BeGeo 2024

LA CONNEXION A L'ETAT PUR
DE ULTIEME CONNECTIE

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Novel approaches to data governance and data sharing in the Green Deal Data Space

Sara Thabit, EU Joint Research Centre

begeo.be

Anticipate

Integrate

Impact

JRC mission

As the science and knowledge service of the European Commission our mission is to support EU policies with independent evidence throughout the whole policy cycle.

We are **independent**, **policy neutral** + work for **30 EC policy departments**.

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JRC work: Data Spaces & Data Sharing

Novel approaches to data governance and data sharing?

Green Deal Data Space

European Commission

Current scenario

- Large amounts of **data remain unused**; which generates no value and creates additional costs
- **Lack of data collaboration** among different actors in the local data ecosystem
- **Lack of social and organizational focus** beyond technology components

Table 39 Data provided by third parties that municipalities rely on

0% to 25% | 26% to 49% | 50% to 75% | 76% to 100%

	National public organisations (%)	Intergovernmental organisations (%)	Private companies (%)	Universities or research institutions (%)	Residents (%)	Others (Please specify) (%)
World	59%	29%	31%	43%	35%	14%
Africa	61%	50%	39%	39%	36%	14%
Asia	58%	40%	42%	57%	36%	17%
China	55%	30%	39%	67%	33%	15%
Other Asian countries	65%	55%	45%	40%	40%	20%
Europe	60%	21%	23%	36%	28%	10%
Latin America	53%	34%	43%	47%	51%	26%
North America	54%	15%	23%	46%	54%	0%

Data Sharing practices at the local level. *Source:* "Global Review of Smart City Governance Practices" 2022, UN-Habitat

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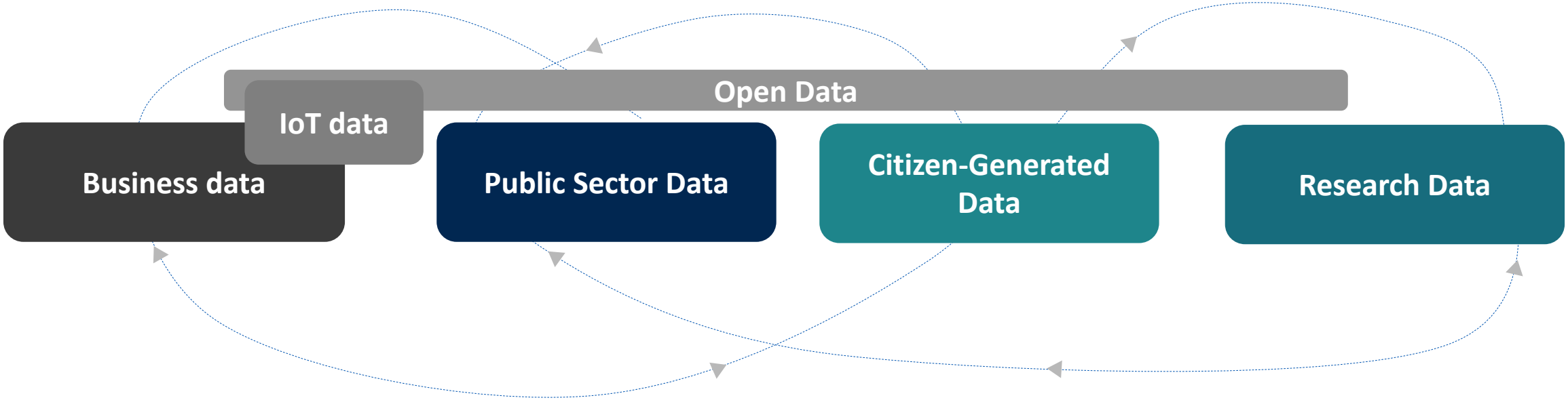
Data ecosystem or data silos?

