



(Common European) Data Spaces

and Official Statistics

Third Data Strategy Sprint Webinar

Supercharging your Data Strategy through Collaboration United Nations Network of Economic Statisticians

Barteld Braaksma (with contributions from Eko Rahmadian and Anastasija Spajic) Utrecht, 8 October 2024

Contents

- Introduction of (Common European) Data Spaces
- **Examples**
 - ✓ EU Green Deal Dataspace
 - ✓ EU Health Data Space (Anastasija Spajic)
 - ✓ Dutch Data Space for the Physical Environment
 - ✓ One Data Indonesia
- Governance framework (Eko Rahmadian)
- Take-away messages

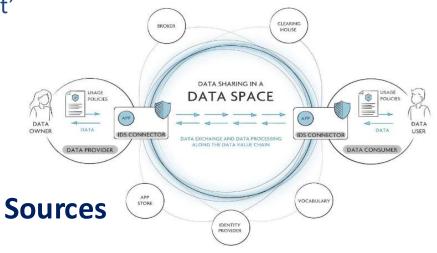




What is a Data Space?

Interoperability
Agreements
'Data Market'

Governance





Users

© International Data Spaces

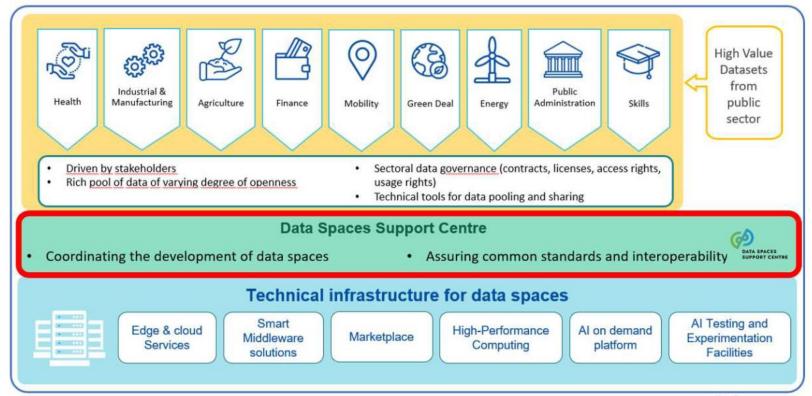
Infrastructure





Four-corner principle of data space concept (International Data Spaces)

EU: Domain-Centered Approach (including laws)







CBS Approach

- We actively explore how we can
 contribute to and benefit from Data Spaces
- Not everything (too much...) -> choices
- Learning by doing
- Collaboration with partners and stakeholders
- Connection between national and international levels
- Approved by CBS Board of Directors





The European Green Deal Data Space

HOME PRACTICE EXAMPLES LEGAL FRAMEWORK TECHNOLO

Home ▶ News ▶ Digital Europe Programme explained: The Green Deal Data Spa

Digital Europe Programme є Deal Data Space

As part of the Digital Europe Programme, the European Commissior Spaces. These data spaces will each have a specific sectoral focus. In a each of those sectoral data spaces. In this article, we dive into the Gree

In general, the data spaces will connect currently fragmented and a from the private and public sectors. They will offer an interope processing, and a set of rules of legislative, administrative, and contra access to and processing of the data.

The Green Deal Data Space specifically, will link with other EU programmes such as Horizon Europe, Galileo, and Copernicus to provide large amounts of real-time data to:

- Provide relevant high-quality data from the activities related to high-value datasets; and
- Interlink to data from other sectoral data spaces where relevant; and
- Contribute to the Destination Earth initiative, a very high precision digital model of the Earth to enable visualising, monitoring and forecasting natural and human activity on the planet in support of sustainable development.

Ultimately, this data space is to develop into a user-driven pan-European Green Deal data space by connecting EU programmes, national, regional and local data ecosystems at the EU level. To achieve this, the Commission established a number of deliverables:

- A sustainable data governance scheme and blueprint that connects national, regional and local data ecosystems and enables public and private stakeholders to access relevant data and to develop crosssector data services;
- 2. A priority list of datasets relevant to the European Green Deal Strategy;
- 3. A roadmap towards the common European Green Deal Data Space.

This roadmap should ensure that relevant users, such as climate and environmental scientists, are able to access and make use of the opportunities offered by Green Deal Data Space.

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~ .		







Relations with many areas



#DigitalEU #DestinE #DigitalDecade #DigitalEUProgramme #EUGreenDeal #CopernicusEU

March 2022

Destination Earth (DestinE) will provide unique digital modelling capabilities of the Earth to enhance the EU's ability to monitor and model environmental changes, predict extreme events, and adapt EU actions and policies to climate-related challenges.

Destine builds on EU investment in high-performance computing, massive space and socio-economic data sources at our disposal, and on the European excellence in data and AI technologies.

Earth Observation Data



Climate change costs

Globally, 2021 was the fifth warmest year on record. Last summer severe floods, heatwaves and other climate-related events claimed the lives of thousands of people across Europe. Climate change has caused at least £1.2.5 billion of economic damage in Europe between 2010-2019.



