



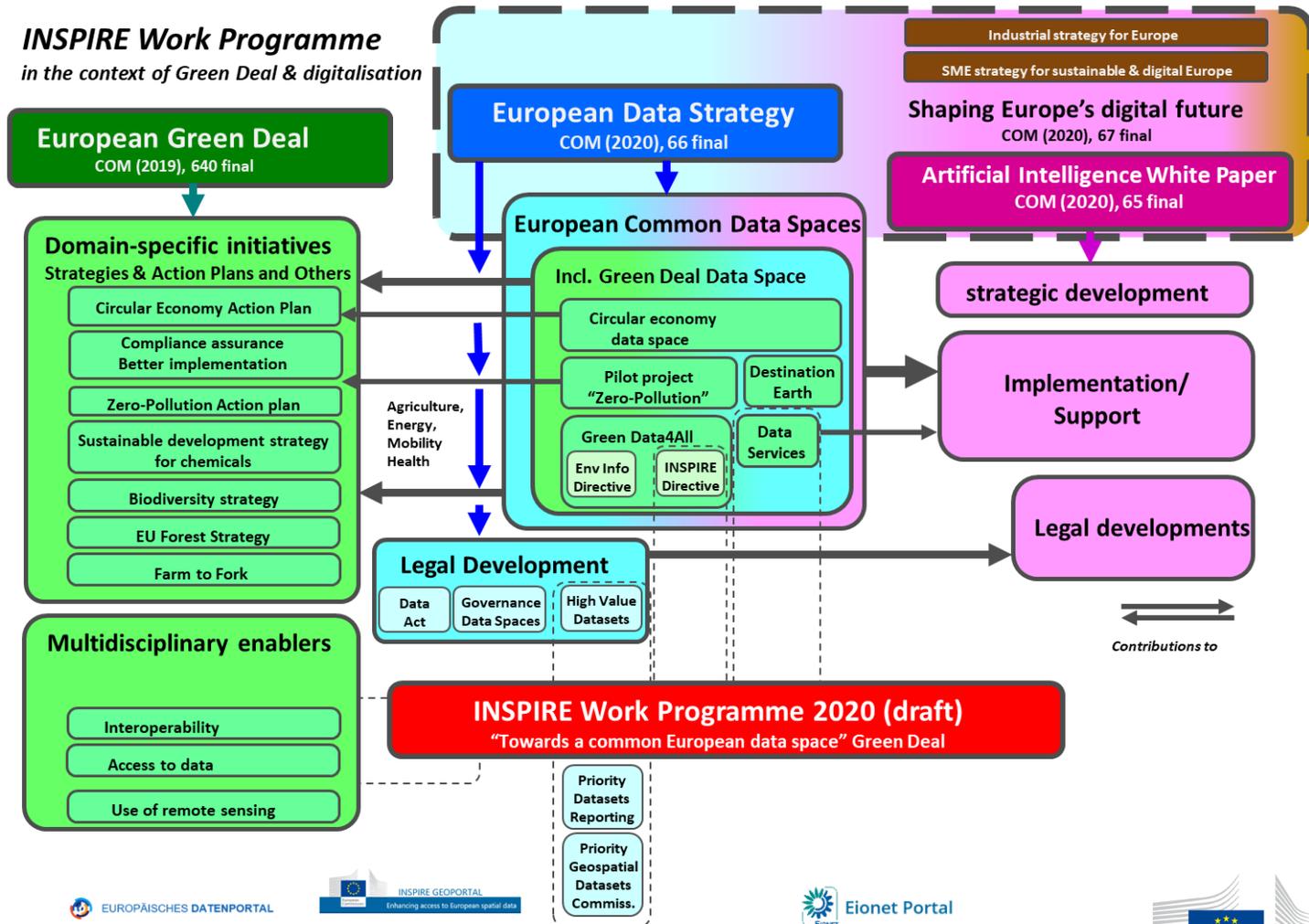
INSPIRE in the DIGITAL landscape

15<sup>th</sup> Meeting of the INSPIRE MIG

*31 March 2022, online meeting*

# The twin green and digital transition sculptures a complex landscape

Where to put the focus?  
Are we opening a can of worms?



# Keeping the overview is not an easy thing

YEAR MONTH TIMELINE

2022 02

COMMISSION 2019-24 EP COMMITTEES COMMISSION 2014-19

DESTINATION	COST OF NON EUROPE	DEPARTURES	ON HOLD	EXPECTED ARRIVALS	ARRIVED	DETAILED
1 A EUROPEAN GREEN DEAL		9 3	0 1	0 3	2 1	0 4
2 A EUROPE FIT FOR THE DIGITAL AGE		5 2	0 5	0 4	1 4	0 3
3 AN ECONOMY THAT WORKS FOR PEOPLE		5 4	0 8	0 0	3 2	0 2
4 A STRONGER EUROPE IN THE WORLD		2 1	0 6	0 1	3 1	0 1
5 PROMOTING OUR EUROPEAN WAY OF LIFE		4 8	0 4	0 2	2 3	0 1
6 A NEW PUSH FOR EUROPEAN DEMOCRACY		4 0	0 2	0 1	0 8	0 1

LEGISLATIVE TRAIN SCHEDULE

European Parliament

Enter your search (min 3 characters)

BACK VIEW YEAR MONTH

2022 02

LEGISLATIVE TRAIN SCHEDULE

European Parliament

Enter your search (min 3 characters)

BACK VIEW YEAR MONTH TIMELINE

2022 02

A EUROPE FIT FOR THE DIGITAL AGE

DEPARTURE DEMANDS

EU-DRIVEN GLOBAL DEFORESTATION (EP REQUEST)

DEPARTURES

EUROPEAN GREEN DEAL

CORPORATE SUSTAINABILITY REPORTING DIRECTIVE...

