



# EU Digital Strategy overview: JRC's scientific support to policies

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# European Commission – the Joint Research Centre



- The European Commission **science and knowledge service for over 60 years**
- Mission to **support EU policies with independent evidence** throughout the whole policy cycle, working **30 EC policy departments**
- Located **across 5 countries**, the JRC hosts specialist research facilities and is home to **thousands of scientists** working to support EU policy



# Push for new commitments

## European Commission priorities 2019-2024

The twin green & digital transition is at the top of the policy agenda.



### A European Green Deal

Europe aims to be the first climate-neutral continent by becoming a modern, resource-efficient economy.



### A Europe fit for the digital age

The EU's digital strategy will empower people with a new generation of technologies.



### An economy that works for people

The EU must create a more attractive investment environment, and growth that creates quality jobs, especially for young people and small businesses.



### A stronger Europe in the world

The EU will strengthen its voice in the world by championing multilateralism and a rules-based global order.



### Promoting our European way of life

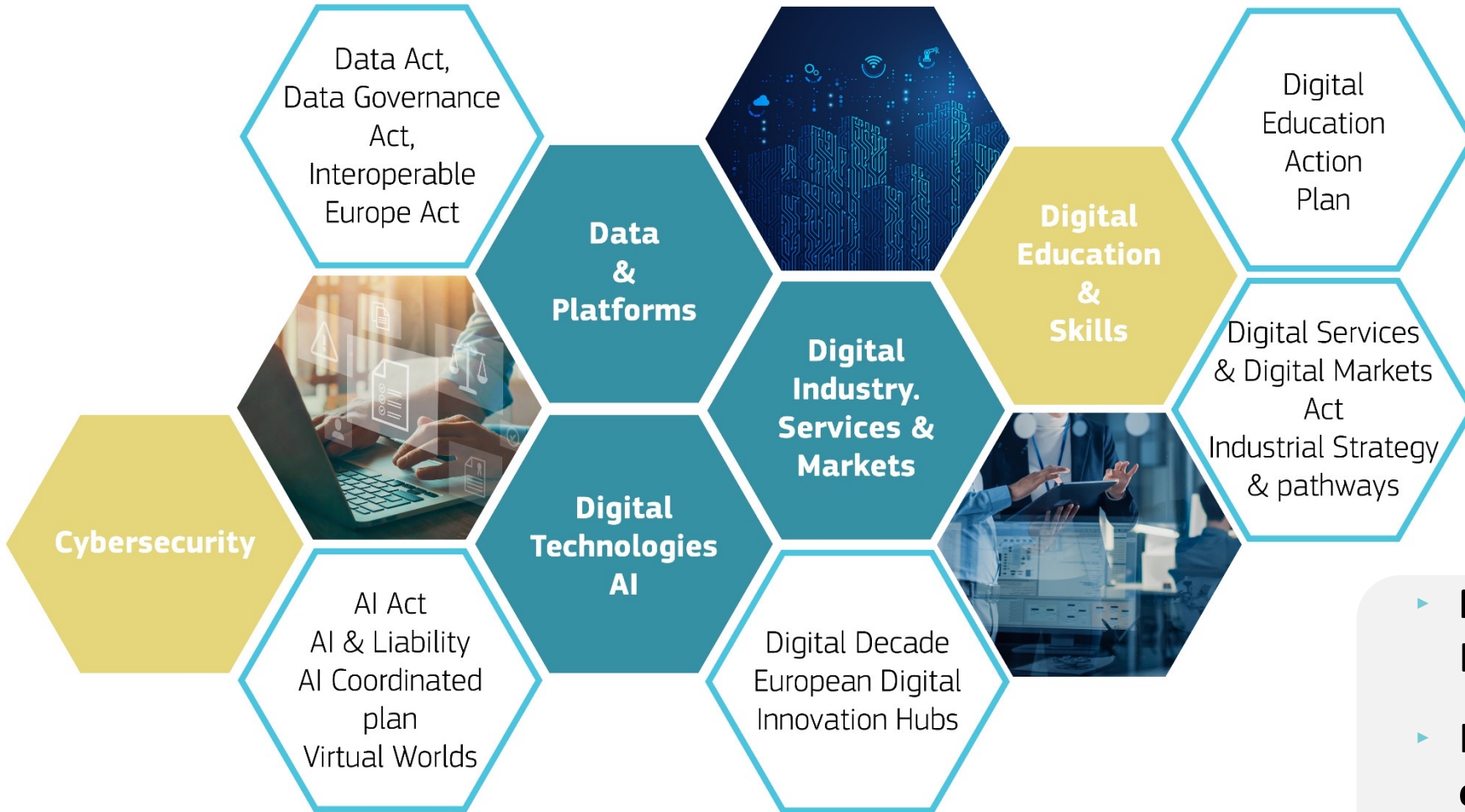
Europe must protect the rule of law if it is to stand up for justice and the EU's core values.