Green Deal: **global nature** of both the problem and the solutions



- B2Consumer
- B2Government
- B2Business

- Cross-border integration
- Intra-sector collaboration

- Citizens as knowledge makers
- Agency over passively generated data

- FAIR principles
- Horizon Projects

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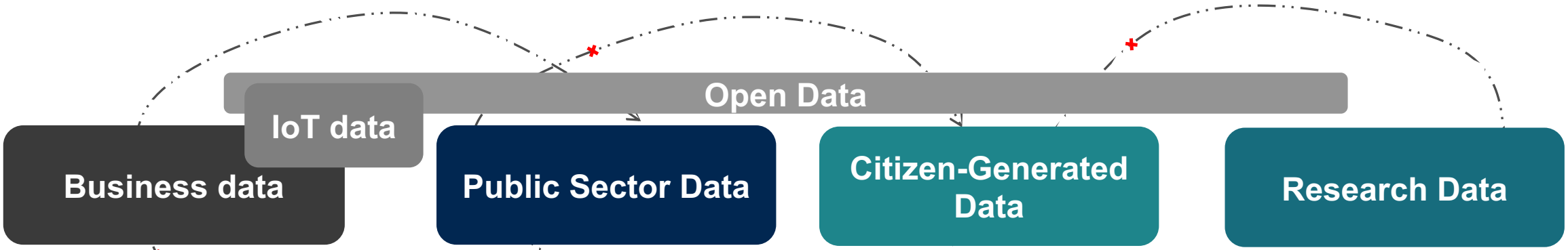
Data ecosystem or data silos?



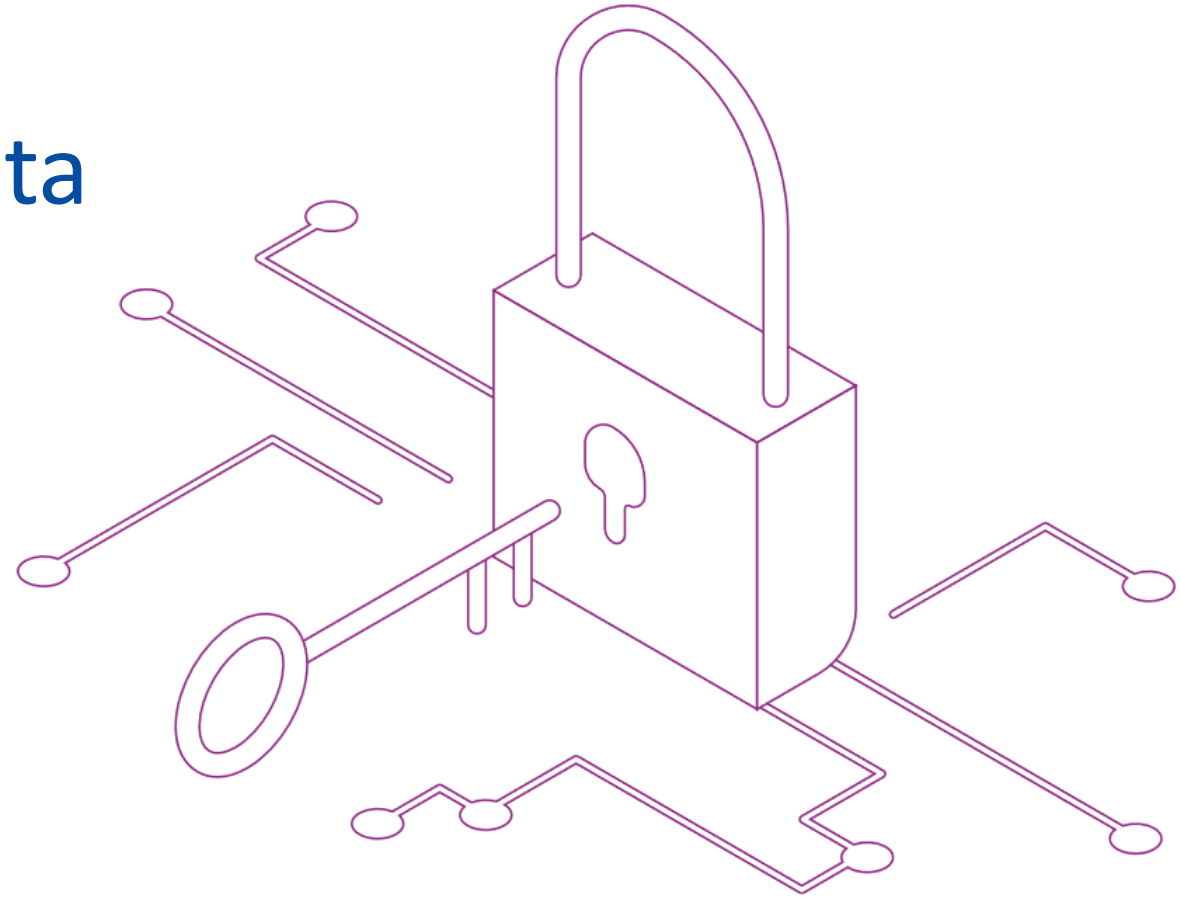
- Intellectual Property and Confidentiality?
- Power Dynamics?
- Mutual benefits?
- Corporate Responsibility?

