

# BeGeo 2024

LA CONNEXION A L'ETAT PUR  
DE ULTIEME CONNECTIE



The Green Deal Data Space Foundation



Raymond Oonk, SURF  
GREAT Project

[begeo.be](https://begeo.be)

Sponsored by





# Raymond Oonk



**SURF** the collaborative IT Cooperative for research and education in the Netherlands with more than 100 members

- Sentinel 5P / Tropomi
- PACE / SPEXone
- Copernicus EOSC Analytics Engine (C-SCALE <https://c-scale.eu/> )
- Green Deal Community of Practice (GREAT <https://www.greatproject.eu/> )



# Data for the Green Deal



Single Market for data  
[COM/2020/66](#)



Climate and environmental-related  
challenges [COM/2019/640](#)



## Green Deal Data Space

A federation of data ecosystems enabling policy makers, businesses, researchers and citizens, from Europe and around the world, to jointly tackle **climate change**.

JRC

“There is no single technical or organisational approach that can be applied for the establishment of common European data spaces”

“Therefore, a community-based approach through co-creation and co-design of data spaces that considers the domain-specific context is the only feasible way forward that would ensure buy-in by a broad spectrum of stakeholders.”



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COM/2020/66



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## GREAT Green Deal Data Space Foundation & its Community of Practice

Duration: 18 Months

Potential starting date: September 2022 – April 2024

Consortium: 14 Partners

### GREAT is brought to you by:



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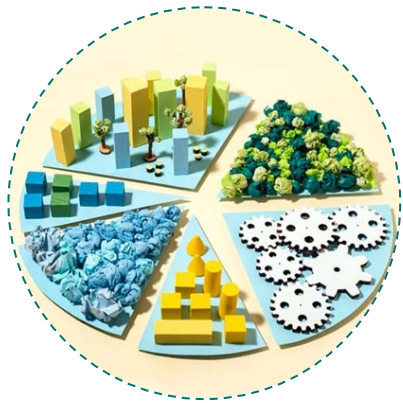
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# Overall objectives