EUROPEAN GREEN DEAL INVESTMENT PLAN

SAIO LEGISLATION REVIEW (REFIT)

REVISION OF THE FISHERIES CONTROL SYST...

REVISION OF THE ENERGY TAXATION DIRECT...

ENERGY SYSTEM INTEGRATION STRATEGY

CARBON BORDER ADJUSTMENT MECHANISM

DEPARTURE DEMANDS

ARTIFICIAL INTELLIGENCE: ETHICAL FRAMEWORK

ARTIFICIAL INTELLIGENCE: CIVIL LIABILITY REGIME

DIGITAL SERVICES ACT: COMMERCIAL AND CIVIL LAW RULES

DIGITAL SERVICES ACT: IMPROVING THE FUNCTIONING OF THE...

THE RIGHT TO DISCONNECT - A LEGISLATIVE PROPOSAL TO THE...

DEPARTURES

ONLINE PLATFORMS: DISINFORMATION

NEW OPEN FINANCE FRAMEWORK

PERFORMANCE REVIEW BODY OF THE SINGLE E...

ADAPTATIONS TO THE EXISTING FINANCIAL SERVICES LEGISLATI...

TYPE APPROVAL OF MOTOR VEHICLES: CONFORMITY F...

RETAIL DIGITAL PAYMENTS ACTION PLAN

CYBER-SECURITY PACKAGE

EX-ANTE COMPETITION TOOL

DIGITAL EDUCATION ACTION PLAN

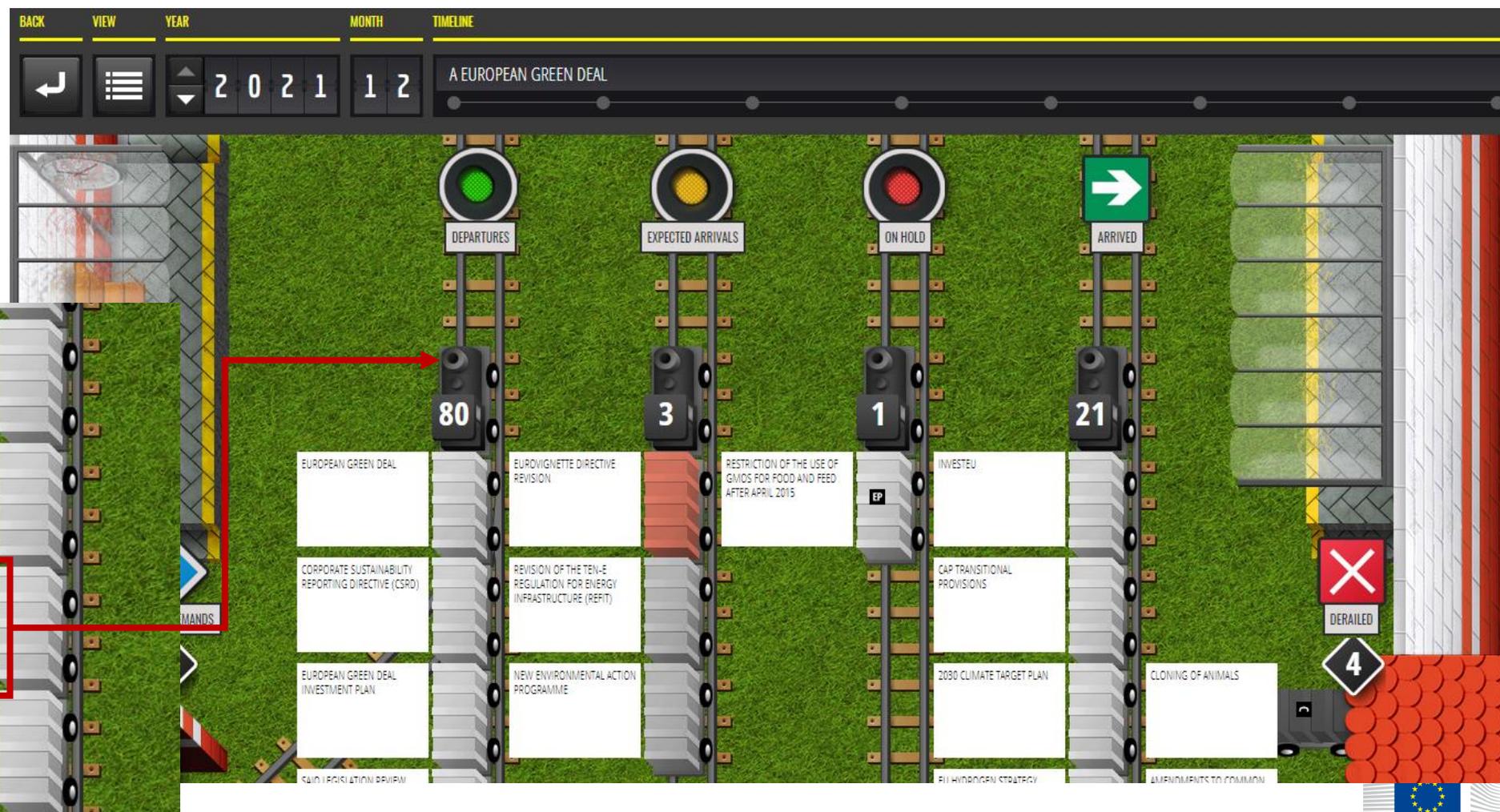
EUROPE'S DIGITAL DECADE: 2030 DIGITAL TARGETS