- Public sector capacity?
- Internal data silos?
- Data sovereignty?
- Win-win partnerships?

- Citizen empowerment?
- CARE principles?
- Mutual trust?

- Data access for research?
- Data management plans?

European Strategy for Data



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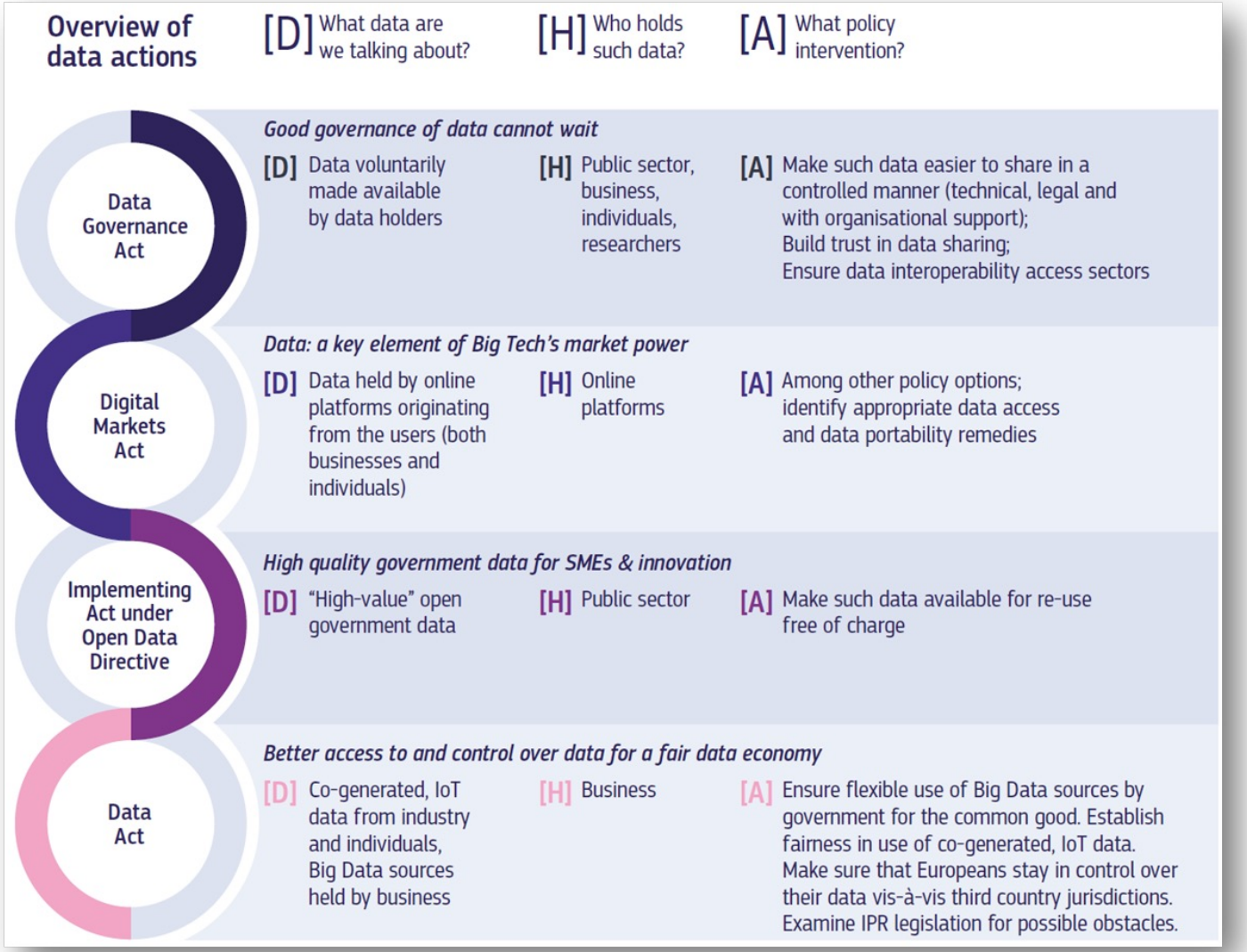
“Legal Toolkit”: Horizontal provisions