### A new push for European democracy

We need to give Europeans a bigger say and protect our democracy from external interference such as disinformation and online hate messages.

# EU Digital Strategy: building blocks



- ▶ **Monitoring and shaping the Digital Transition**
- ▶ Focus on **techno-socio-economic impacts** of the Digital Transition

# European strategy for data

Aims to create a European single market for data

Highlights the problems to address

data availability, interoperability, quality

governance & infrastructures

skills & data literacy

cybersecurity

- Envisages establishing
  - common European sectoral data spaces

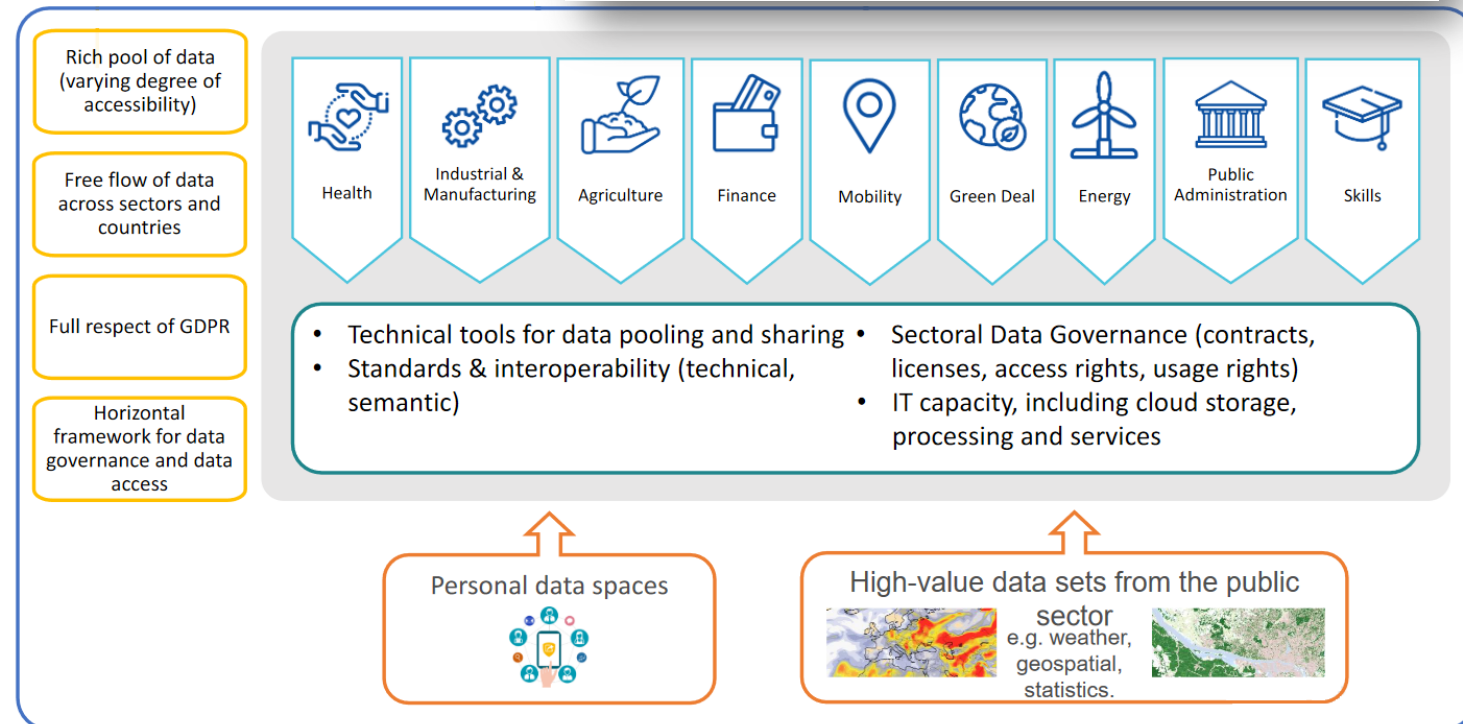
<https://digital-strategy.ec.europa.eu/en/policies/strategy-data>



