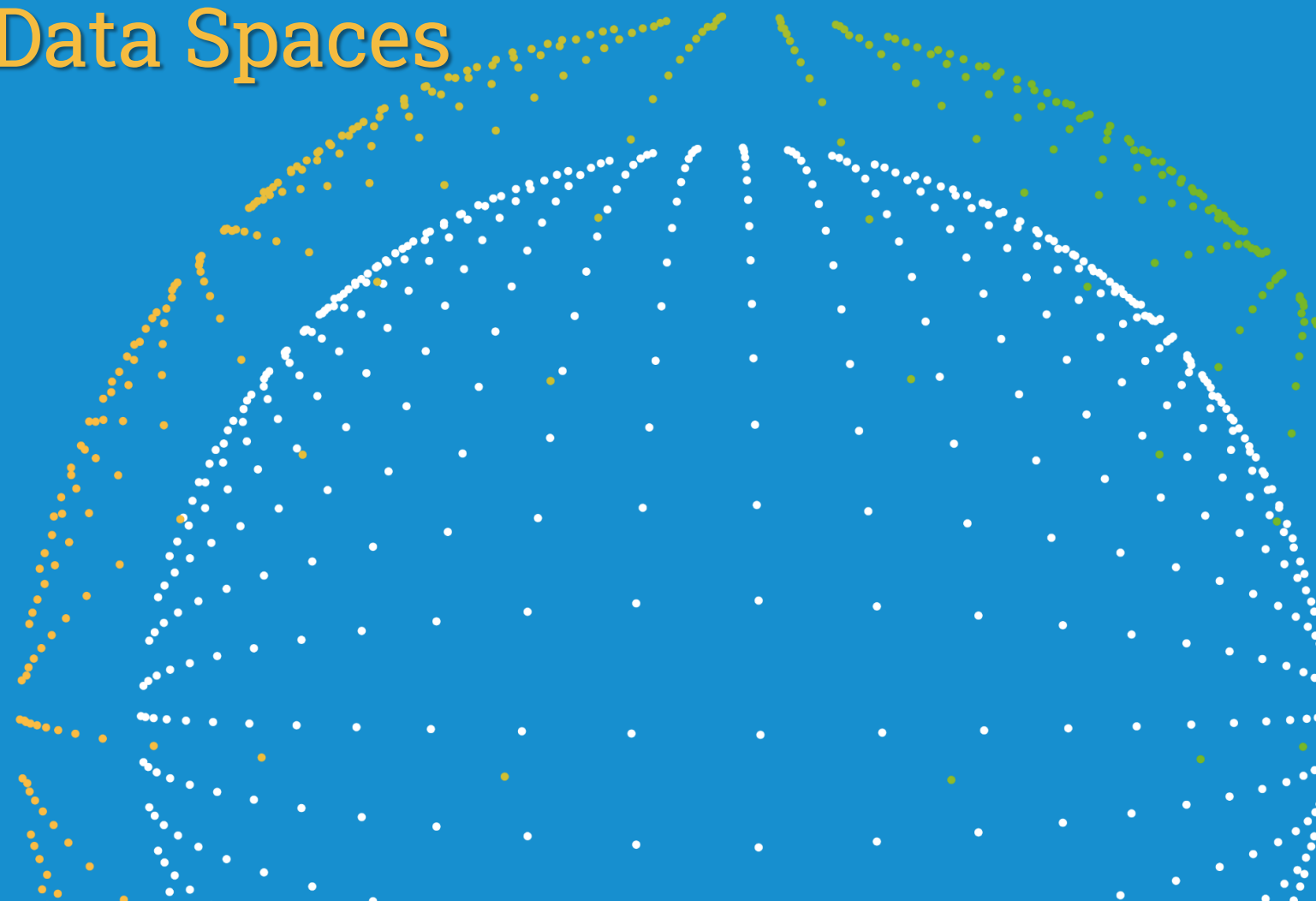


# Data Spaces Symposium

EC Perspectives on the  
Common European Data Spaces  
for the Green Deal,  
Agriculture and  
Energy

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European Commission  
CNECT/ENV  
Johan Bodenkamp  
Sotirios Kanellopoulos  
Doris Marquardt  
Svetoslav Mihaylov



# The bigger vision: a European Single Market for Data



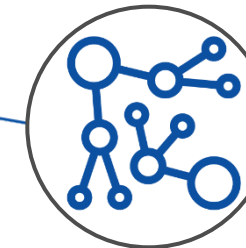
## European Data Strategy, February 2020

- Create conditions to make data sharing and use easier
- Genuine internal data market built on EU values and rules
- Facilitate cross-border and cross-sectoral data sharing
- Fully reap the benefits of data



## A cross-sectoral legislative framework:

- Data Governance Act – applicable since 24 Sep 2023
- Implementing Act on High-value datasets (Open Data Directive) – applicable from 9 June 2024
- Data Act – applicable from 12 September 2025



## Common European Data Spaces:

- Roll out of common European data spaces (federated data ecosystems based on shared policies and rules) in 14 strategic economic sectors and domains of public interest

# The bigger vision: a European Single Market for Data

European data strategy, Feb 2020

## Horizontal Data Legislation

Data Act

Data Governance Act

Open Data Directive

Free Flow of Data Regulation

GDPR

...