Source: adapted from European Commission:

1. **Data Governance Act**
   - Build trust in data sharing
   - Data interoperability
2. **Digital Markets Act**
   - Data portability.
   - Assure fair practices by ‘gatekeepers’
3. **Implementing Act under Open Data Directive**
   - Increase data availability and access
   - Reduce heterogeneity in licensing
4. **Data Act**
   - Increase data availability to foster innovation / Incentivize data generation.
   - Fair access to and use of data.
   - Data sovereignty

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1. Data Governance Act (DGA)

Cross-sectoral instrument that aims at **increasing trust in voluntary data sharing**

Leverage data sharing for **both economic and public interest purposes**

Provides regulations for:

1. Reuse of **Public Sector** Data
2. Data **Intermediation** Services
3. Data **Altruism** Organizations

1.1 Data intermediaries

Defined by the DGA as **“Data Intermediation Service Providers”**:

- Should be **neutral third parties** (structural separation)
- Establish **commercial relationships** for the purposes of data sharing
- Key role in the data economy**:**

EU Recognised
Data Intermediary

→ **Reducing transaction costs** (e.g., searching time/cost)

→ **Aggregating data** from several data holders/subjects

→ **Increasing data quality** (accuracy, accessibility, security, etc.)

→ **Data governance** for enhanced agency and control

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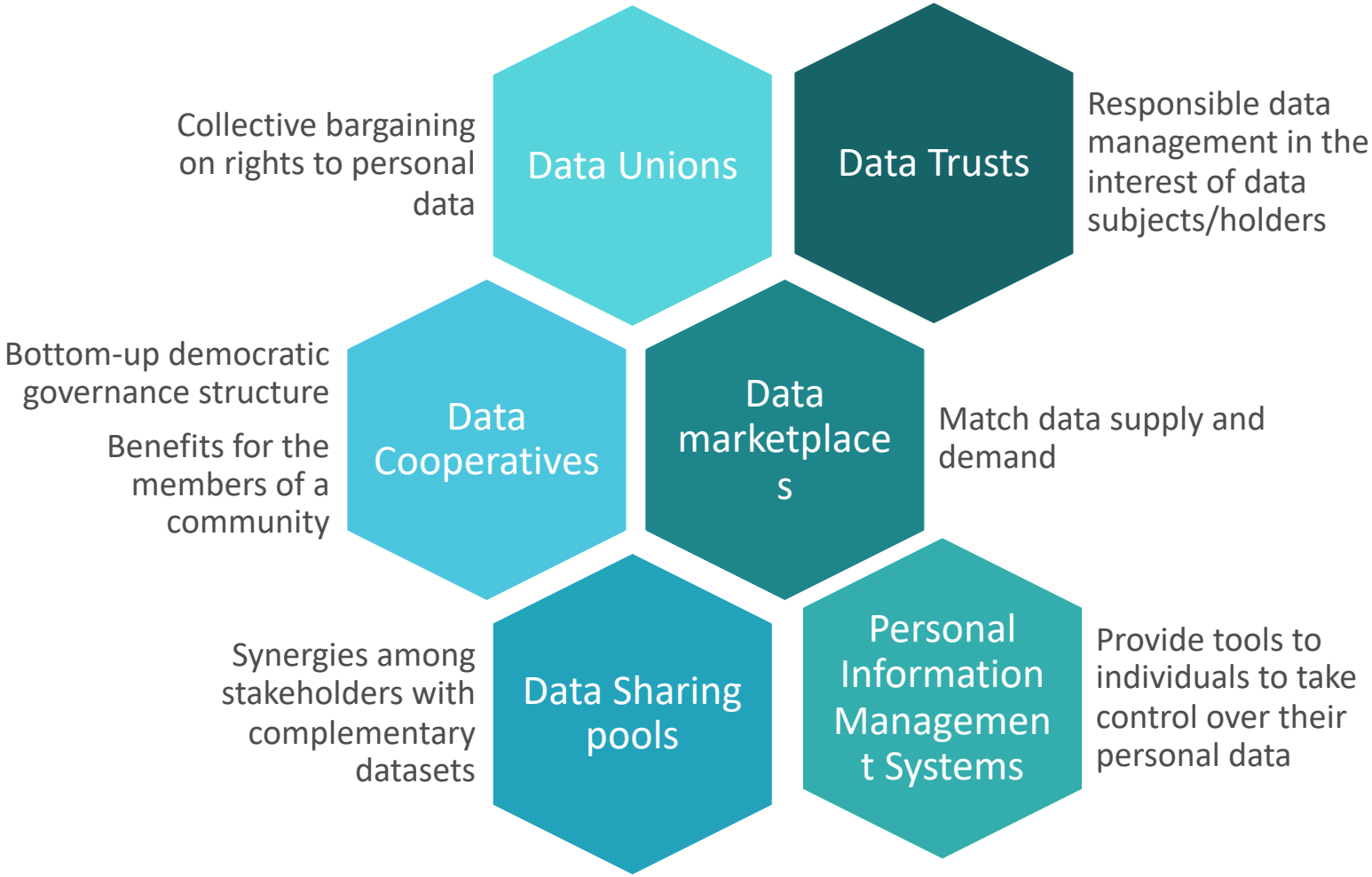
1.1 Landscape of Data intermediaries