Brussels, 19.2.2020  
COM(2020) 66 final

COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS

A European strategy for data



# Implementing Act on high-value datasets

## High-value datasets (HVD)

datasets the **re-use of** which is associated with important **socio-economic benefits**

## To be made available

for **free**, under **open access** licenses (CC BY 4.0 or less restrictive)

in **machine-readable formats**, via **APIs** and (when relevant) as a bulk download

## Thematic categories of HVD



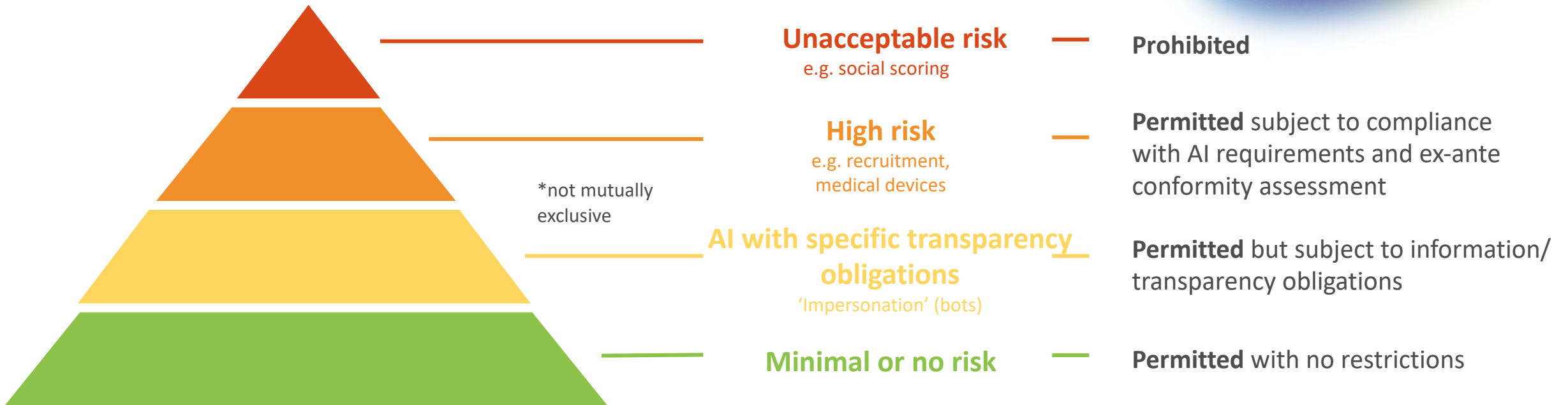
## The Implementing Act defines

the **list of high-value datasets** for each thematic category

the **requirements** for their provision: key attributes, granularity, formats, license, etc.