## Common European Data Spaces



Health



Manufact.



Agriculture



Finance



Mobility



Green Deal



Energy



Public Admin.



Skills



R&I (EOSC)



Tourism



Cultural heritage



Media



Language

High Value Datasets from public sector

## European Data Innovation Board

- Prioritisation of cross-sectoral interoperability standards
- Guidelines for common European data spaces

## Data Spaces Support Centre

- Development of blueprint, glossary, etc.
- Support of data space projects

## Technical Infrastructure

Standards / Interoperability

Digital identity (eIDAS)

Smart Middleware Platform (Simpl)

High-Performance Computing

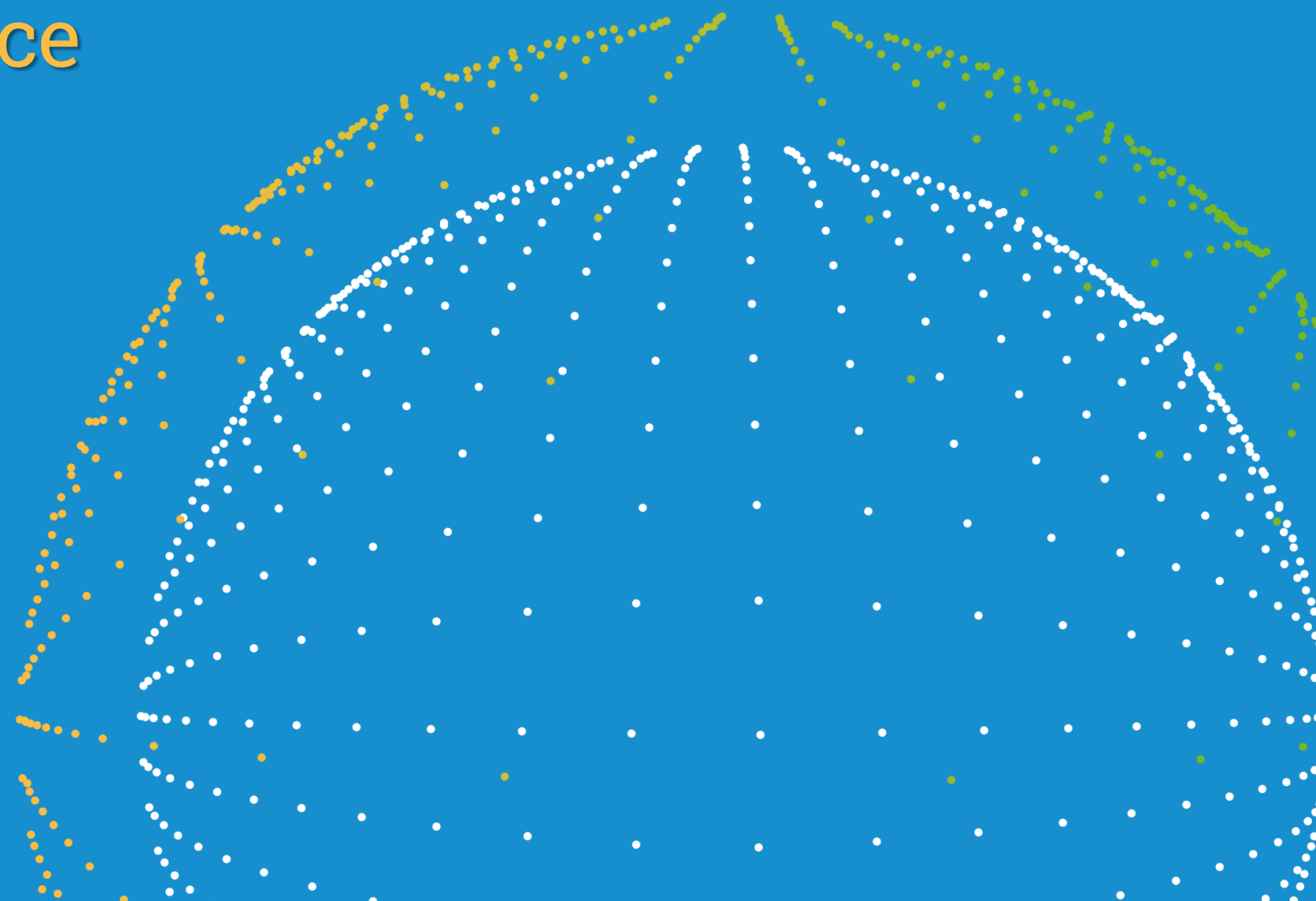
Testing and Experimentation Facilities

# Data Spaces Symposium

## Building the Common European Green Deal Data Space

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Johan Bodenkamp  
CNECT.G1  
Sotirios Kanellopoulos  
ENV.01  
European Commission



# Green Deal Data Space

Green and digital transition both at the top of the EC policy agenda!