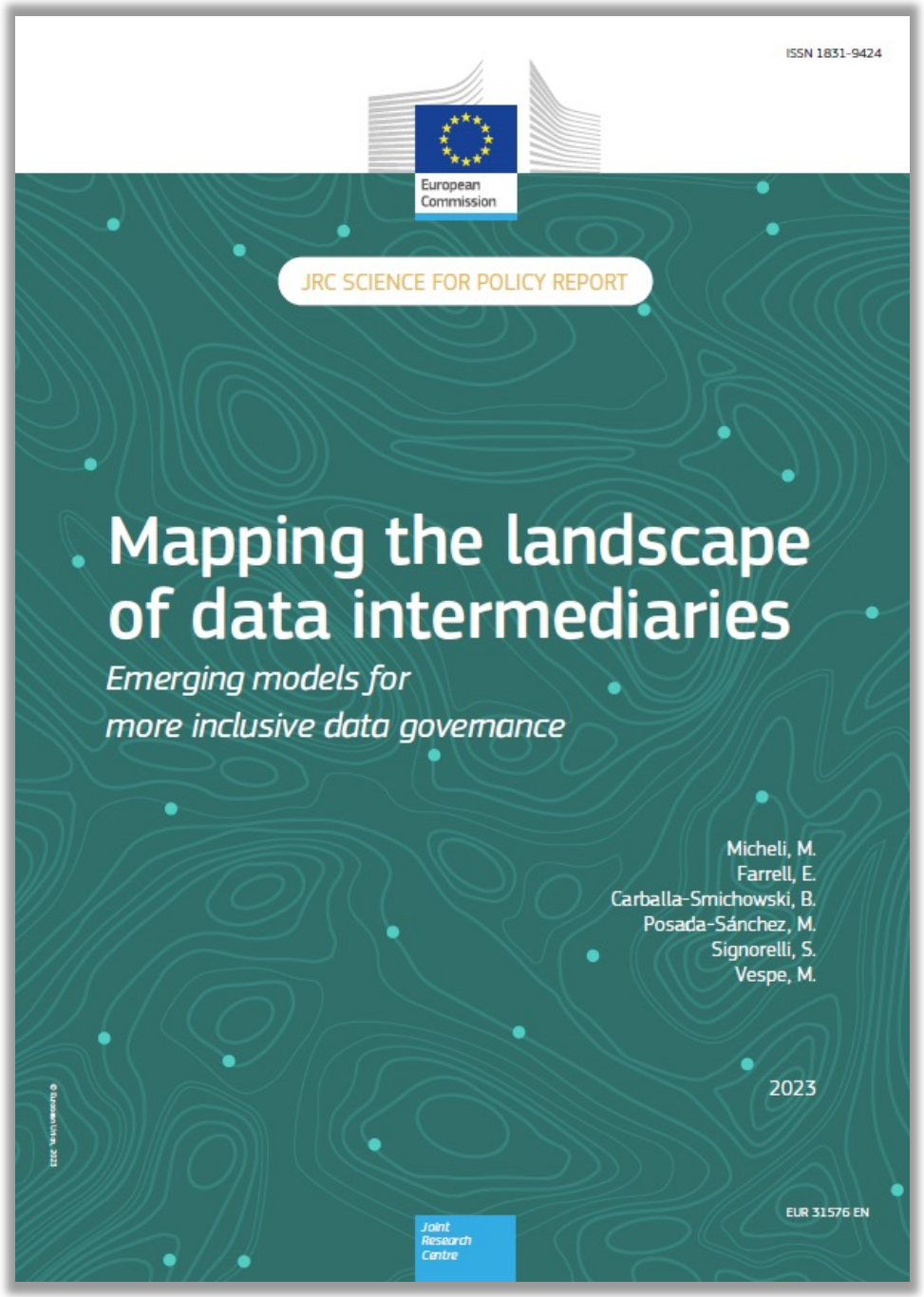


1.1 Potential role in the Green Deal Data Space

- **Alternative and fairer approach** to data governance and use
- Boost **economic growth & collective benefits**
- Enhance **Inclusive Data Governance**
- **Reduce power asymmetries** of the current data landscape

1.1 Potential obstacles

- Sustainable **business models** in the long-term
- Demand for data intermediation: lack of **awareness & knowledge**
- Lack of **technology literacy** among EU population
- **Technical and infrastructural needs** of data intermediaries



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1.2 Data Altruism for environmental purposes

The DGA defines data altruism as:

- ‘the **voluntary sharing of data on the basis of the consent** of data subjects to process personal data pertaining to them, or permissions of data holders to allow the use of their non-personal data **without seeking or receiving a reward** that goes beyond compensation related to the costs that they incur where they make their data available **for objectives of general interest** as provided for in national law (…)’ (Article 2(16) DGA).

1.2 Data Altruism for environmental purposes

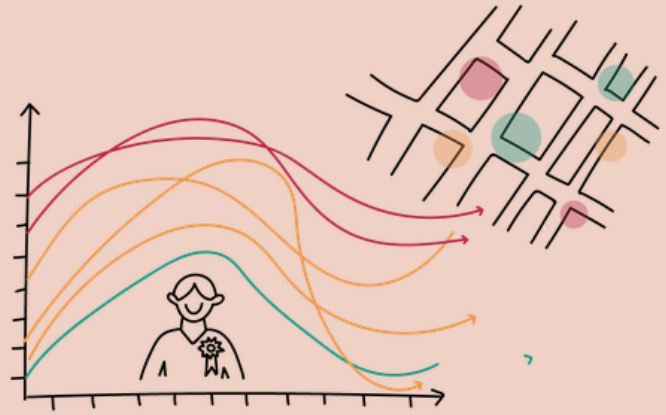
- **Recognised Data Altruism Organisations** (RDAOs) by the DGA
- **Trustworthy** foundation for leveraging data shared by both individuals and organisations under altruistic terms
- RDAOs process (and potentially share) data collected from:
  - **Data subjects** who grant consent