# Proposal to adopt an Artificial Intelligence Act

European Centre  
for Algorithmic  
Transparency



Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021PC0206>

# Proposal to adopt an Interoperable Europe Act






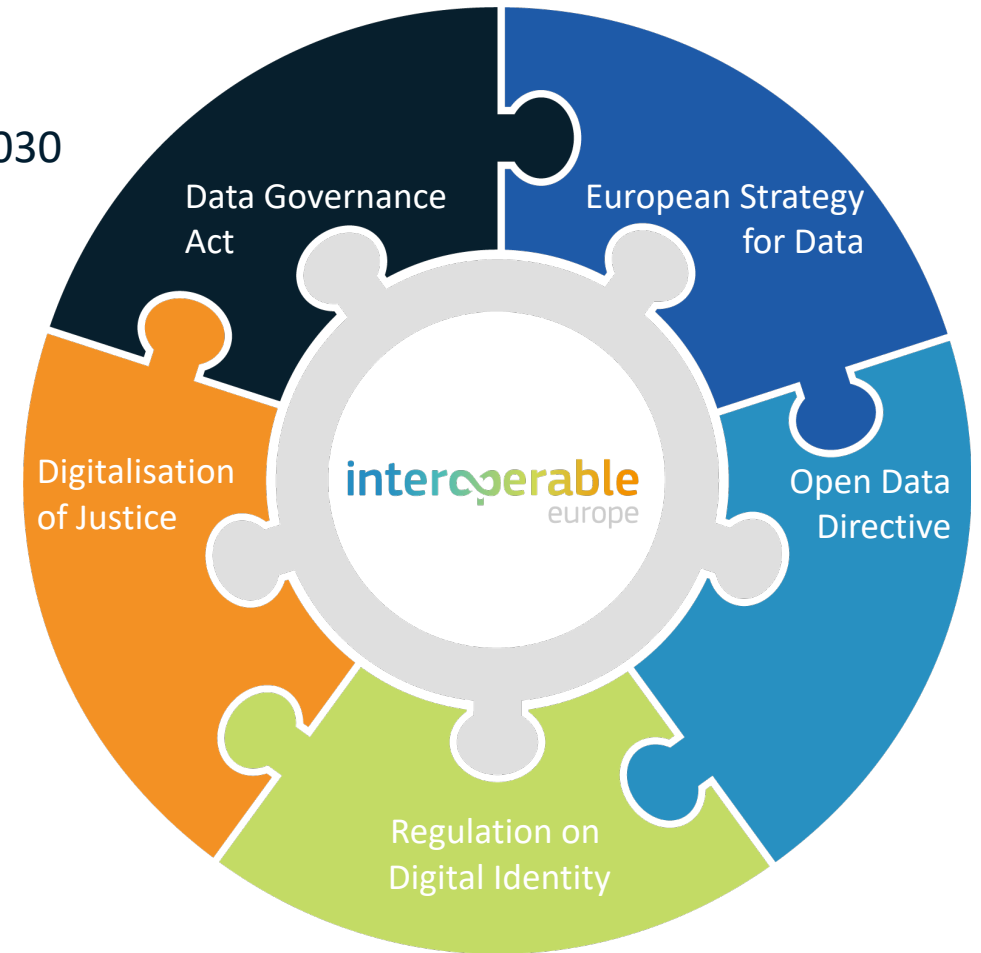
## EU's digital strategy

- Digital Decade: Key public services 100% online by 2030
- Cross-border interoperability as an enabler



## Gaps in existing legislation

-  Inefficient governance of interoperability efforts between EU policies, the Commission and Member States for all administrative levels and sectors.
-  Lack of common minimum interoperability specifications, shared solutions, standards.
-  Lack of an 'interoperability-by-default' approach in the design and implementation of EU and MS's legislation and policies.