**Federated data ecosystems** enabling policy makers, businesses, researchers and citizens, from Europe and around the world, to **support EGD policies and objectives.**

Four focus areas:



**Biodiversity**



**Circular Economy**



**Zero Pollution**



**Climate Change**

# Green Deal Data Space – Landscape

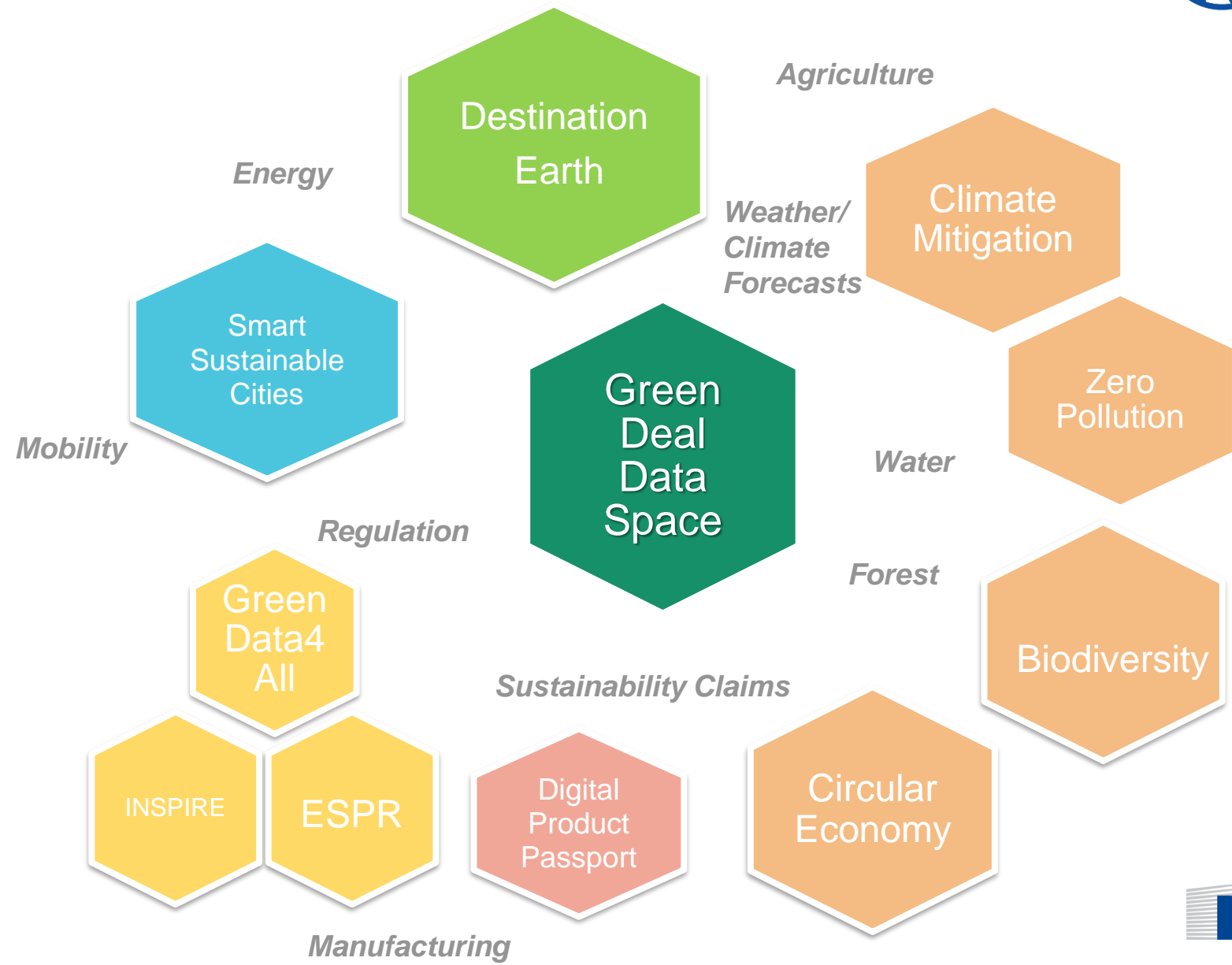


Complex

Transversal

All sectors

Many initiatives





# Destination Earth

## A Highly Accurate Digital Model of the Earth

To monitor, simulate and predict natural phenomena and the impact of human activity on Earth



To assist in designing accurate adaptation strategies and climate change related mitigation measures



To accelerate the EU's green and digital transition



To leverage existing and new data sources and EU's advanced digital and computing infrastructure



To create and test "what if" scenarios and to integrate impact sector applications for more sustainable development



To support near real-time decision-making at various levels (e.g. EU, national, regional, local)



To go beyond the current complex systems designed mainly for expert use



To scale up existing models and fuse simulation with observation



# Destination Earth: Roadmap

June 2024 – Launch of DestinE ! 