**Community  
of Practice**



**High Priority  
Dataset**



**Technical  
Blueprint**



**Governance & Business  
Models**

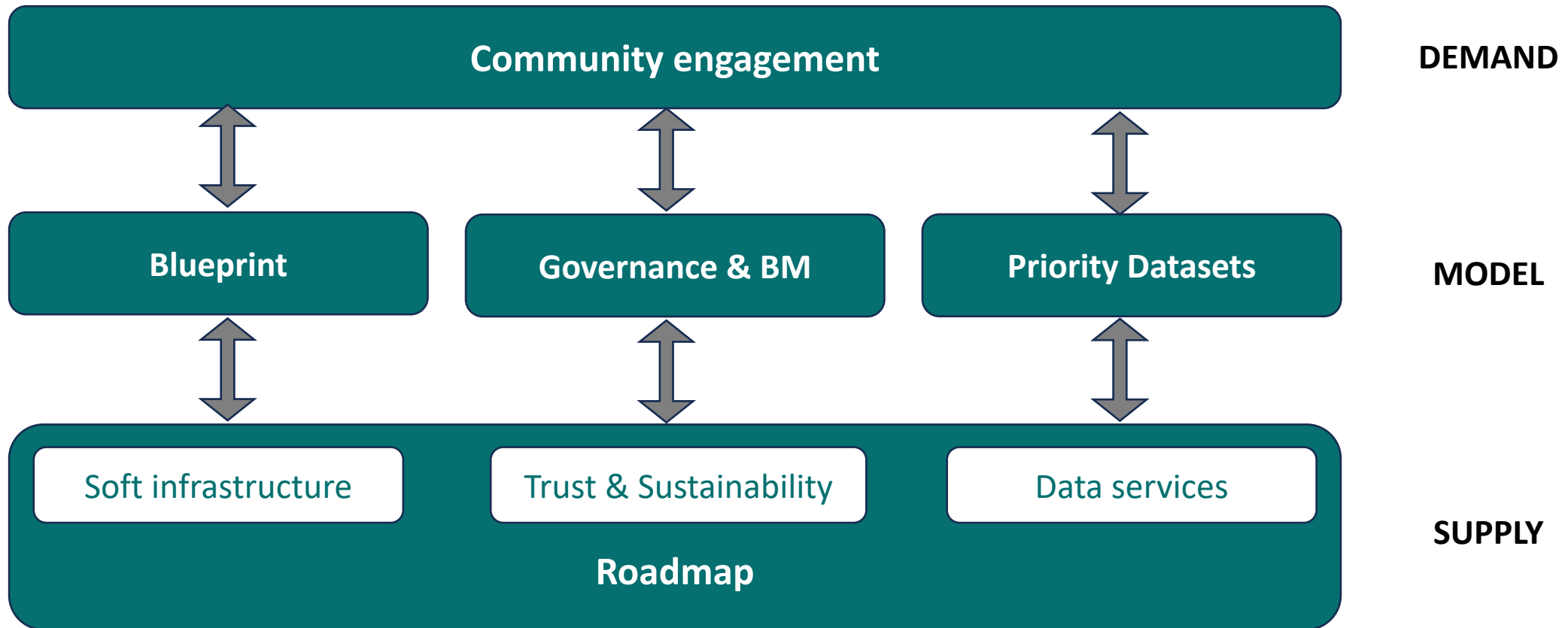


**Roadmap**





# Green Deal Data Space approach



# Strategic Green Deal Actions

**1**

**2030  
Biodiversity  
Strategy**



GREAT

**2**

**Zero  
Pollution  
Action  
Plan**



GREAT

**3**

**Climate  
Change  
Adaptation  
Strategy**



GREAT





# Green Deal Data Space principles



The Green Deal Data Space is a collaborative and inclusive ecosystem supported by shared data infrastructures and governance frameworks. It offers an **open environment** for participation, ensuring secure and privacy-preserving data handling. With clear and transparent **access rules** and a **robust governance** mechanism, it upholds EU regulations, prioritizes fair access, and encourages data sharing for the benefit of sustainable development and innovation.

# GREAT ( Community of Practice )

16

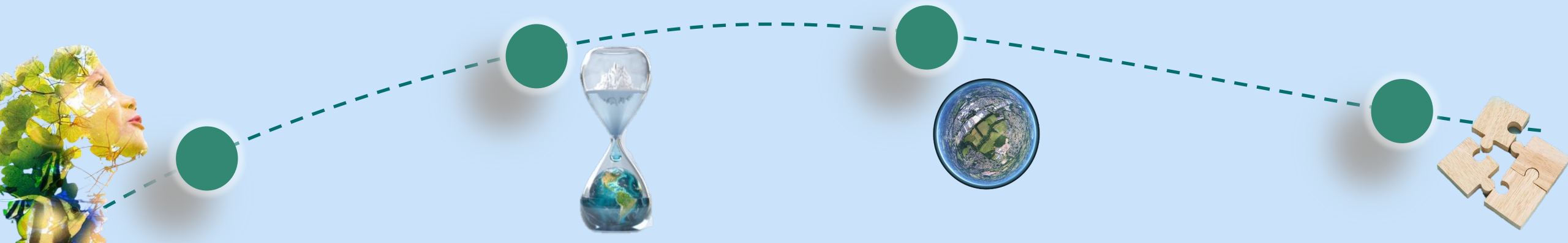
Reference Use Cases & Initiatives

4

Stakeholder Fora

600+

Stakeholders involved



# GREAT ( Community of Practice )

Public, Private and Academic sectors



BeGeo 2024  
begeo.be

19/03/2024 - Brussels Expo



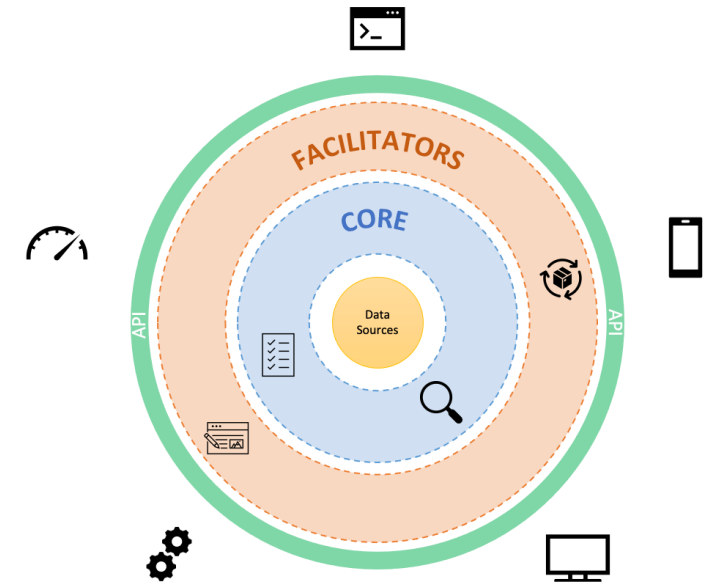




# Green Deal Data Space – Blueprint

## THE GREEN DEAL DATA SPACE

- ❖ will interconnect **currently fragmented and dispersed data from various ecosystems**, both for/from the private and public sectors.
- ❖ will offer an **interoperable, trusted IT environment**, for data processing
- ❖ will provide a **set of rules** of legislative, administrative and contractual nature that determine the rights of access to and processing of the data.