E-PRIVACY REGULATION

DATA ACT

<https://www.europarl.europa.eu/legislative-train/>

# GreenData4All / INSPIRE revision is one of the initiatives still to depart





DEPARTURES



DEPARTURE DEMANDS



DEPARTURES



EXPECTED ARRIVALS



ON HOLD



ARRIVED



DERAILED

80

EUROPEAN GREEN DEAL

CORPORATE SUSTAINABILITY REPORTING DIRECTIVE (CSRD)

EUROPEAN GREEN DEAL INVESTMENT PLAN

SAIO LEGISLATION REVIEW (REFIT) BEFORE APRIL 2021

REVISION OF THE FISHERIES CONTROL SYSTEM

REVISION OF THE ENERGY TAXATION DIRECTIVE

ENERGY SYSTEM INTEGRATION STRATEGY

CARBON BORDER ADJUSTMENT MECHANISM

# LEGISLATIVE TRAIN SCHEDULE

## A EUROPEAN GREEN DEAL

### GREENDATA4ALL - REVISION OF THE DIRECTIVE ESTABLISHING AN INFRASTRUCTURE FOR SPATIAL INFORMATION IN THE EU (INSPIRE) AND THE DIRECTIVE ON PUBLIC ACCESS TO ENVIRONMENTAL INFORMATION (REFIT) / BEFORE 2023-01

 [Get PDF version](#)



The European strategy for data announced the development of a Common European Green Deal data space, to use the major potential of data in support of the Green Deal priority actions on climate change, circular economy, zero pollution, biodiversity, deforestation and compliance assurance.

This involves the launch of a 'GreenData4All' initiative, consisting in evaluating and possibly reviewing the Directive establishing an Infrastructure for Spatial Information in the EU (INSPIRE Directive 2007/2/EC), together with the Access to Environmental Information Directive (Directive 2003/4/EC). The initiative would aim to modernise both directives to align them with the contemporary state of technology; promote active dissemination and sharing of government- and private-held public data in support of the environmental acquis and the European Green Deal objectives; and define and implement interoperable building stones for sharing public data in the Green Deal data space.

In its work programme for 2022, adopted on 19 October 2021, the European Commission announced that it would put forward, under the European Green Deal, a revision of both directives, following their evaluation in 2021.

The legislative proposal, to be accompanied by an impact assessment, is expected in the fourth quarter of 2022.

# For the sake of sanity we will focus on data-related initiatives ... and interoperability

- Open Data Directive (2019)
  - Implementing Act on High Value Data sets (? 2022 - 2023)
- Data Governance Act (2021) – strengthen data sharing
- Data Act (? 2022 - 2023) – maximize value of data for economy and society
- Europe Interoperability Act (? 2022 – 2023) - public sector interoperability across the Union
- Green Deal Data space (2024) – to pool data in key strategic sectors
- INSPIRE 2.0 (? 2023 – 2024) – support the development of a Green deal data space

# Open Data Directive

**Directive (EU) 2019/1024 of the European Parliament and of the Council of 20 June 2019 on open data and the re-use of public sector information – In force in force since 16 July 2019 - transposition: 17/07/2021**

- Common legal framework for government-held data (public sector information) and is geared towards two key concepts in the European market: i.e. transparency and fair competition.
- This directive will be put in place on the national level and will:
  - Stimulate the publication of dynamic data and the uptake of APIs;
  - Reduce the exceptions that now enable public bodies to charge more than marginal costs of dissemination for data re-use;
  - Extend the scope of the PSI directive to include data held by public undertakings, under a specific set of rules and research data resulting from public funding;
  - Strengthen the transparency requirements for agreements involving public sector information between public and private parties, thereby avoiding exclusive deals.
- The directive includes the adoption of a free-of-charge list of high-value datasets by the Commission. They will be labelled within a specific thematic categorisation in the Annex to the directive and act as the building blocks for Artificial Intelligence solutions.