End of Phase I

Beginning of Phase II

2024

Integration of additional data sources, services and Digital Twins

2027

2030

Full Digital Twin of the Earth

Kick-off event of DestinE

2022

Deployment of the core service platform, the data lake, the Digital Twin engine environment and the first two Digital Twins on Weather-Induced Extremes and Climate Change Adaptation





# GreenData4All

## *Modernising environmental data sharing*

- Announced in the 2020 European Data Strategy
- The “GreenData4All” initiative will help deliver on Europe’s green and digital transformation by **updating EU rules on sharing environmental data** and on public access to environmental information.
- The aim is to enable greater sharing of data between the public & private sectors and with the general public, and to **unlock the full benefits of data sharing for data-driven innovation** and evidence-based decisions in support of the EU sustainability goals
- **Align the existing legal framework** with recent and **emerging horizontal digital data legislation** to maximize coherence with the larger ecosystem of the European Common Dataspaces, promoting the once-only principle.
- The **Call for Evidence** for the GreenData4All initiative is launched on the “Have your say” website (<https://europa.eu/!QphkN3>). It is the **first opportunity to share your views and expectations**. The public consultation will be open for feedback till 25 March 2024.

# Digital Product Passport

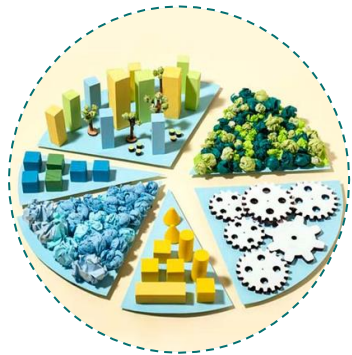
- The GDDS looks for **use-cases that build on data/ capacities** brought by the DPP to create value for the Green Deal Objectives
- **Digital Product Passport (DPP)** is an important chapter of the Ecodesign for Sustainable Products Regulation (**ESPR**). The ESPR has nearly concluded its co-decision process.
- The objective of the DPP is to simplify digital access to relevant **product-specific information** in the area of **sustainability, circularity, and legal compliance**.
- Delegated acts of ESPR will drive the requirements for the information to be included in the DPP
- There is a (growing) number of **EU policies** which will rely on DPP or element of it in order to make digitally available product related information
- A **Standardisation Request** to CEN/CENELC **for the DPP** is currently being finalized It will be addressed. Deadline to deliver the requested standards is 31 January 2025.

# Green Deal Data Space – Timeline



## Step 1: Preparatory work – Co-ordination and Support Action

 **GREAT** Project (Oct/2022 – Avr/2024)



Community of Practice



Technical Blueprint



Governance & Business Models




High Priority Data Sets



Roadmap

## Step 2: Deployment action – Operational Green Deal Data Space

- Call currently open until 29 May 2024 (Info session after this one!)
- Building on  **GREAT** results and relevant HE projects
- Long-term run-time / financially sustainable

### Strategic EGD Actions



# Call – Key Features

Timetable and deadlines (indicative)	
Call opening:	29 February 2024
<u>Deadline for submission:</u>	<u>29 May 2024 – 17:00:00 CEST</u> <u>(Brussels)</u>
Evaluation:	June-July 2024
Information on evaluation results:	July-August 2024
GA signature:	February 2025



# Use-cases for the GDDS

- This call invites you to structure your proposals **around concrete use-cases**
- The call has **identified 3 example use-cases of interest** – linked to some of recent European Commission policy initiatives
- **These 3 example use-cases of interest are not restrictive.**
- **Any Green Deal data space use-case** whose principal value lies in at least one of the four focus areas is in scope