- Functional description of core logical components
- Functional description of facilitator logical components

# Green Deal Data Space & Governance

A useful definition from Data Spaces Support Centre (DSSC):

“A distributed system defined by a **governance framework** that enables secure and trustworthy **data transactions** between **participants** while supporting trust and **data sovereignty**. A data space is implemented by one or more **infrastructures** and enables one or more **use cases**.”

## Governance framework formulated along 2 dimensions:

- 4 layers of governance *Legal & Regulatory; Digital platforms; Data Space; Data*
  - 4 lifecycle stages of governance *Formation; Operation; Monitoring; and Sustainability*
- > **multi-organizational alliance organised around a central entity**



# Green Deal Data Space – Priority Data

Knowledge collection from:

- Reference Use Cases and Initiatives
  - Interviews with specific data users and providers
  - Collection of data requirements, products and gaps
  - Data Sets Inventory: list of specific data sets required by the RUCIs
- GREAT consortium and engaged stakeholders
  - Engagement with stakeholders from different domains related to the EGD
  - Data Services inventory: list of data service/portals/catalogues



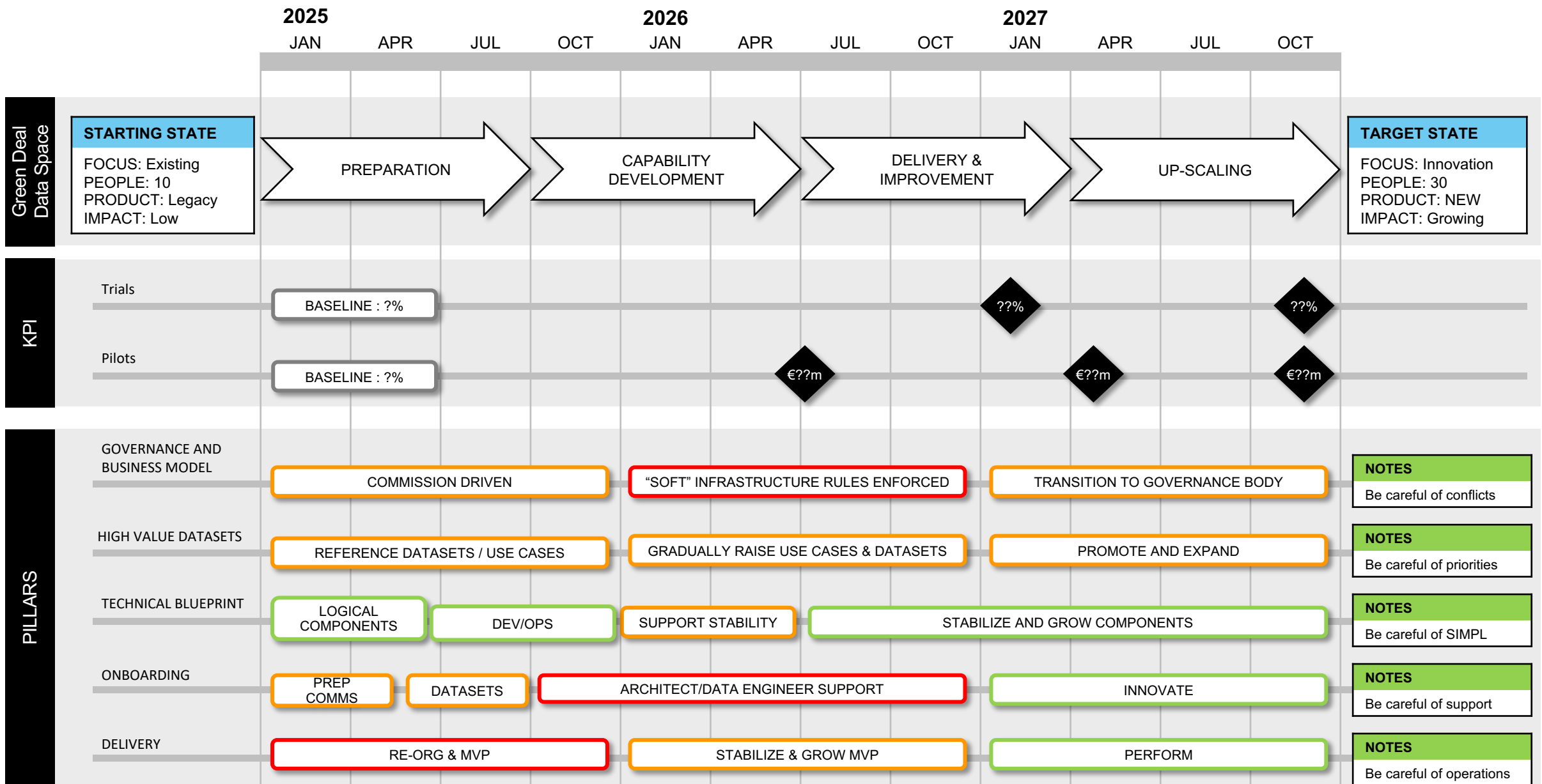


# GDDS STRATEGIC ROADMAP

TBC LOW RISK MED RISK HIGH RISK

VERSION 1

PHASED IMPLEMENTATION



# Contact and follow us!



[www.greatproject.eu](http://www.greatproject.eu)



[@GreenDealDS](https://twitter.com/GreenDealDS)



[@Green Deal Data Space](https://www.linkedin.com/company/green-deal-data-space)



[@greendealdataspace](https://www.youtube.com/channel/UC...)



Public  
Deliverables

Phase – 1 available

Phase – 2 arrives in  
April - May

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Funded by  
the European Union

# Green Deal Data Space

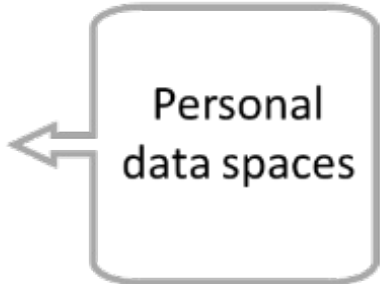


Define the **technical blueprint of the GDDS reference architecture** explaining how existing (and planned) data ecosystems (at national, regional, and local level) can be connected to provide an interoperable, secure data sharing environment which allows seamless discovery and use of available data