# Digital Decade Programme targets by 2030



## Skills

**ICT Specialists:** 20 million + gender convergence  
**Basic Digital Skills:** min 80% of population



## Digital transformation of businesses

**Tech up-take:** 75% of EU companies using Cloud/AI/Big Data  
**Innovators:** grow scale-ups & finance to double EU Unicorns  
**Late adopters:** more than 90% of SMEs reach at least a basic level of digital intensity



## Secure and sustainable digital infrastructures

**Connectivity:** Gigabit for everyone  
**Cutting edge Semiconductors:** double EU share in global production  
**Data - Edge & Cloud:** 10,000 climate-neutral highly secure edge nodes  
**Computing:** first computer with quantum acceleration



## Digitalisation of public services

**Key Public Services:** 100% online  
**e-Health:** 100% of citizens have access to medical records online  
**Digital Identity:** 100% of citizens have access to digital ID

**The success of the Digital Decade will be critical for the EU's future**

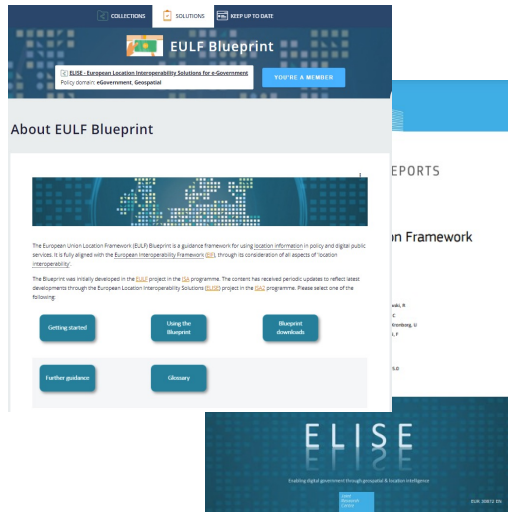
Achieving the EU's **prosperity** Digital Decade agenda could unlock over **EUR 2.8 trillion in economic value** that is **equivalent to 21% of the EU's current economy**.  
**First report on the State of the Digital Decade**, published on 27 Sept. 2023, **calls for collective action to shape the digital transition.**

**Member States to address investment gaps, to accelerate digital transformation in Europe.**

**Collaboration envisaged between the EC and MS on how to achieve our common goals, i.e. through the implementation of large-scale multi-country projects, for example, the newly introduced European Digital Infrastructure Consortia (EDICs).**

# European Union Location Framework (EULF) Blueprint

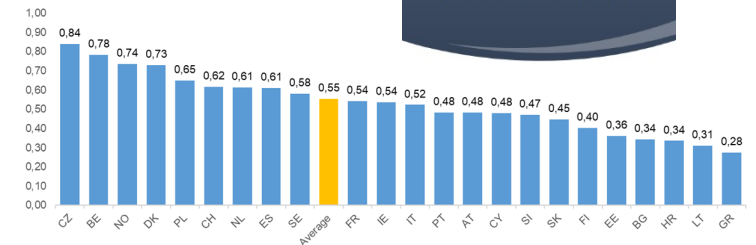
A European 'location interoperability framework' with guidance for the exchange and use of location information in government policy and digital public services, building on the implementation of **INSPIRE**, and allied closely to the interoperability principles of the **EIF**



Online and downloadable versions

[European Union Location Framework \(EULF\) Blueprint | Joinup](#)

- 5 FOCUS AREAS
- ✓
 19 RECOMMENDATIONS
- 
 6 ROLES
- 
 2 RELATED FRAMEWORKS
- 
 92 BEST PRACTICES
- 
 15 BENEFITS ILLUSTRATIONS



Adoption monitored through the LIFO

[Location Interoperability Framework Observatory \(LIFO\) | Joinup](#)

# EULF Blueprint and the UN-GGIM Integrated Geospatial Information Framework (IGIF)

Presented at the Geospatial World Forum 2022 Geospatial Knowledge Infrastructure (GKI) Training programme

- EULF Blueprint contains detailed **two-way cross references** between **EULF Blueprint** recommendations and **IGIF strategic pathways**, key elements, actions and tools
- Enables users to access resources from both frameworks** in defining their strategies, implementation actions, guidance and monitoring
- Start your exploration here: <https://joinup.ec.europa.eu/node/704325>