**Biodiversity**



**Circular Economy**



**Zero Pollution**



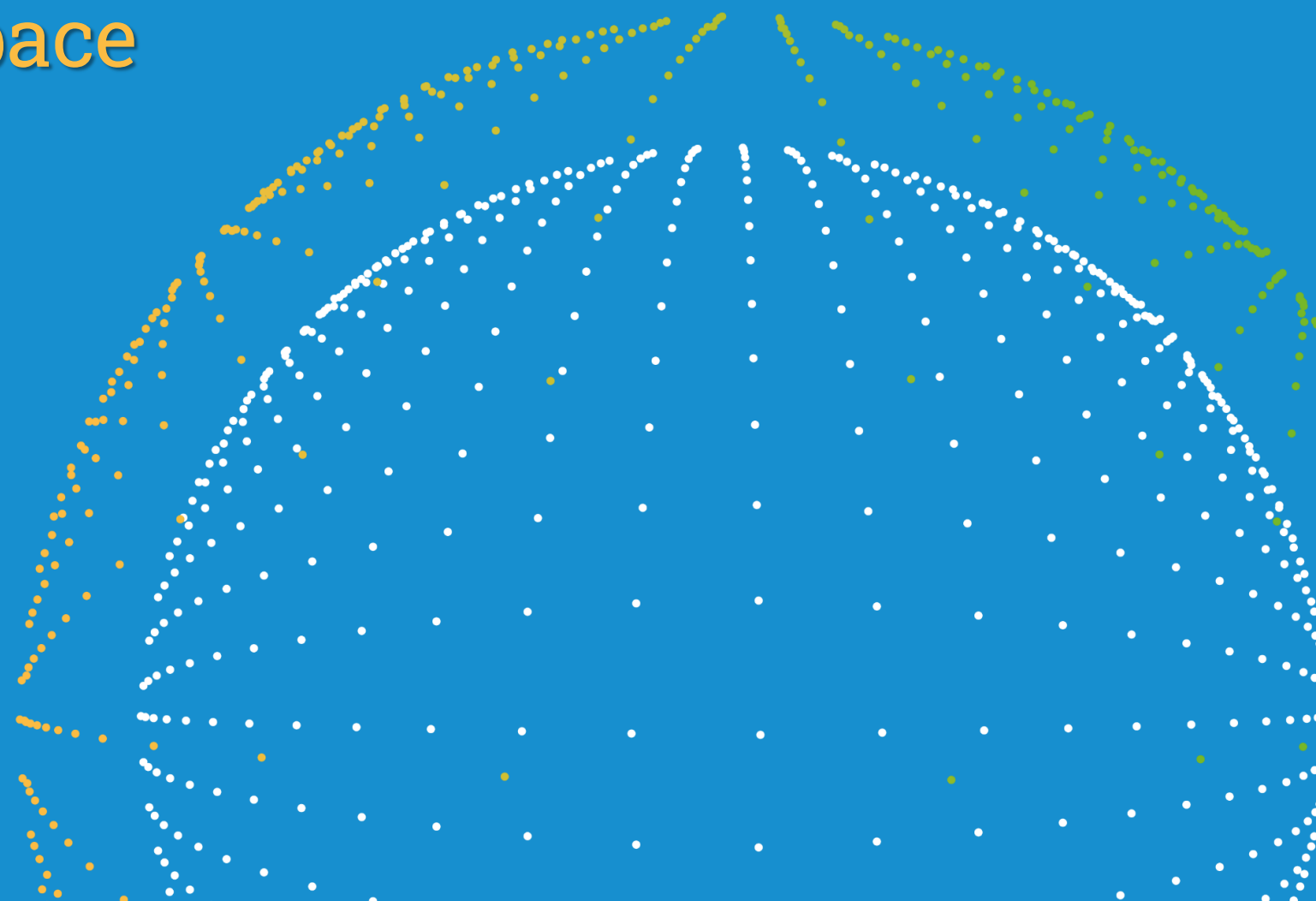
**Climate Change**

# Data Spaces Symposium

## Building the Common European Agricultural Data Space

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Dr. Doris MARQUARDT  
CNECT.E4  
European Commission



# Benefits & challenges of sharing data in agriculture



**Businesses:** exploitation of data will enhance EU industry; create B2B marketplace; increase access to digital single market, innovative solutions