# Impact on INSPIRE

- More coherence needed on what charges and licenses are permitted for accessing spatial data and services. Possible inconsistencies regarding the data sharing provisions under INSPIRE (Article 17) and the Open Data Directive regarding licensing and charging for the data.
  - the PSI Directive is more prescriptive than the INSPIRE Directive: charges must be limited to the marginal costs incurred for the reproduction, provision and dissemination of the data, and in the case of public bodies that are required to generate revenue to cover the costs of their activities, also a reasonable return on investment.
  - the INSPIRE Directive uses a broader terminology: charges applied for sharing data between public bodies should be kept to the minimum required to ensure the necessary quality and supply of spatial data sets and services, together with a reasonable return on investment.
- Possible metadata interoperability issues (ISO vs. CKAN standards).
- Interaction between Open Data Directive and INSPIRE Directive:
  - Recital 34 references INSPIRE as an example to make public sector information available
  - Article 1(7) specifically clarifies that the Open Data Directive ‘governs the re-use of existing documents held by public sector bodies and public undertakings of the Member States, including documents to which Directive 2007/2/EC applies.’
- **Implementing act on High Value Data sets (upcoming)**

# Implementing Act on High Value Datasets (indicative)

*Geospatial*

*Earth observation  
and environment*

*Meteorological*

*Statistics*

*Companies and  
company ownership*

*Mobility*

Datasets listed in the implementing act to be made available for free, in machine-readable formats, via APIs and (where relevant) as bulk downloads.

*Examples in recital 66:*

"the thematic categories listed in the Annex could inter alia cover postcodes, national and local maps (Geospatial), energy consumption and satellite images (Earth observation and environment ), in situ data from instruments and weather forecasts (Meteorological), demographic and economic indicators (Statistics), business registers and registration identifiers (Companies and company ownership), road signs and inland waterways (Mobility)."

**The thematic categories can be extended by Delegated Act**

# Geospatial data (indicative)

## Scope

Administrative units,

Place Names,

Addresses,

Buildings,

Cadastral parcels: geometry, identification code and location

Agricultural parcels and livestock

## Publication modalities

- CC-BY 4.0 licence
- Format: as per INSPIRE requirements
- Metadata to match the INSPIRE requirements allowing transformation to geoDCAT-AP
- Partial national or national coverage in terms of granularity
- Key attributes as per INSPIRE

# Earth observation and environment (indicative)

- Environmental e-reporting priority data and the listed INSPIRE themes. Adds open data requirements to INSPIRE (download) services and to e-reporting priority data. Removes restrictive terms of use and fees. INSPIRE's data harmonisation efforts extend to open data. Follows current/future INSPIRE standards.

Earth observation	Environmental data	
Hydrography (I)	Air quality (prio)	Protected sites (I)
Land parcels (I), cover (II), use (III)	Biodiversity (prio)	Bio-geographical regions (III)
Elevation (II)	Emissions (prio)	Environmental monitoring facilities (III)
Geology (II)	Nature preservation (prio)	Habitats/Biotopes (III)
Ortho-imagery (II)	Noise (prio)	Natural Hazards (III)
Oceanography (III)	Waste (prio)	Soil (III)
Sea Regions (III)	Water (prio)	Species distribution (III)

# Data Governance Act

- Political agreement was reached on the Data Governance Act on 30 November 2021. Full endorsement is likely to be completed by March 2022 and the Act will become applicable 15 months after the date of its entry into force — i.e., summer 2023.
- It is a framework for sharing data. It aims to increase trust in data sharing, creates new EU rules on the neutrality of data marketplaces and facilitates the reuse of certain data held by the public sector.
- The Act encourages **wider re-use of data held by the public sector bodies**, including personal data. This is to be achieved by making use of secure processing environments and anonymization techniques. For example, the reuse of health data, under clear conditions, could advance research to find cures for rare or chronic diseases;
- **A new business model for data intermediation** - A licensing regime is set up for “data intermediaries.” These are organizations which set up commercial arrangements between data holders and data users, but which do not themselves add extra value to the data. Data intermediaries will need to meet license conditions designed to ensure their independence and restrict their re-use of data and metadata. The requirements will affect those offering data marketplaces and (possibly) consent management platforms.

# Data Governance Act

- **Data altruism** is encouraged. Entities seeking to collect data for objectives of general interest may request to be listed in a national register of recognised data altruism organisations. Registered organisations will be recognised across the EU. This will create the necessary trust in data altruism, encouraging individuals and companies to donate data to such organisations so that it can be used for wider societal good. **Making it easier and safer for companies and individuals to voluntarily make their data available for the wider common good under clear conditions.**
- **International access to and transfer of non-personal data** - The Act contains the first steps towards restriction of transfers of non-personal data. Data intermediaries and recognized data altruism providers will need to consider if third countries offer appropriate protections for non-personal data and will need to resist attempts by public authorities in third countries to access EU originating non-personal data. There are additional restrictions applicable to those involved in re-use of public sector data, as well as mechanisms for the Commission to recognize countries as offering adequate protection and to adopt model contractual clauses for transfer of non-personal data. **Tools to give Europeans control over the use of the data they generate.**
- A new structure, the **European Data Innovation Board**, will be created to advise and assist the Commission in enhancing the interoperability of data intermediation services and issuing guidelines on how to facilitate the development of data spaces, among other tasks.