		UN-GGIM IGIF STRATEGIC PATHWAYS								
		Governance and Institutions	Policy and Legal	Financial	Data	Innovation	Standards	Partnerships	Capacity and Education	Communication and Engagement
EULF BLUEPRINT RECOMMENDATION TOPICS	Policy and Strategy Alignment	1. Digital policy alignment	X	X			X			
		2. Data policy alignment		X						
		3. Location data privacy		X						
		4. Location data for policy evidence				X	X			
		5. Standards based procurement				X		X		
	Digital Government Integration	6. Location enabled digital public services					X			
		7. SDI integration	X	X		X	X			
		8. Open and collaborative development							X	X
		9. Location-based statistics				X	X			
	Standardisation and Reuse	10. Common architecture				X	X			
		11. Authentic data reuse				X	X			
		12. Use of standards						X		
		13. Location data quality				X				
	Return on Investment	14. Assessing and monitoring benefits	X	X	X					X
		15. Communicating benefits	X	X	X					X
		16. Innovation through access to data		X			X			
	Governance, Partnerships and Capabilities	17. Integrated governance	X							
		18. Effective partnerships							X	
		19. Communication and skills			X					X

# EU Digital policies: impact on the Geospatial domain

**Digital policies are transversal across sectors and across thematic domain**, including vertical applications (e.g. for the data spaces, such as agriculture, green, health, tourism, mobility...).

**Geospatial data and technologies are also transversal**, i.e. all these policies also relate to the geospatial community independent if they deal with space, environment, utilities, urban planning, etc.

Equally **geospatial solutions can help implementing these policies**, and they create a market beyond sectorial applications - especially for sharing, integrating and processing data from multiple sources, which has always been a **strength** of the geospatial industry.

As these policies create a **common framework and governance structure across different sectors**, it might be **easier to scale-out from nice applications and address a larger pan-European market**.

Many of the recent **digital policies** (i.e. Data Governance Act, AI Act, Interoperable Europe Act) target include **governance processes**, such as the **creation of boards and communities**. It will be **important for the geospatial community** to be aware of these developments and **to contribute**.

# EU Digital policies: benefit for the Geospatial community

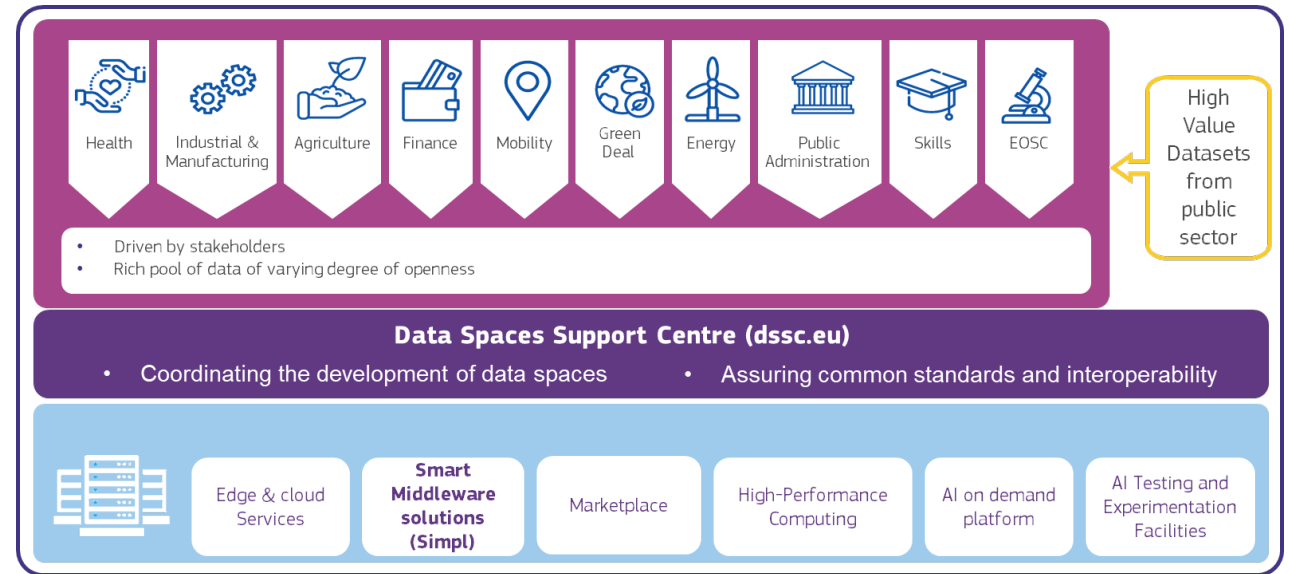
The **benefits for the geospatial community** are twofold.

