

Data Spaces Symposium

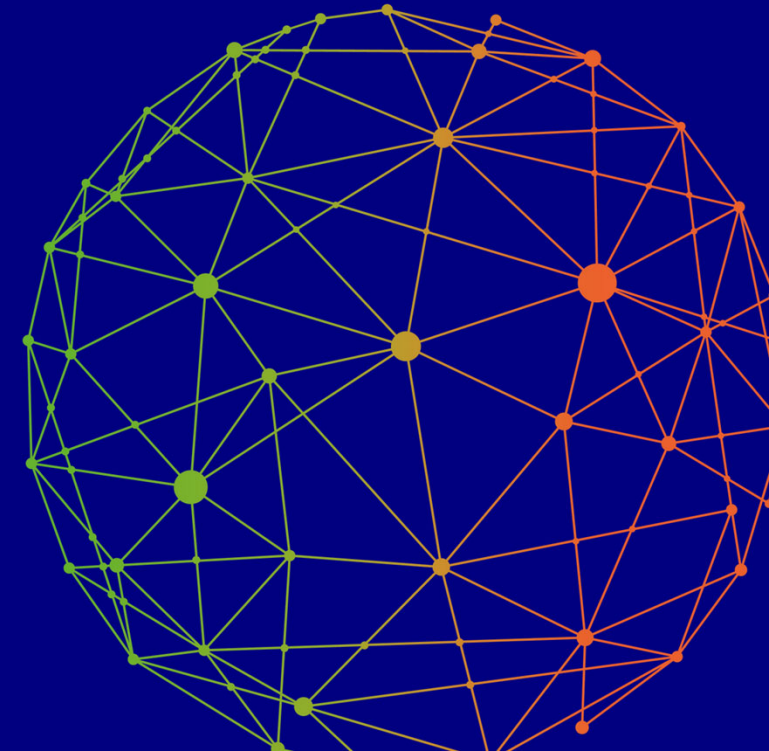
13:30

Designing and delivering the European
single market for data

Data space tech [facilitated by the DSSC]

Designing and delivering the European single market for data (Part 1 of 2)

Questions? Use the QR-Code



Data Spaces Symposium

Setting the scene | Designing and delivering
the European single market for data

Boris Otto

The Network of Stakeholders

Designing and delivering the European single market for data

Data Spaces Symposium 2025



Ana García, BDVA

Testimonials
from our
guests:



Georg Rehm, DFKI



Kuldar Aas, Ministry
of Justice and Digital
Affairs, Estonia

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The Data Spaces Support Centre receives funding from the European
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A Network of Stakeholders (NoS) ?



