

# European Data Spaces

- a new paradigm for data  
access and exchange

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SDFI, Lea Schick 12. dec. 2023

Sammen kommer vi #**ForanDigitalt**

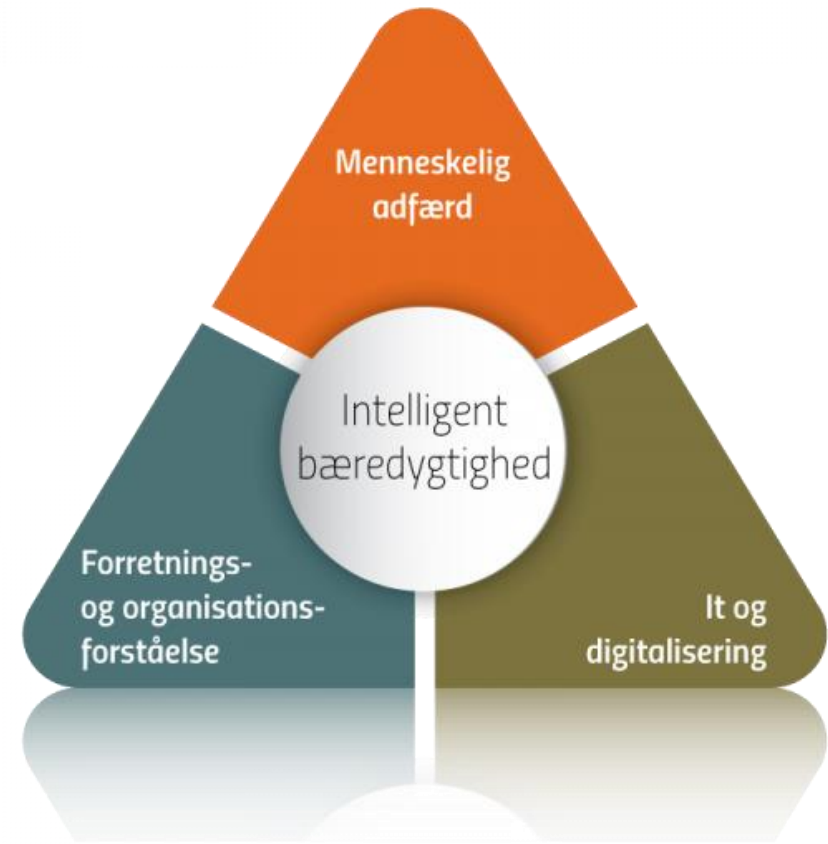


# About us

- One of seven government-approved Research and Technology Organisations (GTS institutes).
- Specialised in IT and digitalisation.
- Helps companies and organisations apply state-of-the-art IT research in practice.
- Private not-for-profit company owned by Aarhus University Research Foundation.
- Located in the IT innovation hub Katrinebjerg in Aarhus and at the IT University of Copenhagen.
- Innovation since 1999.



# About me...



# My previous work on dataspaces

## 5 webinars:

- Introduktion til data spaces og standarder (17. aug.)
- Energi data spaces (4. sept.)
- Governance and legal aspects of data spaces (28. sept.)
- Technological components for data spaces (25. Okt.)
- Ekspertpanelets anbefalinger til dansk data space (7. dec)

**Expertpanel** – made recommendations for Danish Energy Data Space

**Report:** [Data Spaces - Kortlægning af aktører og initiativer](#) (jan. 2023)

**Podcast:** [What on earth is Data Spaces? Tech & Innovation](#), KMD



# The twin transition



## European data strategy

Making the EU a role model for a society empowered by data

**The EU is creating a single market for data where:**

- data can flow within the EU and across sectors, for the benefit of all
- European rules, in particular privacy and data protection, as well as competition law, are fully respected
- the rules for access and use of data are fair, practical and clear

**The EU will become an attractive, secure and dynamic data economy by:**

- setting clear and fair rules on access and re-use of data
- investing in next generation tools and infrastructures to store and process data
- joining forces in European cloud capacity
- pooling European data in key sectors, with common and interoperable data spaces
- giving users rights, tools and skills to stay in full control of their data