First, even if there is no 'geospatial' dataspace, **location is increasingly important** as it would allow **to integrate the different citizen, business and public data**. The **policy and legal framework allows to morph** the **geospatial** data with completely **new sources** such as **IoT and personal data**.

Second, the **improved access to data** would **allow geospatial businesses** to develop **new innovative products** that are **aligned with** the EU legal frameworks and values. This would **enhance AI applications adoption and implementation in the Geospatial Sector** and **companies across industry segments** such as **Construction and Engineering, Earth Observation, Location Analytics and Business intelligence** or **Smart Cities**, just to mention a few, leading to improve growth, productivity, efficiency and innovation.

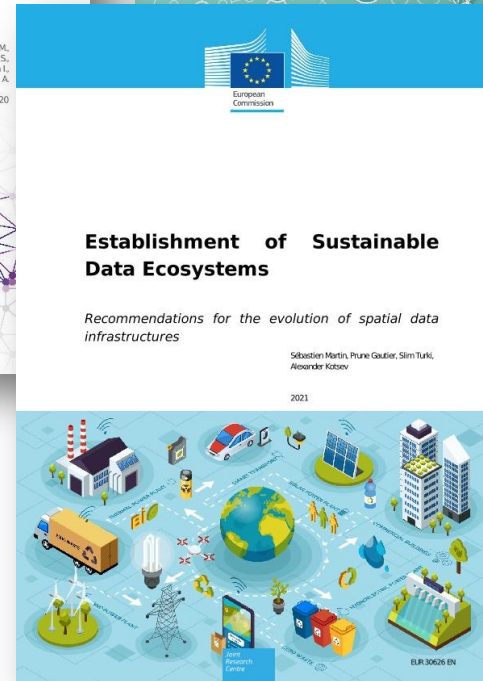
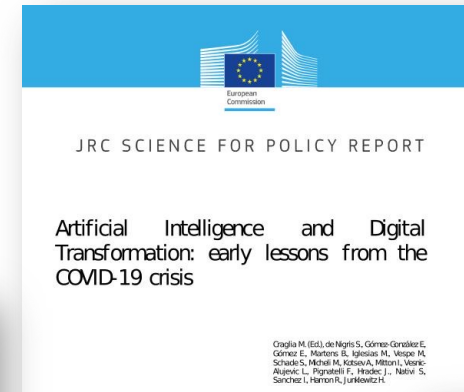
# Next: a Geospatial strategy for data spaces

- There is **no geospatial data space foreseen in the European Strategy for data**
- Nonetheless, the **geospatial dimension remains of fundamental importance due to the possibility to integrate data from different sources** (private, public, satellite, citizen) through their location
- In addition, **spatial analysis and visualisation** provide huge opportunities for extracting value from data made available in a data space and the **creation of new products** such as **digital twins** and **virtual worlds**
- For those reasons, a **geospatial strategy for data spaces can be conceptualised** that would cater for the **integration of data within and across domain-specific data spaces.**



# JRC knowledge base

Extensive research on data strategy and technology



# Thank you



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## EU Science Hub

[joint-research-centre.ec.europa.eu](https://joint-research-centre.ec.europa.eu)



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