A Lead for Europe

DestinE will provide evidence-based support for EU and Member State policy makers at all levels on EU environmental adaptation strategies and mitigation actions and policies, thus contributing to the digital and green transformation of Europe.

DestinE Actors



The **Commission** leads in coordination with Member States and Associated Countries European Space Agency (ESA)

European Centre for Medium-Range Weather Forecasts (ECMWF)
European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT)

Key components of DestinE system

Core service platform

The core platform will provide decision-making tools, based on an open, flexible, and secure cloud-based computing system. It will bring together data, cloud, and high-performance computing and it will integrate access to digital twins. It will be operated by the European Space Agency (ESA).





Privacy Enhancing Techniques





Requests for action, funded by EU





Digital Europe Programme (DIGITAL)

Call for proposals

Cloud, data and artificial intelligence (DIGITAL-2024-CLOUD-AI-06)

> Version 1.0 15 February 2024

DIGITAL-2024-CLOUD-AI-06-GREENDEAL— European Green Deal Data Space

Objectives

The objective of this action is to deploy an operational Green Deal Data Space (GDDS). The Action is expected to take into account the latest developments in the data strategy and green deal landscape including the results of the Coordination and Support Action on "Preparatory actions for the Green Deal data space"3, funded under the WP 2021/22. It should also take into account the results from the Horizon Europe projects funded under HORIZON-CL6-2021-GOVERNANCE-01-17: Common European

Budget for GDDS in this call: 16 million euro

CBS participates in SAGE consortium (70 partners) on Circular Textile use case (led by TEXroad)

Overall EU budget for CEDS: 2 billion euro (!)

The inclusion in the proposal(s) of concrete use cases that benefit citizens and businesses and especially SMEs will be **considered an asset** in the evaluation process. Applicants are encouraged to consider the following **examples and guiding directions**:

- Collecting data for calculating certain forest indicators is essential in order to monitor pressures and hazards encountered by forest eco-systems. If The GDDS could enable access to Earth Observation and National Forest Inventories (NFI) data for calibrating geospatial machine learning models that underpin development and delivery of forest indicators. The GDDS should deploy confidentiality preserving technologies to ensure confidentiality for the plot locations of the NFI data. Proposals could also explore how access to Earth Observation and NFI data can be the basis for new downstream services benefitting the broader forest economy. Similar use cases that seek to allow access to certain environmental data-sets considered confidential in order to train machine learning models are also encouraged.
- In a circular economy for textiles, there is a need to close material and data loops along the value chain. The GDDS could contribute by designing and deploying a Producer Responsibility Organization Information System (PRO-1S)⁹ as a complement and interface with the Digital Product Passports (DPPs). For instance, the PRO-1S could close data loops via collecting and feeding DPPs of newly manufactured textiles with information on the recovered/ recycled fibres content. Involving actors from the textile, waste and digital sectors for such a use case would be important.
- Sustainability reporting and due diligence along supply chains and operations
 helps private operators assess and disclose their environmental and sustainability
 performance while complying with legal obligations¹⁰, which can become a
 competitive advantage in the sustainability race. The GDDS could support private
 operators in their journey to collect, verify and share "data-points" across their
 value chains, to calculate scope 3 GHG emissions, deforestation caused by



The European Health Data Space



Home > Press > Press releases

Ocuncil of the EU | Press release | 15 March 2024 01:10

European Health Data Space: Council and Parliament strike deal

This press release was updated on 22 March 2024 to include the link to the compromise text

The Council of the EU and the European Parliament have reached a provisional agreement on a new law making it easier to **exchange and access health data** at EU level. The agreement will now need to be endorsed by both the Council and the Parliament.

The proposed regulation for a **European Health Data Space (EHDS)** aims to improve individuals' access to and control over their personal electronic health data, while

Provisional agreement on a new law

After months of hard work and dedi have a deal that will strongly and scientific research i agreed on today will a

health data whereve providing scientific reasons of public interest data that will greatly be health policies.

Health Data Access Body

 Frank Vandenbroucke, Belgian Deputy Prime-Minister and Health

Easier access to health data for individuals

Under the new rules, individuals will have faster and easier achealth data, regardless of whether they are in their home cour member state. They will also have greater control over how the countries will be required to set up a digital health authority to implement the new provisions.

Greater research potential









Granting access to health data for secondary purposes – 'Good governance' assessment of legal schemes for Dutch Health Data Access Body

MASTER THESIS PROJECT WITHIN RESEARCH INTERNSHIP AT CBS

ANASTASIJA SPAJIC

A.SPAJIC @STUDENT.RUG.NL

28.08.2023

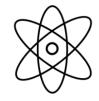
Confrontation of Legal Schemes (OS and CEDS) Art.9 **GDPR** Art.5 Art. 89 European Code of Practice European Data Statistical Governance Act System Regulation (ESS) on access to confidential data for **CBS** Chapter V European Health **CBS Act** Data Space Policy Rule