# EU initiatives on data spaces

## Legislations:



## Funding:



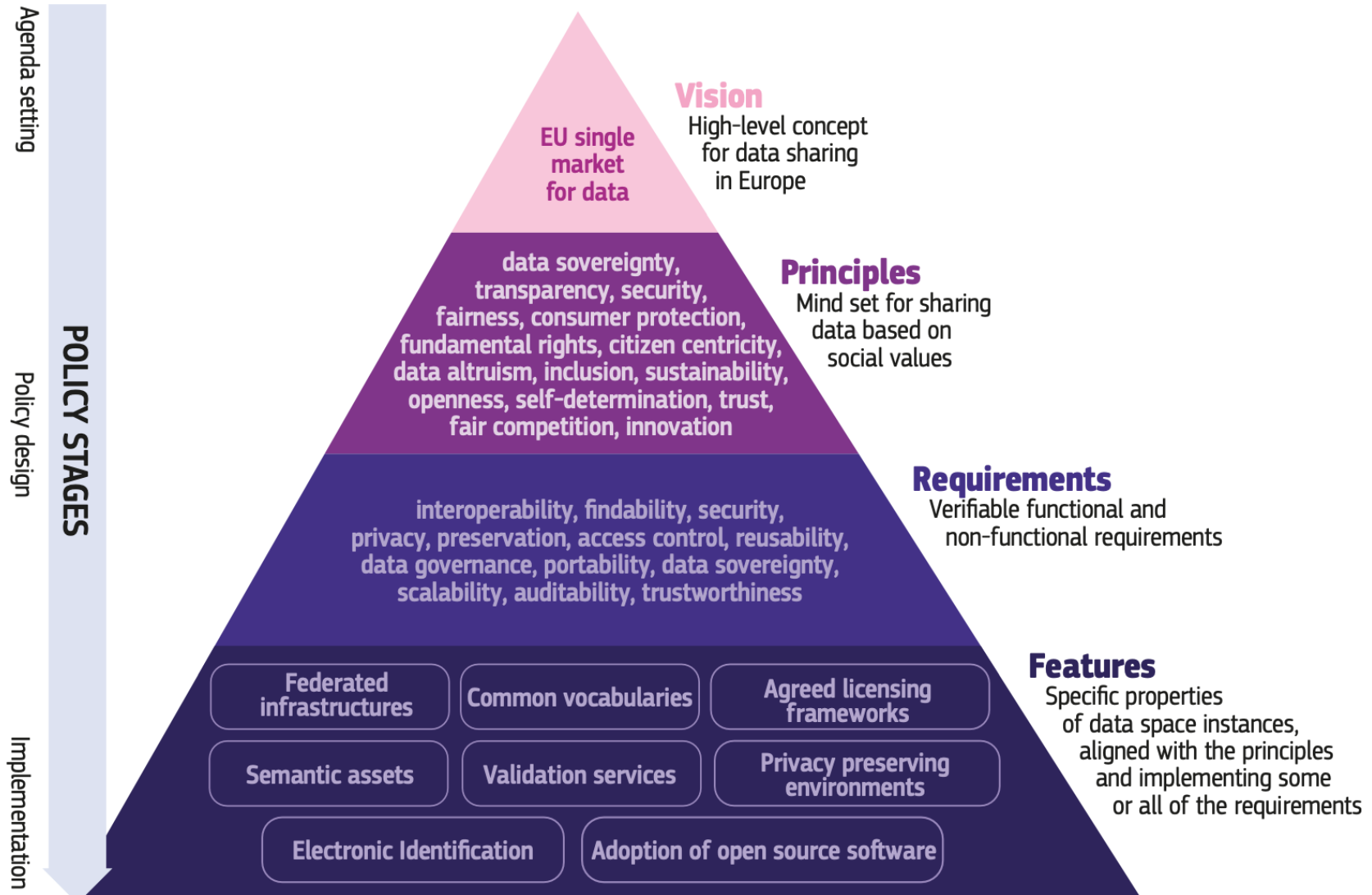
## Consolidation and development:



# What is a data space?

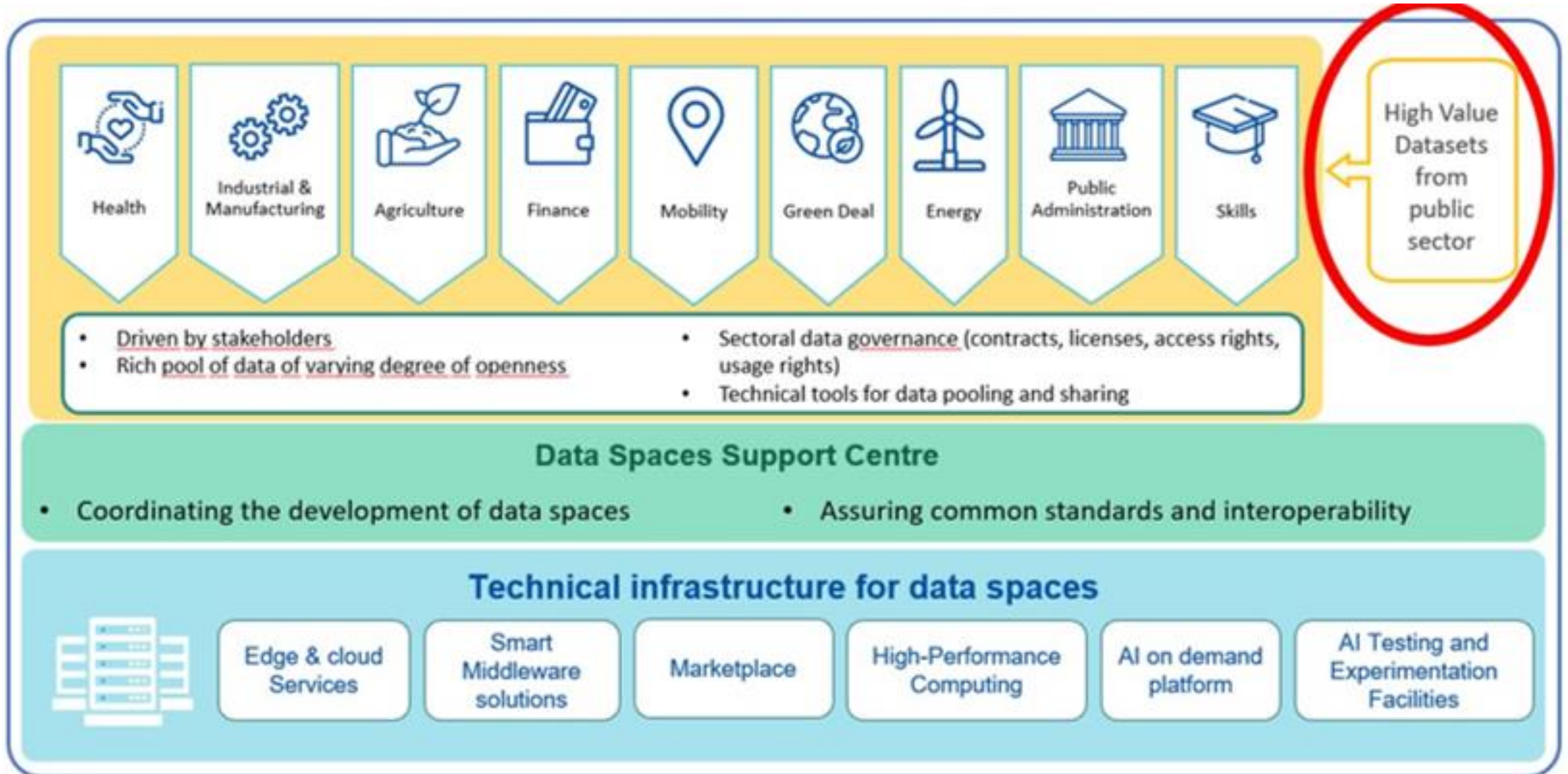


*European Data Spaces - Scientific Insights into Data Sharing and Utilisation at Scale*, JRC Publication 2023



Source: JRC's own elaboration based on existing EU policy documents.

