across the world – where personal as well as non-personal data, including sensitive business data, are secure and businesses also have easy access to an almost infinite amount of high-quality industrial data, boosting growth and creating value, while minimising the human carbon and environmental footprint. It should be a space where EU law can be enforced effectively, and where all data-driven products and services comply with the relevant norms of the EU’s single market. **To this end, the EU should combine fit-for-purpose legislation and governance to ensure availability of data, with investments in standards, tools and infrastructures as well as competences for handling data.** This favourable context, promoting incentives and choice, will lead to more data being stored and processed in the EU” (European Commission 2020a)*

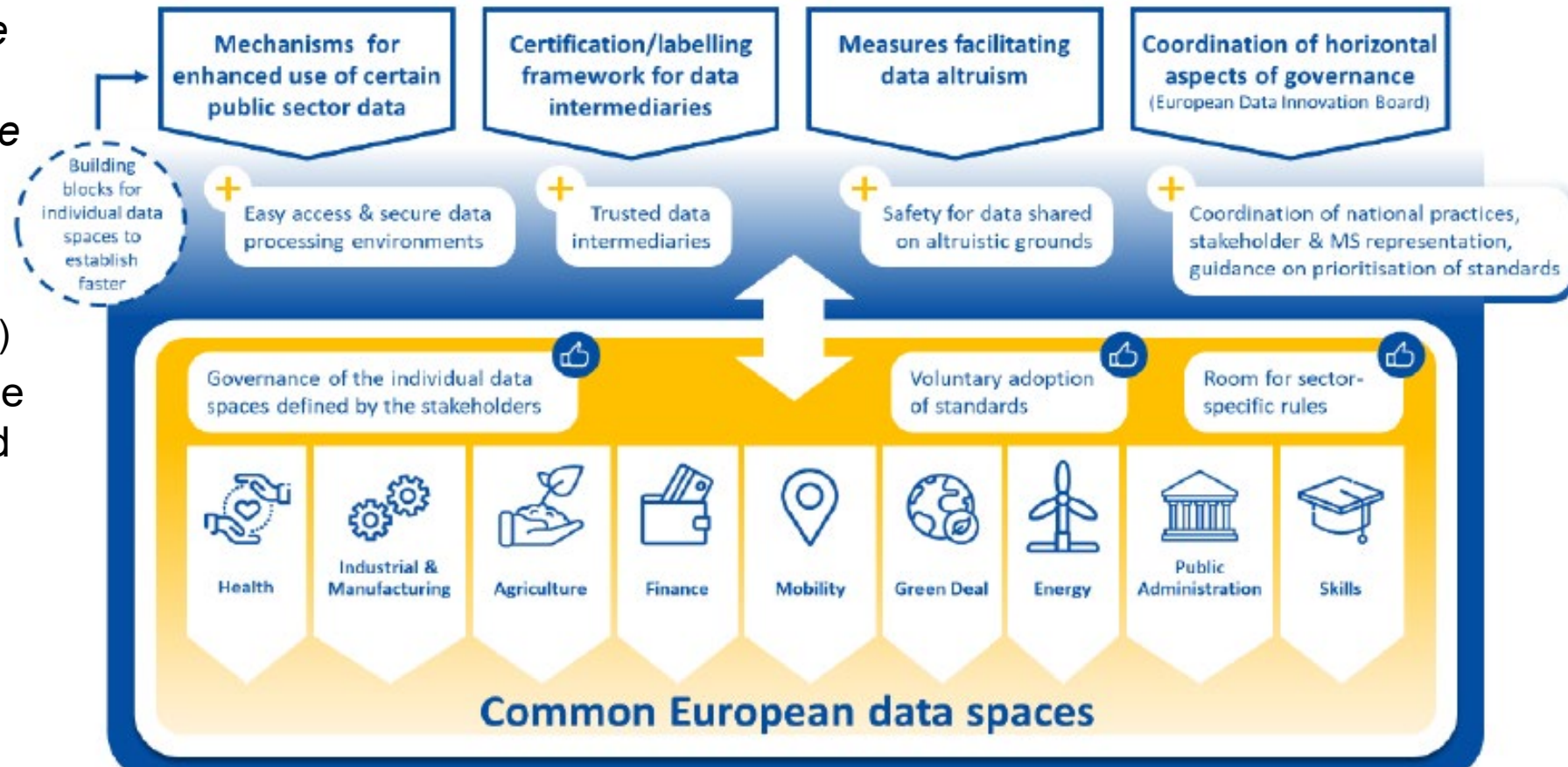


# Cross-sectoral actions towards a Common European Data Space

- Boost EU investments in next-generation technologies and infrastructures as well as in digital competences. This will increase Europe's technological sovereignty in key enabling technologies and infrastructures for the data economy. The infrastructures should support the creation of European data pools enabling Big Data analytics and machine learning, in a manner compliant with data protection legislation and competition law, allowing the emergence of data-driven ecosystems (European Commission 2020a)
- Data governance regulations will ensure (European Commission 2020a) :
  - data flows within the EU and across sectors;
  - the full respect of European rules and values, in particular personal data protection, consumer protection legislation and competition law;
  - fair, practical and clear access and use of data
  - trustworthy data governance mechanisms
  - open, but assertive approach to international data flows, based on European values