# Data Act

- Proposal for a Regulation designed to harmonize rules on the fair access to and use of data generated in the EU across all economic sectors (the “Data Act”) adopted on February 23, 2022.
- To “ensure fairness in the digital environment, stimulate a competitive data market, open opportunities for data-driven innovation and make data more accessible for all.”
- For all data generated in the EU, not only personal data, which is regulated by the General Data Protection Regulation (“GDPR”)
- The Data Act is part of the European Commission’s [European Strategy for Data](#) and complements the [Data Governance Act](#).

# Data Act – Key elements

- Reinforced data portability measures allowing connected device users to gain access to, and share with third parties, data generated by connected devices, thereby allowing cheaper aftermarket and other data-driven innovative services (such as predictive maintenance).
- Measures to rebalance the negotiating power of small and medium-sized enterprises (“SMEs”) by preventing the abuse of contractual imbalances in data sharing contracts. Model contracts also will be developed by the European Commission to help companies draft and negotiate fair data-sharing contracts.
- Means for public sector bodies to access and use data held by the private sector that is necessary for exceptional circumstances, particularly in case of a public emergency, such as floods and wildfires, or to implement a legal mandate if data are not otherwise available. Data insights are needed to respond quickly and securely, while minimising the burden on businesses.
- Data and cloud interoperability rules that allow end users to effectively switch between cloud and edge service providers, and establish safeguards against unlawful data transfer and access by non-EU governments.
- A clarification that databases containing data from Internet-of-Things (IoT) devices and objects should not be subject to separate legal protection, thereby allowing data generated by IoT devices to be accessed and used more easily by end users.

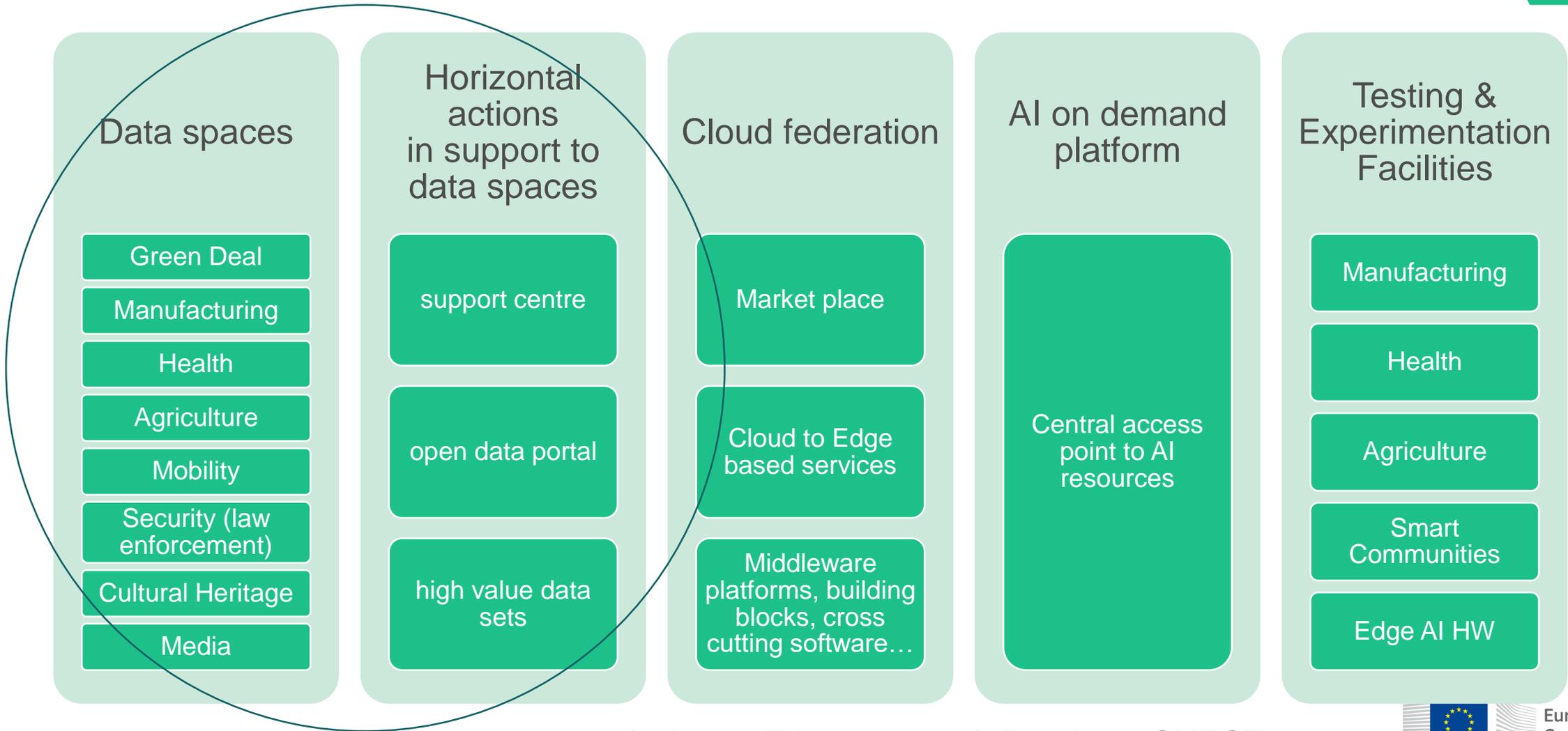
# Europe Interoperability Act (indicative)