# Common European Data Spaces





# Centrale actors working on data spaces



Started with the research project:  
'Digitale Souveränität Über Daten  
– beiträg des industrial data space'  
(2016)

Head of International Data Space  
Association and Data Space  
Support Centre

## INTERNATIONAL DATA SPACES ASSOCIATION

- [Developing a data spaces protocol](#)
- [Data space radar](#)
- [Data spaces Rulebook](#)
- [Reference architecture model](#)



- Open source software
- Part of many of the EU funded projects



- [Gaia-X Framework Knowledge base](#)
- [Gaia-X Federation Services GXFS](#)
- [Gaia-X Hubs](#)

Organizational convergence



Technological convergence



# What is a data space?



## *Data Space:*

*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**.*

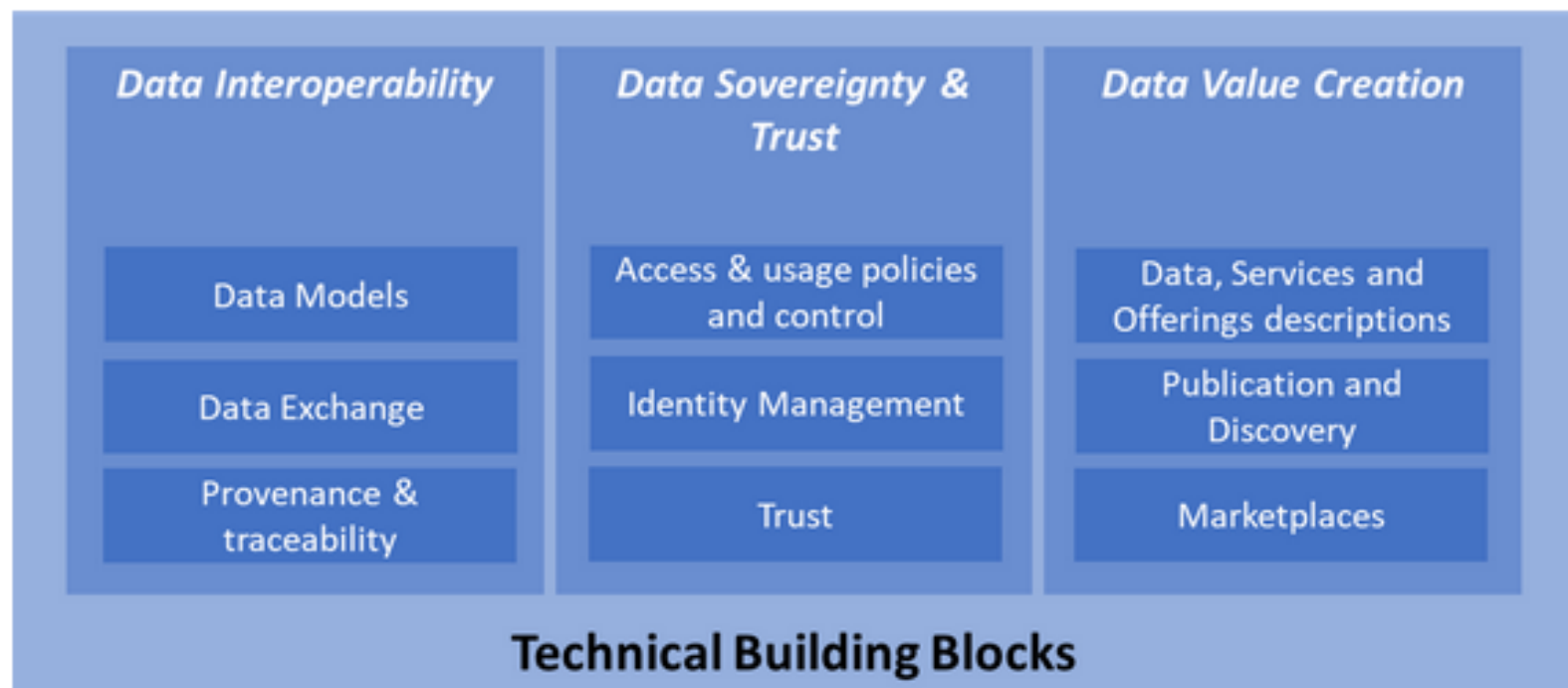
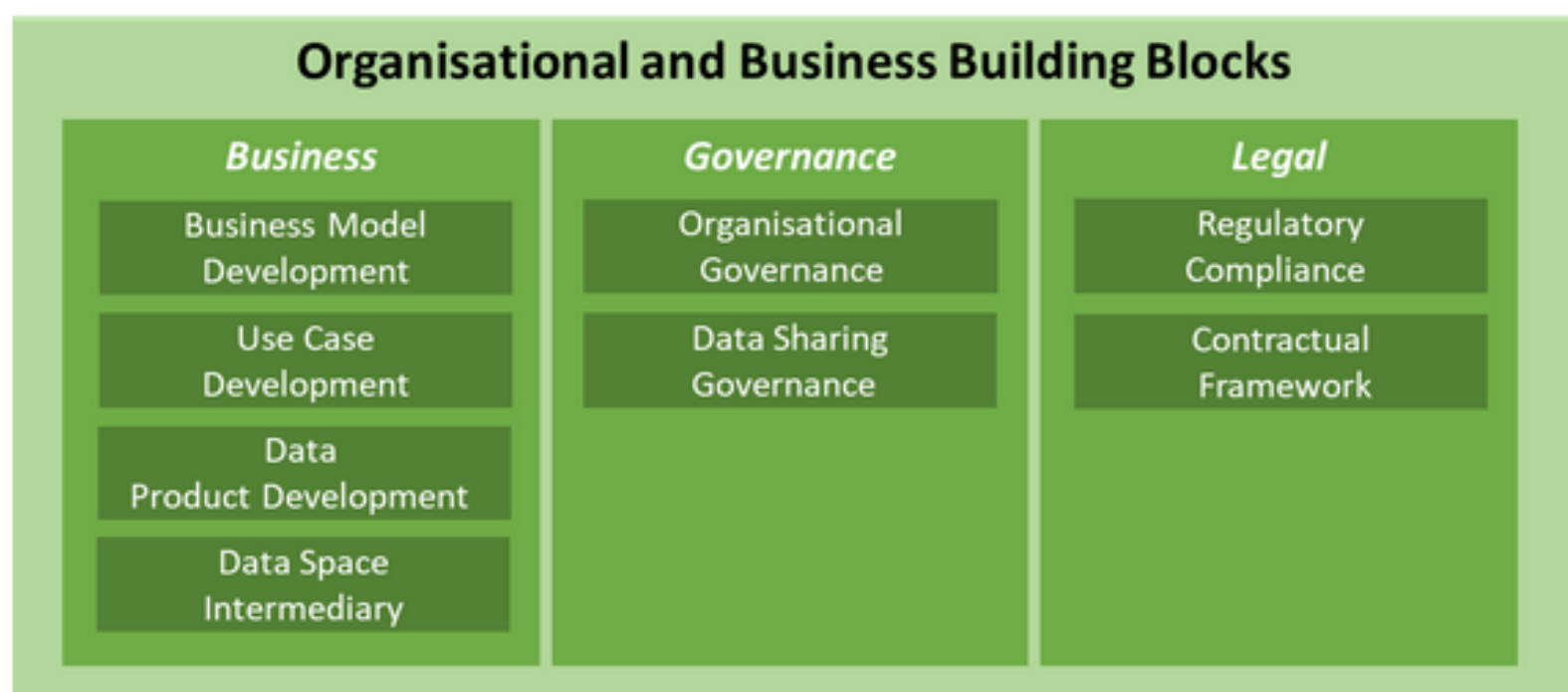
## Usefull resources from DSSC:

- [Starter Kit](#)
- [Glossary](#)
- [Data Space Support Centre Insights](#) på Youtube
- [Data Space Blue Print 0,5](#) (sept. 2023)
- [Strategic Stakeholder Forum](#)

# Blueprint 0.5: Data Space Building Blocks



<https://dssc.eu/space/BBE/178421761/Building+Blocks+Version+0.5+September+2023>



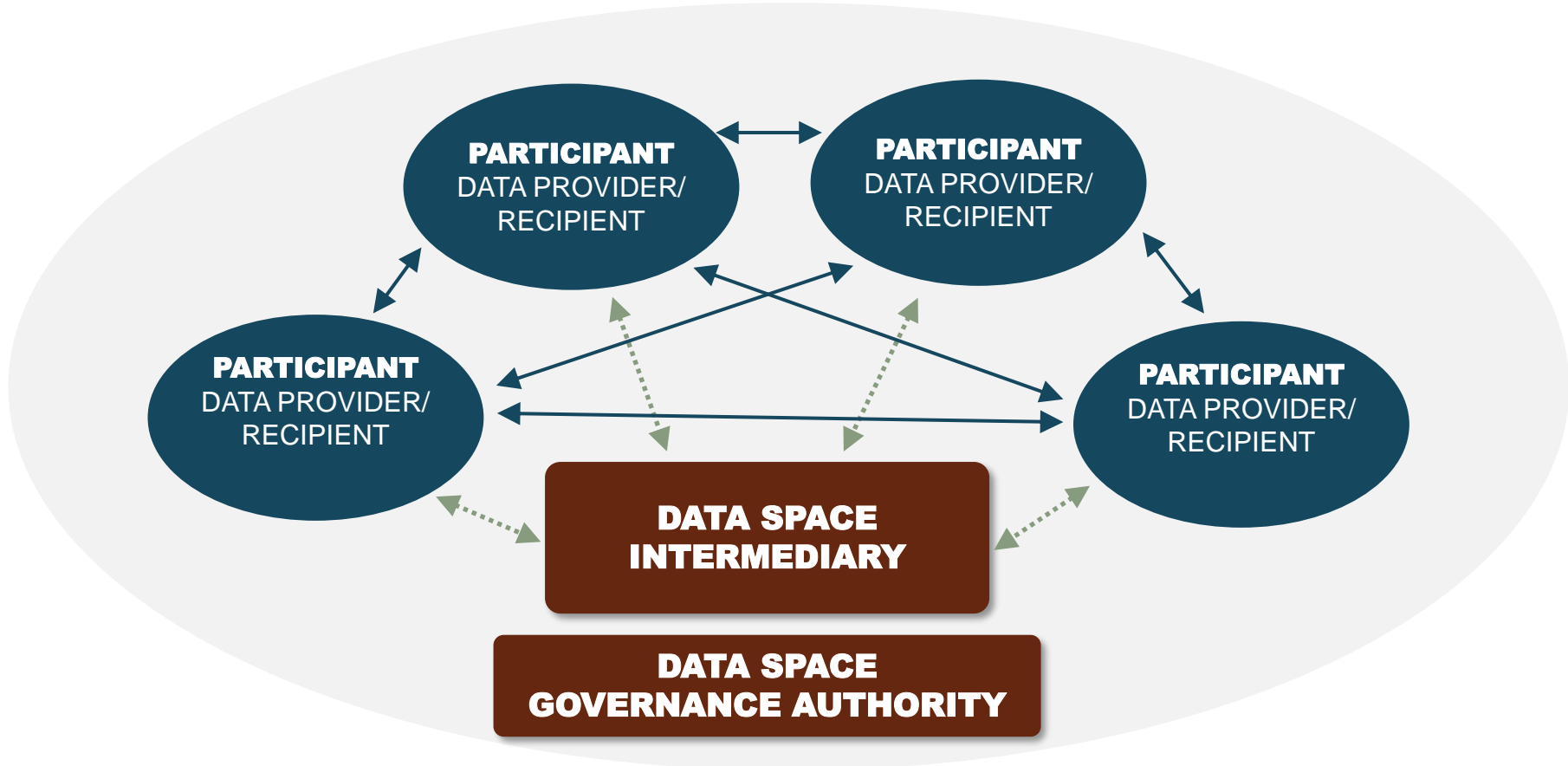
# Data Space



European Data  
Innovation Board

National  
authorities

Standardisation  
and certification  
bodies