**Governments & Public authorities:** sector analysis; data can be used for policy monitoring



**Farmers:** Improve performance with decision support systems; data accessible from one entry point



**Reluctance to share data:** security, competition concerns, lack of trust

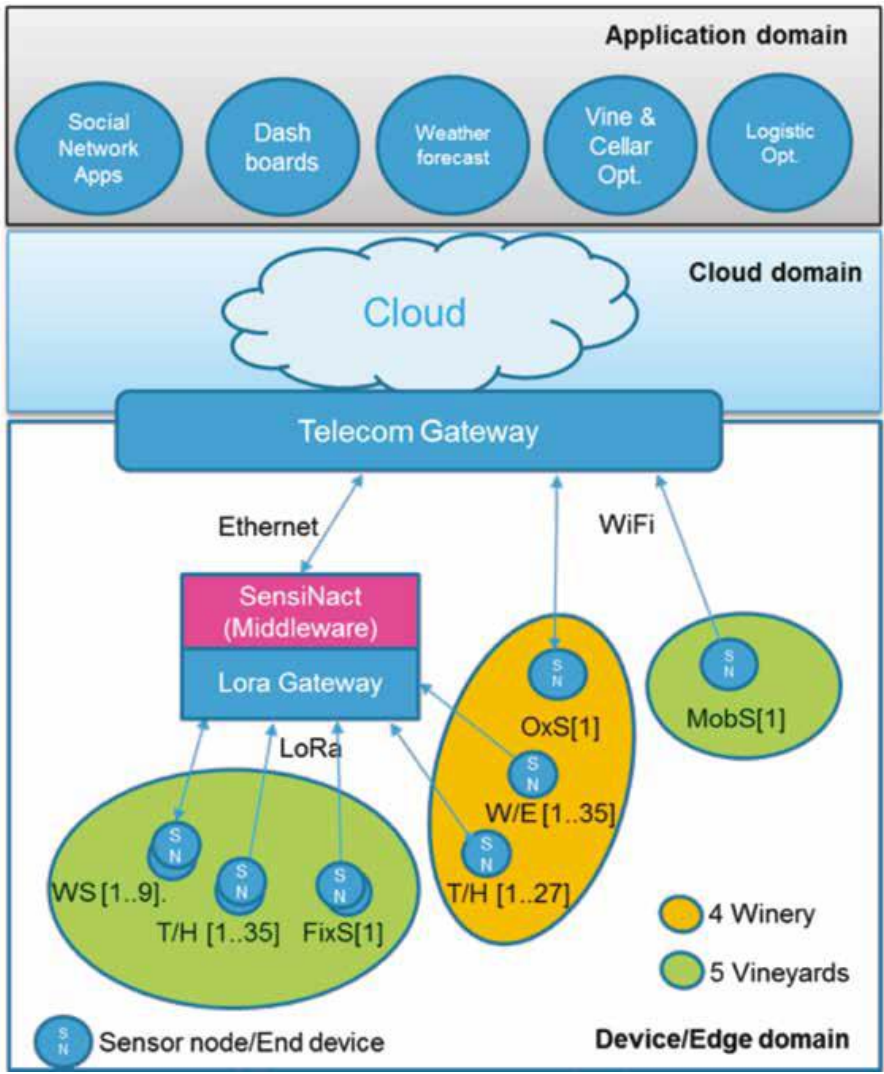


**Dominance of large platforms:** capturing increasing share of value –avoid vendor– lock-in



**Fragmentation:** lack of access to (big) data and of interoperability of data

# The potential of agricultural data - Precision farming - Big Wine Optimisation



**Objective: Optimize the use of chemicals**  
**Internet of Things (IoT)** technology allows to monitor weather, vine conditions in real time;  
**150 sensor nodes** to gather data from 5 vineyards, covering 150 hectares

IoT System based on a LoRa private network:

- **Data gathering in real time** (weather conditions, vine phenological stages)
- **Big data analysis**
- **Decision-making** at anytime and anywhere through applications on **mobile devices**



## Impacts

- Reduced pesticides costs - **20%**, Reduced fertilizers costs - **20%**,
- **3.4 liter portable water use reduction per liter product**,
- Energy use reduction in processing stage, Reduction of GHG
- **400 Euro/ha Productivity gains**
- Increased annual savings due to accident prevention



# Data sharing in the agricultural sector

- B2B data sharing plays an important role
- Challenges to classify data (e.g. personal and non-personal data)
- Code of Conduct of Agricultural Data Sharing in the Agricultural Sector in Place; interplay with Data Act to be assessed
- (Achieving) Trust in data sharing is crucial factor
- Extent to which B2G data sharing, e.g. to reduce reporting obligations, is in place, varies across Member States

# Objectives

- To facilitate the trustworthy sharing and pooling of data for the sector
- A "single data space", building on a set of data sharing initiatives
- Transparent control of data access and use
- Capitalisation of data for the sector in the private and public domains
- Boosting innovation and strengthening the portfolio of data-based solutions for farmers
- Enhancing the performance of the sector

***→ Lay the foundation for the effective and efficient capitalisation of agricultural/agriculture-relevant data for various stakeholders***

# Supporting & complementary actions

- Horizon 2020 and Horizon Europe projects in the field agricultural data
- DEP funded action on data interoperability at EU level
- Testing and Experimentation Facilities for AI in Agri-Food
- Provision of High Value Data Sets

## Forthcoming

- Horizon Europe partnership Agriculture of Data

# Timeline

- Step 1: Preparatory action: Co-ordination and Support Action (CSA)- Project “AgriDataSpace” (Q4/2022 – Q2/2024)
  - Inventory of existing platforms
  - Taking stock of experiences with the Code of Conduct
  - Proposed design approach based on scenarios
  - Governance scheme
  - Blue-print for the data space
  - Interim results used for the development of the implementation action
  - Input to the work of the data space support centre
- Step 2: Deployment Action for the Common European Agricultural Data Space
  - Call open from February – May 2024 (Info session today, after this session)
  - Building on results of the CSA
  - Long-term run-time/ financially sustainable