  - **Data holders** who grant permission to re-use data

1.2 Potential benefits in the GDDS
Example of a “Recognised Data Altruism Organisation”

“Data Association for Planetary Wellbeing” (DATALOG) https://datalog.es/

DATALOG te permite

Ahorrar en tus facturas, ser consciente de tus gastos, manteniendo siempre la privacidad y confidencialidad de tus datos.



Ver predicciones de tu consumo para tomar decisiones más responsables y sostenibles.

Conocer datos de consumo de Barcelona y estimar tendencias y patrones que afectan nuestra ciudad.

1.2 Potential obstacles

- **Low awareness** around Data Altruism models
- Need of the right **skills, technologies and resources** to do data collection, anonymization and analysis
- Need to identify **viable and social driven business models**

2. Data Act

The Data Act supplements the provisions of the Data Governance Act towards a single market for data.

- **Increased rights to access data** for individual users and consumers
- Strengthened negotiating position of **smaller companies**
- Regulations on **data portability** among data processing services
- **Interoperability requirements**

The **Data Act** (2023) clarifies who can create value from data

The **Data Governance Act** (2022) facilitates data sharing

2.1 Users' rights to access data

The Data Act provides individuals and businesses more control over the **data that are generated by "connected products and services"** (e.g., smart objects, machines, and devices).