↔ Data flow  
↔ Meta data



## DATA SPACE ENABLING SERVICE

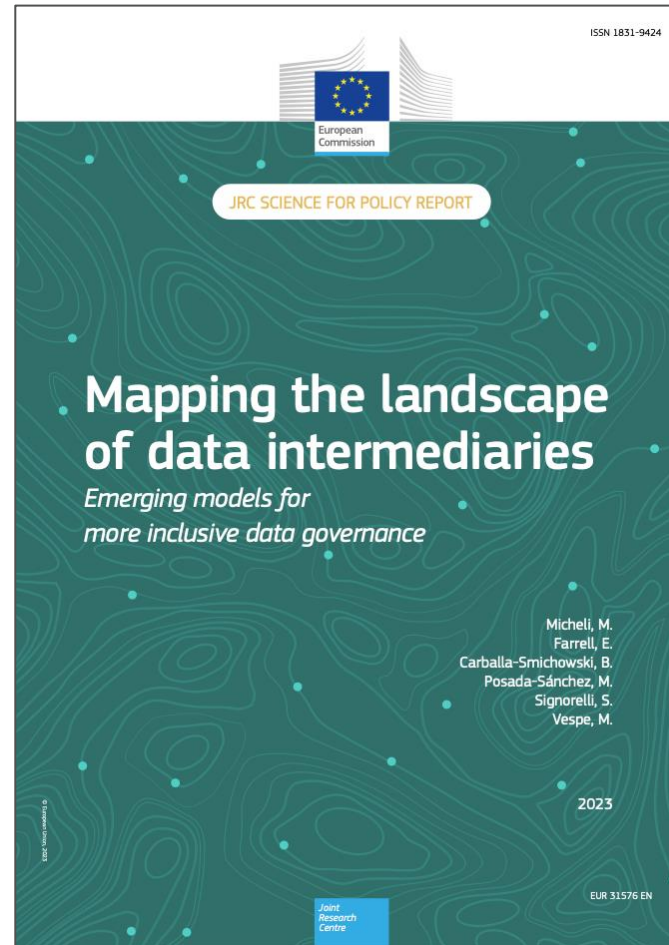
# Data space intermediary

*“A data space participant that provides one or more **enabling services** while not directly participating in the **data transactions** itself.”*

(Data Space Support Centre, Glossary)



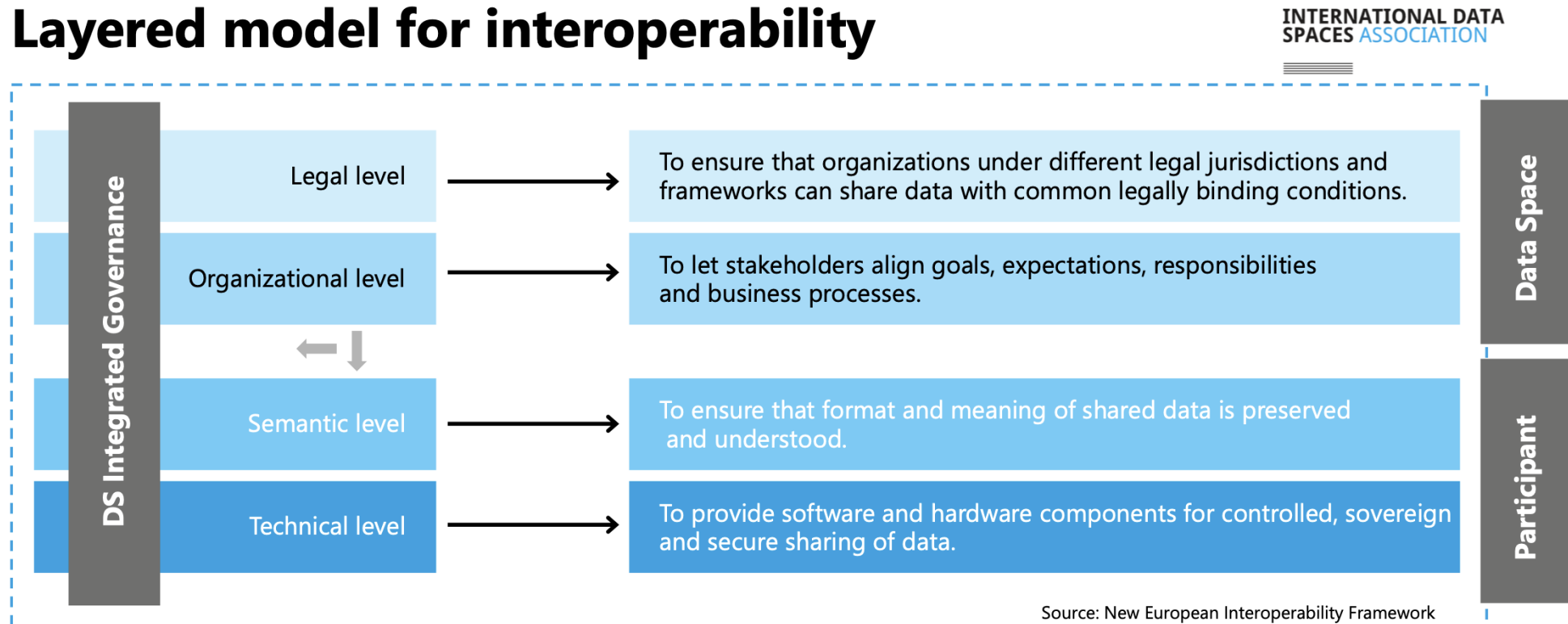
1. Recognised Data Altruism Organisations (RDAO)
2. Data Intermediation Services Providers (DISP)