*CSA follows a participatory approach involving stakeholders and Member States*

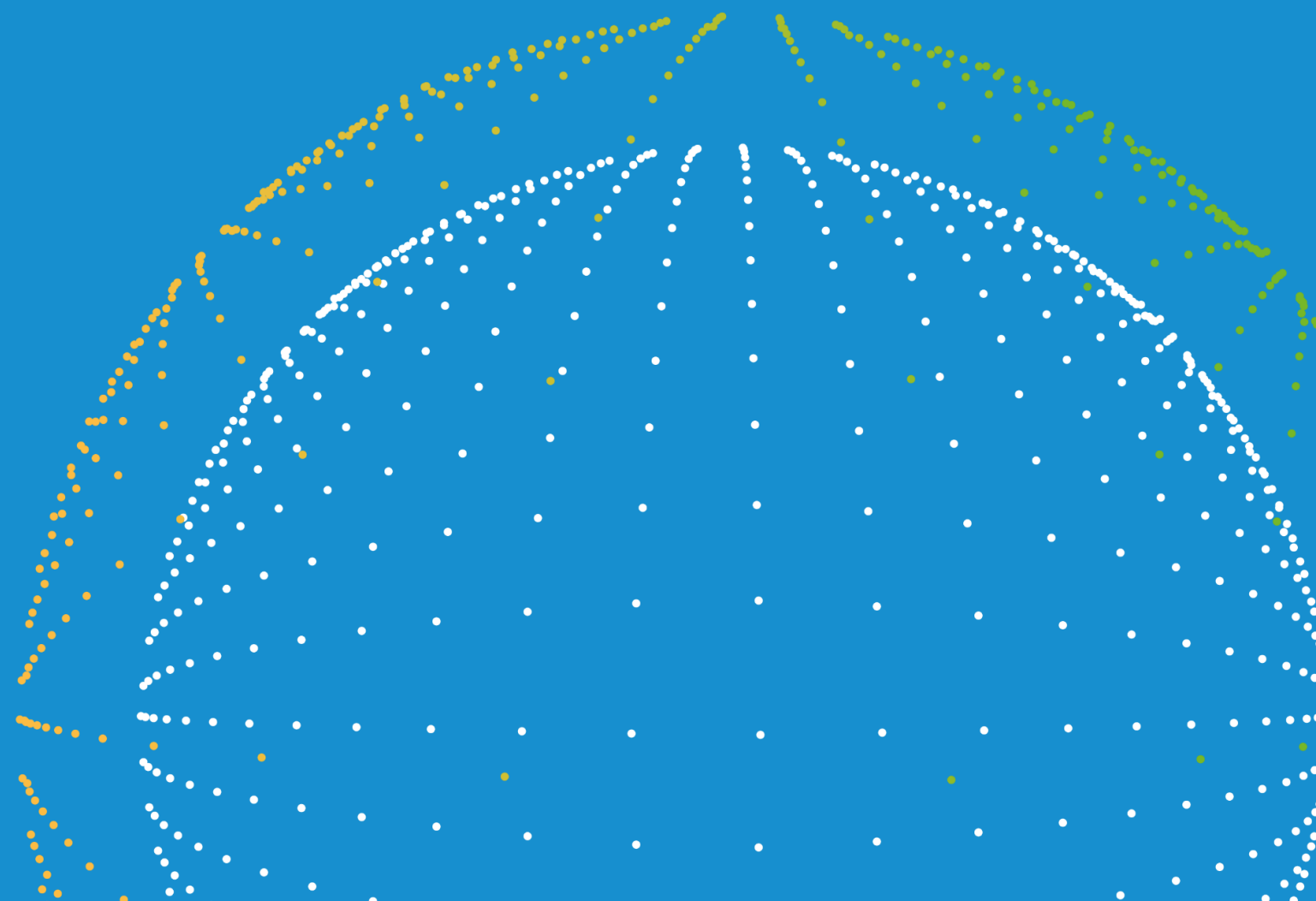


# Data Spaces Symposium

## Building the Common European Energy Data Space

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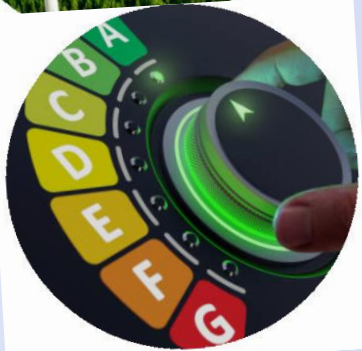
Svetoslav Mihaylov  
CNECT.E4  
European Commission



# Policy background



**Climate neutrality by 2050**  
Renewables - 45% in energy mix by 2030 (**Renewable energy directive**)



**Improved energy efficiency**  
Primary energy consumption -32% vs. 2005 levels



**Electrification of transport**  
All new cars and vans in EU to be zero-emission by 2035. (**Fit for 55**)  
**Digitally connected recharging points**  
Regulation on the deployment of alternative fuels infrastructures (**AFIR**)

**RepowerEU**  
More ambitious than Fit-for-55

Digitalisation of Energy Action Plan

Digital Decade

Digital Strategy  
Common European Data Spaces

Digital legislation  
Data Act  
Data Governance act  
Digital Services Act  
Digital Market Act  
...