- Regulation on measures for a high level of public sector interoperability across the Union (Interoperable Europe Act).
- More and more public sector services go digital - their level of interoperability is still insufficient
- Interoperability is not only a technical issue, it also requires action on legal interoperability, organisational interoperability and semantic interoperability.
- A low level of interoperability leads to citizens and businesses facing unnecessary administrative burden and greater costs for public administrations.
- Strengthening public sector interoperability holds important opportunities for innovation, for better foresight (e.g. in situation of crisis) and technological sovereignty of the Union.
- Specific objectives of Regulating public sector interoperability are:
  - a coherent, human-centric EU approach to interoperability
  - an interoperability governance designed to enable public administrations from all levels and sectors as well as private stakeholders to work together — with a clear mandate to agree on shared interoperability solutions (e.g. frameworks, specifications, applications, or guidelines).
  - Co-create an ecosystem of interoperability solutions (open standards, data and services) for the EU's public sector.

# Common European data space supporting the Green Deal

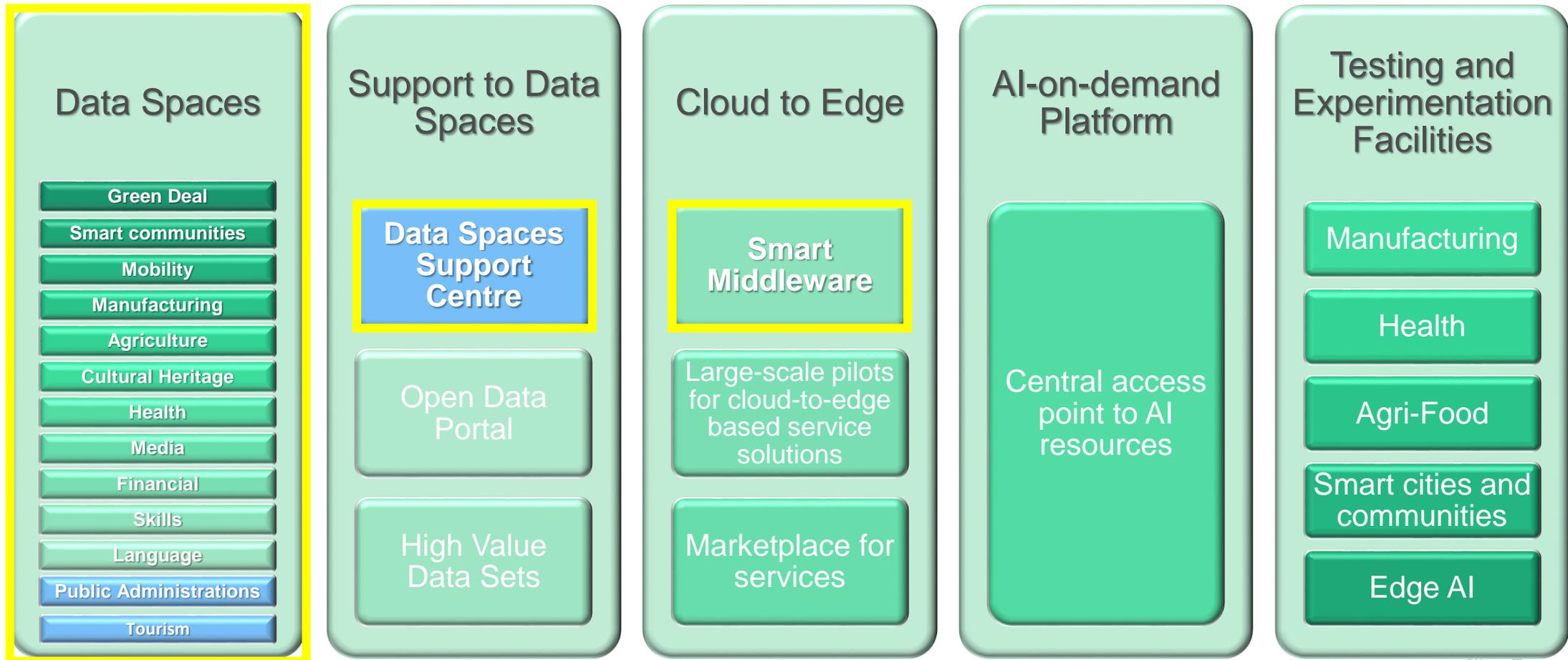
- 1) The data space can involve actors from the public and private sectors and facilitate the exchange of all kinds of relevant data including Copernicus data, High Value Datasets, data under INSPIRE and private sector data (e.g. mobility, energy use).
- 2) Funding from the Digital Europe Programme will help build up the necessary data sharing tools, infrastructures and governance mechanisms, without losing sight of the potential of cross-sectoral data use.
- 3) Data Space will also benefit from Digital Twins, such as Destination Earth (DestinE) in DEP: a dynamic, interactive, computing and data intensive “Digital Twin of the Earth”