(JRC, Data Intermediaries, 2023)

# A project of interoperability and shared rules

## Layered model for interoperability

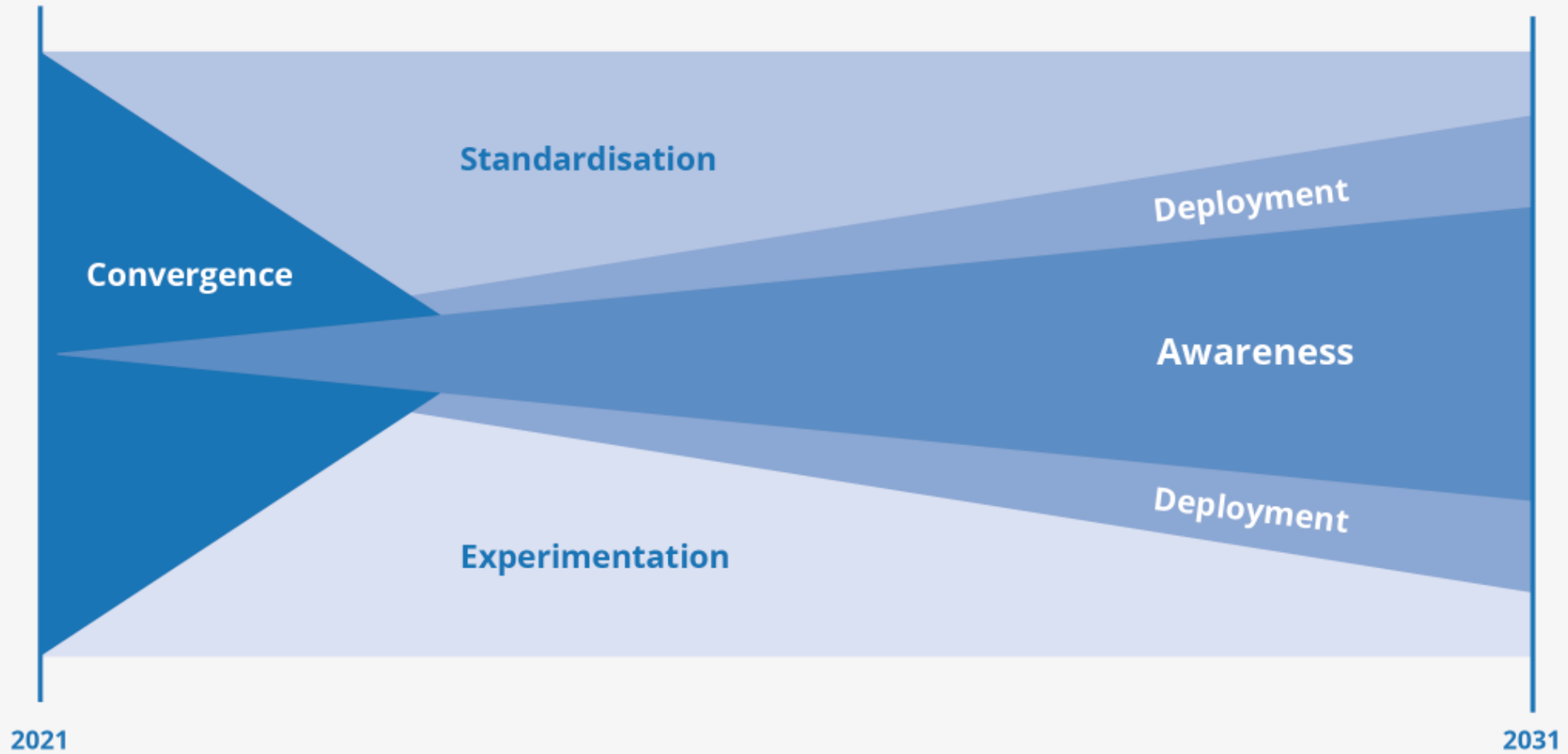


- **Intra data space interoperability**, between the data space authority, processing, and data sharing building blocks within a single data space instance
- **Inter data space interoperability**, between multiple data space instances at each of the functional levels

# What is the time perspective?

Approach to realise the potential of data spaces

10-15 years  
1,5-2 billion €



# Open for dialog



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