Spajic, 2023, p.49

criteria for

CBS as part

of Dutch HDAB (for

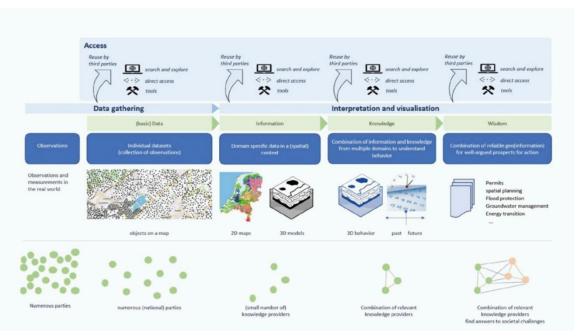


Conclusions

- •Both legal schemes fulfill good governance. Decision on the most apt framework depends on interests of decision-makers and weighing the challenges.
- Lack of adequate, pre-established EU principles that would guide data governance frameworks
- •Complexity of the interplay of legal frameworks:
 - EU level ambiguity between EHDS and DGA.
 - New legal initatives implemented without resolving issues with existing frameworks like the GDPR.
 - Interplay between ESS and DGA underexplored.
 - Extensive research conducted on the GDPR given its revolutionary nature but little attention has been given to the ESS and pre-existing frameworks that also govern access to data for research purposes.

The Dutch Data Space for the Physical Environment



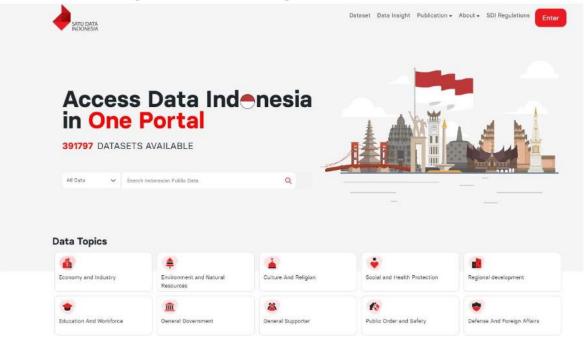


- Document available <u>here</u>
- Part of Dutch <u>Intergovernmental Data Strategy</u>
- Federated Data System





Not only in Europe ©



A data governance policy to produce data that is accurate, up-to-date, integrated and accountable, as well as accessible and easy to share between government agencies in national level and regional agencies in subnational levels, through compliance of the principles: standard data, metadata, data interoperability, and using reference code and master data.







Many aspects to take into consideration...



Stakeholder Engagement

Comprehending the needs and concerns of both internal and external stakeholders.



Interoperability and data sharing

Enabling seamless data exchange and collaboration within CEDS and across other data spaces.



Sector and domainspesific applications

Customize initiatives and policies to tackle the distinctive challenges and prospects within each realm.



Organizational Capabilities

Building the capacity of stakeholders (particularly internal stakeholders and close partners) to effectively participate in CEDS.



Governance

Establishing a robust governance and regulatory framework is essential for effectively overseeing the operations of CEDS.



Collaboration

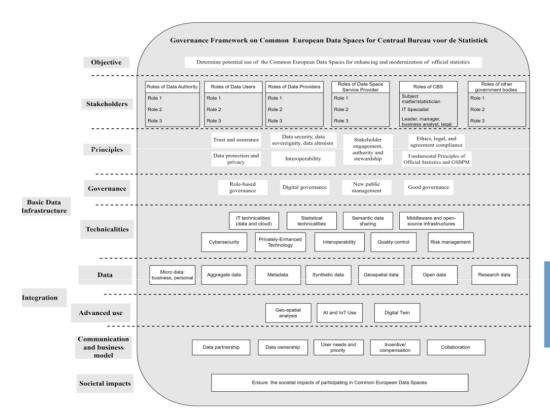
Collaboration with national and international partners and organizations is essential to align policies, share best practices, and address common challenges

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How to make choices?



PROPOSED GOVERNANCE FRAMEWORK FOR CBS

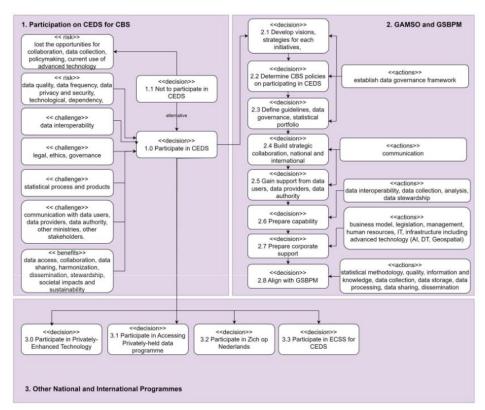
Set of policies, guidelines, rules, actions on data governance; to provide comprehensive overview, ensure the benefits, and mitigate the risks.

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Questions and decision trees



How to implement?

DECISION RELATIONSHIP VIEWPOINT

Describe the relationship of each decisions on participating on CEDS for CBS with GAMSO, GSBPM, and other programmes.

It helps CBS to track decisions for transparency, accountability and clarity.

© Eko Rahmadian, March 2024





Take-aways

- ❖ A lot of activity, often domain-specific
- Many stakeholders involved -> Data is a team sport
- What's in it for Official Statistics?
- (Do we need a statistical data space?)
- Important to join the discussions!
- Outside our comfort zone?
- Data spaces lead to broader strategic questions





Facts that matter