# DEP: Artificial intelligence, data and cloud



Actions will be managed directly by CNECT

# DIGITAL: Artificial intelligence, Data and Cloud



# Green Deal data space



- Legislative initiative: GreenData4All
- DEP Call CSA - Preparatory actions for the Green Deal Data Space

- Related DEP calls:
  - Preparatory actions for the data space for smart communities
  - Data Spaces Support Centre
  - Digital Product Passport: sustainable and circular systems
  - ...
- Related HE calls
  - e.g. HORIZON-CL6-2021-GOVERNANCE-01-17: Common European Green Deal data space to provide more accessible and exploitable environmental observation data in support of the European Green Deal priority actions

# CSA - Preparatory actions for the Green Deal Data Space [Funding & tenders \(europea.eu\)](https://europea.eu)

The action will establish a data governance mechanism (framework and programme), with a detailed roadmap on how the Green Deal data space should progressively develop by connecting EU programmes, and the national, regional, local and EU level data ecosystems.

For the data governance:

- The action will have to interact with the 'GreenData4All' initiative

For the roadmap:

- The action will integrate the various activities contributing to the European Green Deal data space in line with existing policy priorities and existing initiatives, enabling all relevant actors to access and use the data needed for their purposes in compliance with the dataspace governance scheme

# Outcomes and deliverables

- A data governance scheme as well as a blueprint that connects existing national, regional and local data ecosystems and enables public and private stakeholders to access relevant data and to develop cross-sector data services;
- A priority list of types of datasets relevant to the European Green Deal strategies and actions plans;
- A roadmap towards the common European Green Deal data space

# Artificial intelligence, data and cloud

## Data Spaces

- Green Deal
- Smart communities
- Mobility
- Manufacturing
- Agriculture
- Cultural Content
- Health
- Media
- Finance
- Skills
- Languages
- Public Administrations
- Tourism

## First call

Data Spaces  
Support Centre  
CSA – 100% 14 mln €  
36-42 months

Green Deal  
CSA – 100% 2 mln €  
12-18 months

Agriculture  
CSA – 100% 2 mln €  
18 months

Call opening:	17 November 2021
<u>Deadline for submission:</u>	22 February 2022 – 17:00:00 CET (Brussels)
Evaluation:	14 March to 29 April 2022
Information on evaluation results:	End of May 2022
GA signature:	September 2022

Smart Communities  
CSA – 100% 1 mln €  
12 months

Skills  
CSA – 100% 1 mln €  
12 months

Mobility  
CSA – 100% 1 mln €  
12 months

Tourism  
CSA – 100% 1 mln €  
12 months

Manufacturing  
CSA – 100% 1 mln €  
12-24 months

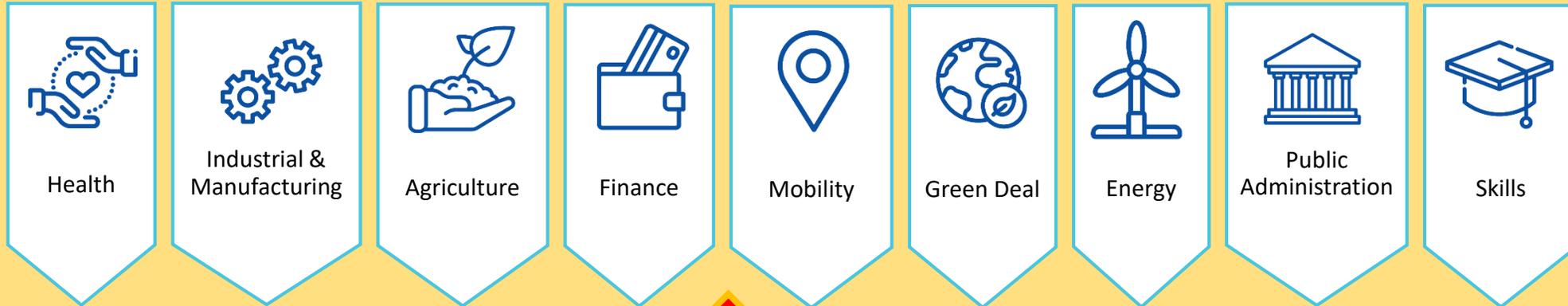
Health - Genomics  
Simple grants – 50%  
20 mln € 36-48 months

**Consortium composition:** minimum 3 independent entities from 3 different eligible countries (5 for Genomics)

# Digital Europe is complementary to other programmes with investments in digital

EU-wide collective effort					National regional and local			Financial instrument
Horizon Europe	Digital Europe	CEF	Creative Europe	Health	Cohesion	Agriculture Funds	RRF	InvestEU
Research Innovation	EU-Wide deployment latest digital technologies	Digital infrastructure Broadband and 5G roll out Connecting Communities	Creative industry Media	Telemedicine eHDSI	Digital connectivity in white and grey areas Support to enterprises in line with Smart specialisation Digital skills for all citizens	Making use of Big Data for CAP monitoring Broadband rollout in rural areas	Connect Scale-up Modernise Reskill and Upskill 20% digital	Leverage private capital for investments in SMEs, research, digital, infrastructure, skills...