# The EU Action Plan on the Digitalisation of the EU's energy system

Adopted in October  
2022

Aiming at delivering on the Commission's  
priorities of the European Green Deal and a  
Europe Fit for the Digital Age

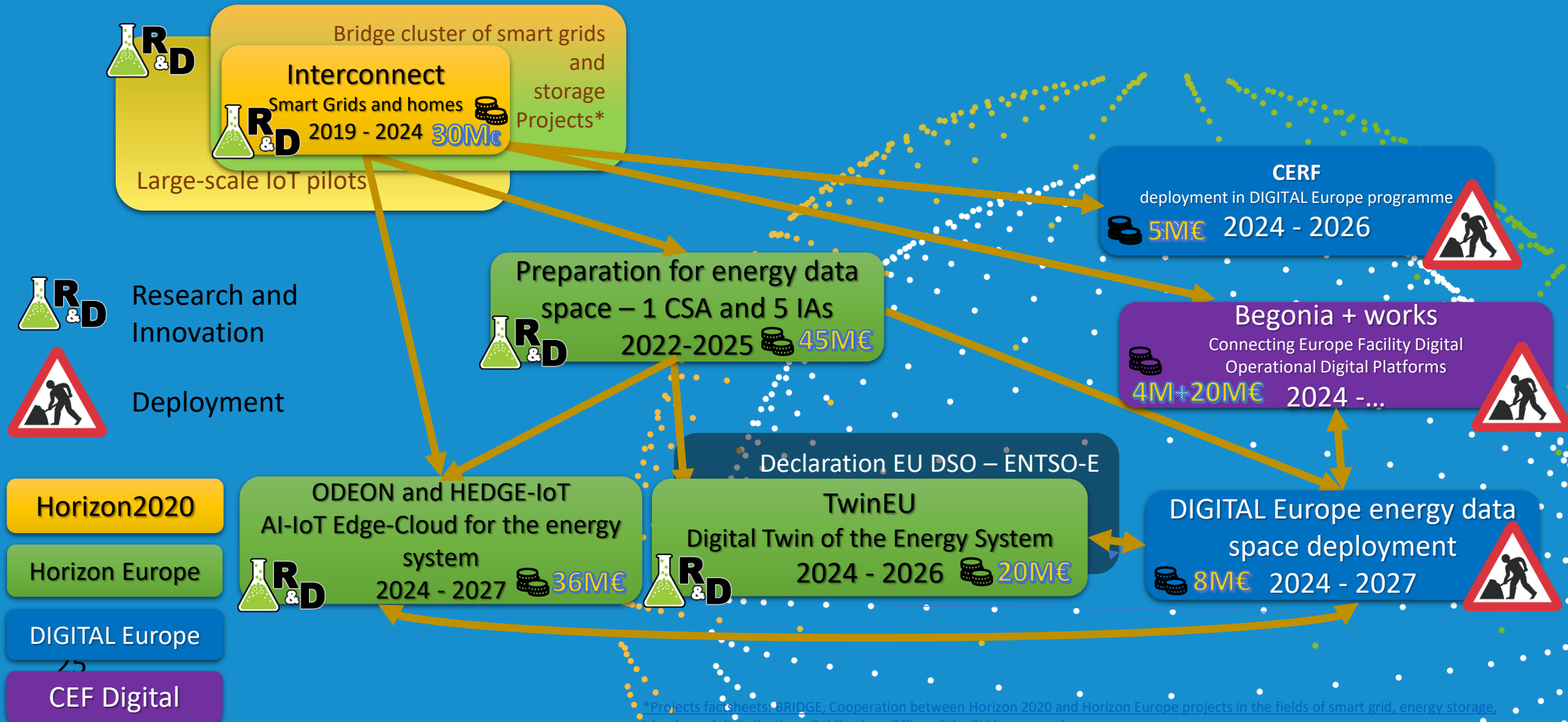


# Other recent developments in EU Energy policy

- **An EU Action Plan for Grids**
- **Implementing Regulation on interoperability requirements and non-discriminatory and transparent procedures for access to metering and consumption data** - adopted in 2023
- **Ongoing implementing act on demand response**
- **DSO Entity & ENTSO-E Public consultation on Network Code for Demand Response**
- **Revision of EU electricity market design in “A European Green Deal”** - trialogues finished in December 2023



# Digitalisation of energy support in EU programmes



# Data Spaces Symposium

# Thank you

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European Commission

CNECT/ENV

Johan Bodenkamp

Sotirios Kanellopoulos

Doris Marquardt

Svetoslav Mihaylov