- **Easier data access to the user:** Users will have **real-time** access to their data, **free of charge** in a comprehensive, structured, commonly used and machine readable format.
- **Access by design:** Manufacturers and providers should design their products and services **in a way that users can access**, in a timely manner, the data generated from the product or service.
- Users of connected products and services **can share those data with third parties of their choice**

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2.2 Data access rights to public sector bodies

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Data holders are obliged to make data available in situations of exceptional need:

- **Public emergencies:** e.g., "resulting from environmental degradation and natural disasters including those aggravated by climate change"

  →**Both company data and personal data.** If necessary, data must be pseudonymised in accordance with GDPR

- **Non-emergency situations:** when data are necessary for the fulfilment of a task in the public interest, such as preventing from a public emergency.

- **Upon justified request:** public authority should identify which data are unavailable and cannot be accessed by alternative means in a timely and effective manner.

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2.4 Potential role in the Green Deal Data Space

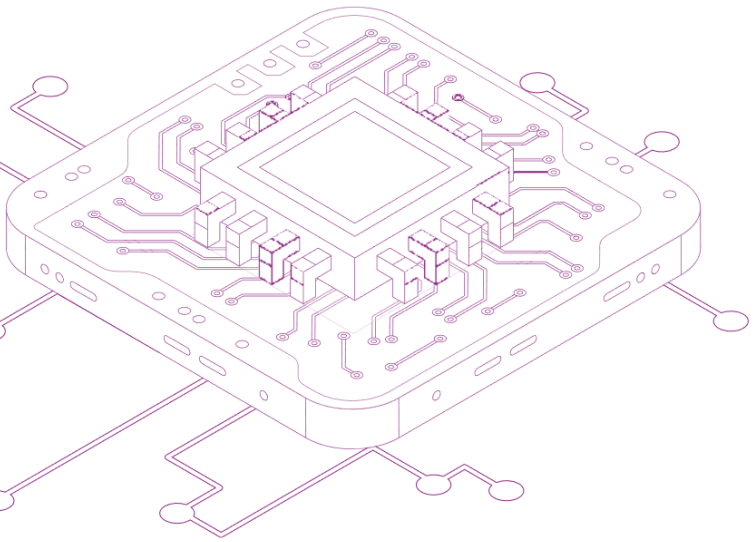
- Enhanced possibilities for **citizens to use their data**: increased awareness, “civic monitoring”, etc.
- Higher **access of data from companies and start-ups**: efficiency gains, environmental monitoring, ESG funding options, etc.
- **Higher capacity of public sector bodies** to prevent, manage, and respond to climate change and other events.

2.3 Potential obstacles

- **Low levels of technology literacy** among users and businesses (smaller and medium).
- Voluntary data sharing is **dependent on the initiative of users.**
- "**Exceptional need**" definition, limits on re-use, and public sector capacity.

3. Implementing Act: High-Value Datasets

Public sector open data contribution:



- **Reuse of public sector information** of particular importance for society, the environment and the economy (cross-border).
- **Geospatial, earth observation and environment, meteorological**, statistics, companies and company ownership, and mobility datasets.
- Public bodies and companies providing services of general interest are required to make such **data available free of charge, in machine-readable formats** through suitable programming interfaces and, where appropriate, as a mass download free of charge.