- Driven by stakeholders
- Rich pool of data of varying degree of openness

- Sectoral data governance (contracts, licenses, access rights, usage rights)
- Technical tools for data pooling and sharing



## Technical infrastructure for data spaces



Edge Infrastructure & Services

Cloud Infrastructure & Services

High-Performance Computing

AI on demand platform

AI Testing and Experimentation Facilities



# Reference Use Cases & Initiatives

## Phase 1

**Water Task Force**

Global hydrology modeling

Seasonal forecasting of water resources

Zero pollution - water  
Climate change adaptation - geohazards

**Marine Task Force**

EMODnet

Biodiversity  
Zero pollution  
Climate change adaptation

**GOS4M**

Zero pollution - air

**EPOS**

Zero pollution  
Climate change adaptation

**BioGIS 360**

Biodiversity  
Climate change adaptation

## #Biodiversity

**AI4TREES**

Biodiversity  
Climate change adaptation

**Natural Capital**

Biodiversity  
Climate change adaptation

**Biodiversity in Wadden Sea**

Biodiversity, Zero pollution  
Climate change adaptation

**#ZeroPollution**

**UNLOCK**

Biodiversity, Zero pollution  
Climate change adaptation

**SDGs-EYES: GHG emission from forest fires**

Zero Pollution

## Phase 2

### #ClimateChangeAdaptation

SHARED PUBLIC ADMINISTRATION FOR CLIMATE CHANGE AT THESSALONIKI METROPOLITAN AREA

Climate change adaptation  
Zero pollution

**HARMONIA**

Climate change adaptation

**USAGE**

Climate change adaptation

**#CircularEconomy**

**Forestry Data Space**

Biodiversity  
Circular economy

**Starling**

Biodiversity, Circular economy  
Climate change adaptation

**Deforestation & wildlife**

Biodiversity, Circular economy  
Climate change adaptation



Blueprint

# Learn more about the technical blueprint



Initial Blueprint of  
the GDDS Reference  
Architecture



Governance  
& Business Models

# Learn more about the governance scheme



Phase 1 Governance  
Requirements and  
Endorsed Governance  
Scheme



High Priority  
Dataset

# Learn more about the High Priority Datasets



EGD Prioritised Data Sets  
and Gaps (Initial  
Inventory plus Phase 1  
Reference Use Cases)





Roadmap

# Learn more about the implementation roadmap



Green Deal Data Space  
Implementation Roadmap