# The EU Data Strategy – an horizontal approach

- The EU Data Strategy proposes an overarching framework encompassing horizontal measures for all common European data spaces: sector-specific rules, governance mechanisms and standards where relevant, using a **collaborative approach** (European Commission 2020b)
- “The objective is not to create the common European data spaces by law, but to enhance their development by strengthening trust in data sharing and in data intermediaries” (EC 2020b, p.3)
- 9 sectors were selected as the most critical for the green and digital transition.
- **Water not identified as an independent sector** but as part of the Green Deal Data Space



# Sector- or domain-specific data spaces: key features

(European Commission, 2022)

1. A secure and privacy-preserving infrastructure to pool, access, share, process and use data.
2. A clear and practical structure for access to and use of data in a fair, transparent, proportionate and/non-discriminatory manner and clear and trustworthy data governance mechanisms.
3. European rules and values, in particular personal data protection, consumer protection legislation and competition law, are fully respected.
4. Data holders will have the possibility, in the data space, to grant access to or to share certain personal or non-personal data under their control.
5. Data that is made available can be reused against compensation, including remuneration, or for free.
6. Participation of an open number of organisations/individuals.

# “Open” & “Common” Data Spaces: what does it mean?

(European Commission, 2018)

- The debate on open data among experts seems to suggest that regulations supporting the democratization of data will increase
- The terms “open” and “common” referred to data spaces do not necessary refer to “free” data but to the need to facilitate access to those data equally to everybody in the EU
- The expectation is the development of a “data market” in which:
  - data are placed and organized in different locations
  - access is diversified in relation to security level
  - some data will be available for free and some on compensation
  - enhancing sharing and data re-use is expected to support innovation in the water sector
- The data space in this context will be characterized by a specific governance structure to ensure a trustworthy and just data brokerage

# The Role of SMEs (European Commission, 2020c)

The role of SMEs is considered indispensable for supporting the EU's twin transition to a sustainable and digital economy because SMEs:

- represent 99% of all businesses in the EU,
- employ around 100 million people within the EU,
- account for more than half of Europe's GDP
- play a key role in adding value in every sector of the economy
- have largely contributed with innovative solutions to important societal challenges

# The SMEs strategy for a sustainable and digital EU

The SMEs strategy for a sustainable and digital EU builds upon three main pillars (European Commission, 2020c):

1. Building capacity for SMEs to support the green and digital transition
  2. Improving their access to the market and reducing their regulatory burden
  3. Improving their access to financing by mobilizing funding under the frameworks of the COSME programme and the European Social Fund. At the same time providing guidance and facilitating access to relevant and updated information on instruments and mechanisms – i.e. cross-cutting initiatives such as gender-smart financing and green-tech initiatives.
- From a governance perspective the European Commission underlines that in order to implement the SMEs strategy, a strong commitment and actions at different governance scales are needed. These have to be rooted within regional and local ecosystems where SMEs contribute with jobs, training, tax revenues and social welfare (European Commission, 2020c) .

# Concluding Reflections on Policy Analysis

- The EU is "ramping up" on the Data Space agenda, but yet limited data sharing is observed due to: 1) trust issues; 2) technical barriers (e.g. lack of a common standardization), 3) lack of appropriate regulations for the governance of data sharing
- Several Data Space initiatives are ongoing at EU level, involving a large network of actors. The number of sectors/domains under focus is not definitive but it could increase if relevant. There is so far little Danish participation.
- The water sector does not (yet) appear as a separate entity but as a sub-category of the Green Deal Data Space. It will be important to prioritize water data spaces in synergy with that.
- But water data spaces play a key role in support of water sector innovation and transition. There is the need for understanding what a water data space is and how it should be best designed and governed to support the twin (green and digital) water transition, which can contribute to economic growth, competitiveness, innovation, job creation and societal progress in general.
- SMEs will have special conditions in order to thrive within the EU data space(s) – we observed that the Danish water sector still has too little focus on the role of SMEs in the digital transition, this may be a barrier for accelerating the twin (green and digital) water transition.

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