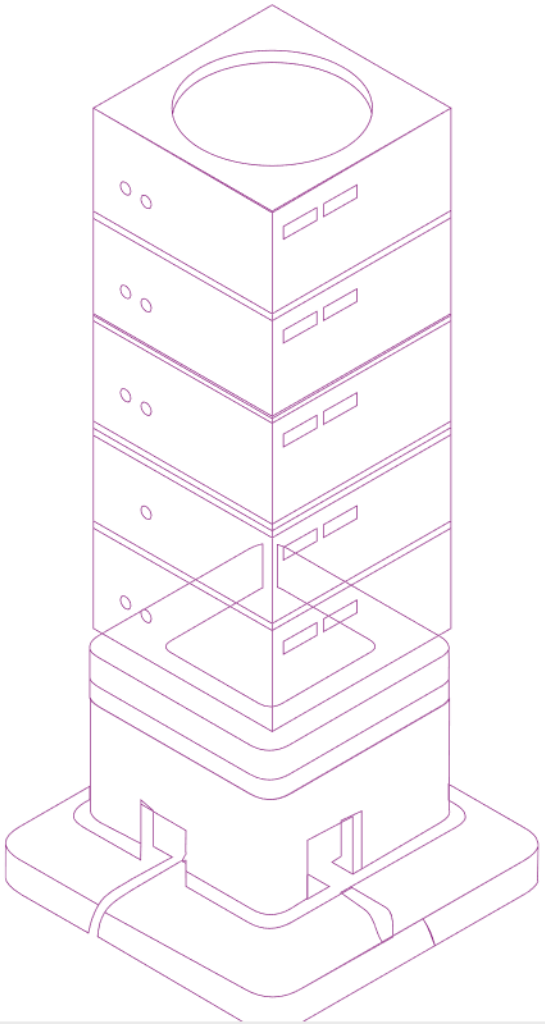
1. GEOSPATIAL

1.1. Datasets in scope

The geospatial thematic category includes datasets within the scope of the INSPIRE data themes Administrative units, Geographical names, Addresses, Buildings and Cadastral parcels as defined in Annex I and Annex III to Directive 2007/2/EC of the European Parliament and of the Council [1]. In addition, it includes Reference parcels and Agricultural parcels as defined in Regulation (EU) No 1306/2013 of the European Parliament and of the Council [2] and of Regulation (EU) No 1307/2013 of the European Parliament and of the Council [3] and the related delegated and implementing acts [4]. Their granularity, geographical coverage and the key attributes are listed in the table below. If datasets are not available at the scale indicated in the table below, but are available at higher spatial resolution(s) [5], they shall be provided at the available spatial resolution.

Datasets	Administrative units	Geographical names	Addresses	Buildings	Cadastral parcels	Reference parcels	Agricultural parcels
Granularity	All levels of generalisation available with a granularity up to the scale of 1:5 000. From municipalities to countries; maritime units.	N/A	N/A	All levels of generalisation available with a granularity up to the scale of 1:5 000.	All levels of generalisation available with a granularity up to the scale of 1:5 000.	A level of accuracy that is at least equivalent to that of cartography at a scale of 1:10 000 and, as from 2016, at a scale of 1:5 000, as referred to in Article 70(1) of Regulation (EU) 1306/2013.	A level of accuracy that is at least equivalent to that of cartography at a scale of 1:10 000 and, as from 2016, at a scale of 1:5 000, as referred to in Article 70(1) of Regulation (EU) 1306/2013.
Geographical coverage	Single or multiple datasets that shall cover the entire Member State when combined.						
Key attributes	Unique identifier; Unit type (administrative or maritime unit); Geometry [6]; Boundary status; National identification code; Identification code of the upper administrative level; Official name; Country code; Name in multiple languages (only for countries with more than one official language) including a language with Latin characters, when feasible.	Unique identifier; Geometry; Name in multiple languages (only for countries with more than one official language) including a language with Latin characters, when feasible; Type.	Unique identifier; Geometry; Address locator (e.g. house number); Thoroughfare (street); name; Administrative units (e.g. municipality, province, country; Postal descriptor (e.g. post code); Date of last update.	Unique identifier; Geometry (footprint of the building); Number of floors; Type of use.	Unique identifier; Geometry (boundary of cadastral parcels or basic property units [7]); Parcel or basic property unit code; A reference to the administrative unit of lowest administrative level to which this parcel or basic property unit belongs.	Unique identifier; Geometry (boundary and area); Land cover [8]; organic [9]; Stable landscape elements [10] ("EFA-layer"); areas with natural/specific constraints.	Unique identifier; Geometry (boundary and area of each agricultural parcel); Land uses (crops or crop groups); Organic; Individual landscape element; Permanent grassland.

Is that all?



- **Emerging opportunities** can be leveraged from the various EU horizontal provisions, towards a fairer and more vibrant data economy.
- To unlock their full potential it is needed to ensure the **active participation of all sectors of society** (citizens, grassroots, public authorities, academia, businesses, etc.)
- Further exploration of the **business models, resources, incentives and motivations** needed to ensure common economic, social, and environmental benefits.

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Thank you !

sara.thabit-gonzalez@ec.europa.eu