# Common European data spaces



High Value Datasets from public sector

- 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

## Data Spaces Support Centre

- Coordinating the development of data spaces
- Assuring common standards and interoperability

## Technical infrastructure for data spaces



Edge & cloud Services

Smart Middleware solutions

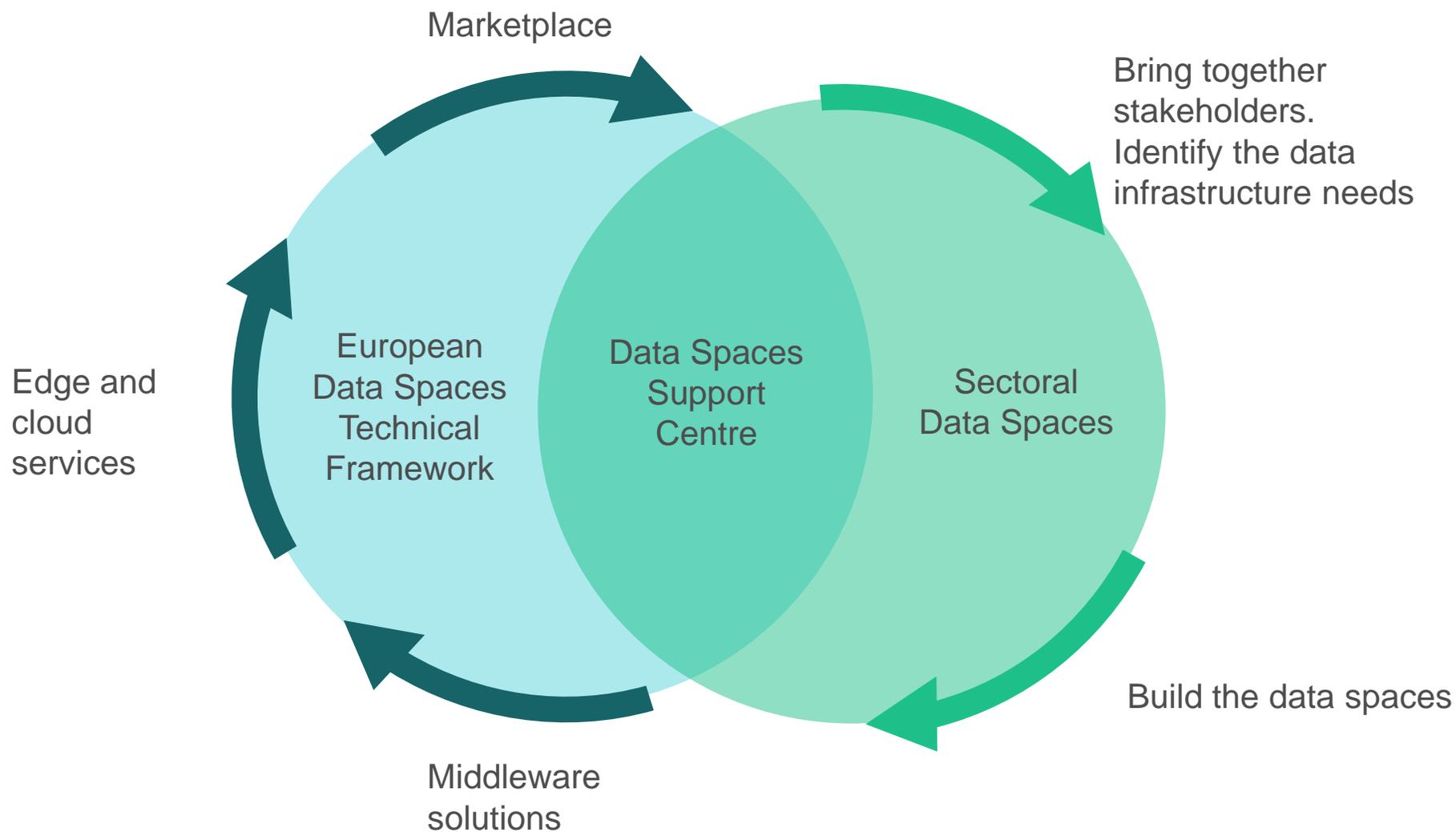
Marketplace

High-Performance Computing

AI on demand platform

AI Testing and Experimentation Facilities

# Data Spaces and Infrastructure in DIGITAL



# Data Spaces Support Centre: outcomes and deliverables

The outcome of this action will be the creation of a Support Centre, which will promote and coordinate all relevant actions on sectorial data spaces and will make available technologies, processes, standard and tools that will support the deployment of common data spaces and will allow reuse of data across sectors

Thank you – Questions?