About ▾

Communities ▾

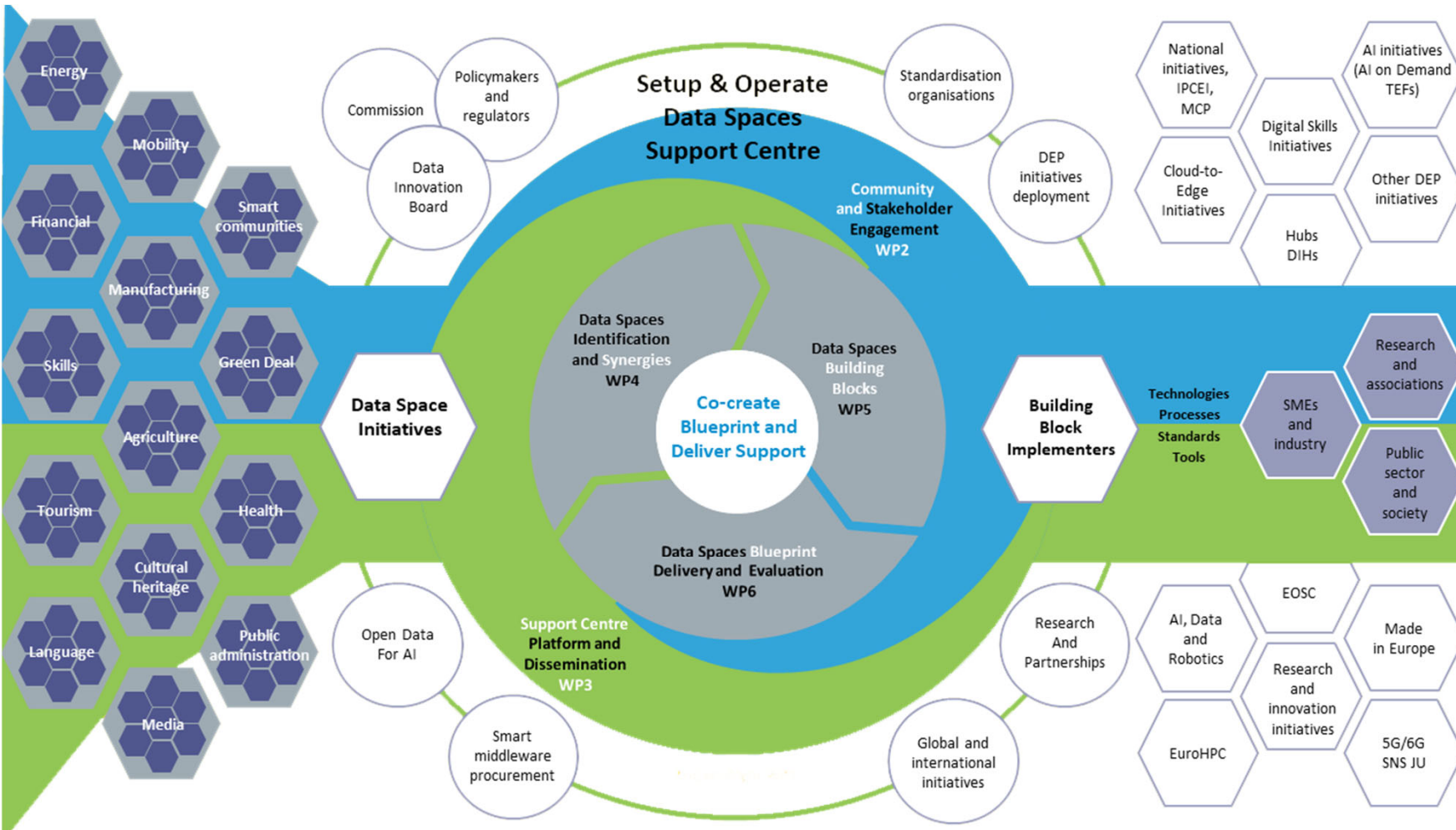
News ▾

Events ▾

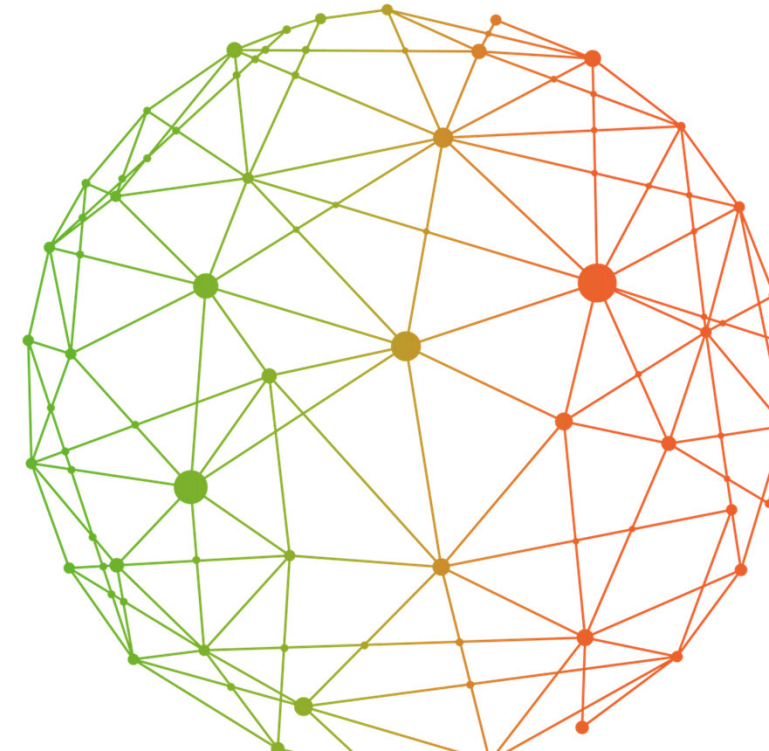
Resources ▾

Contact us ▾

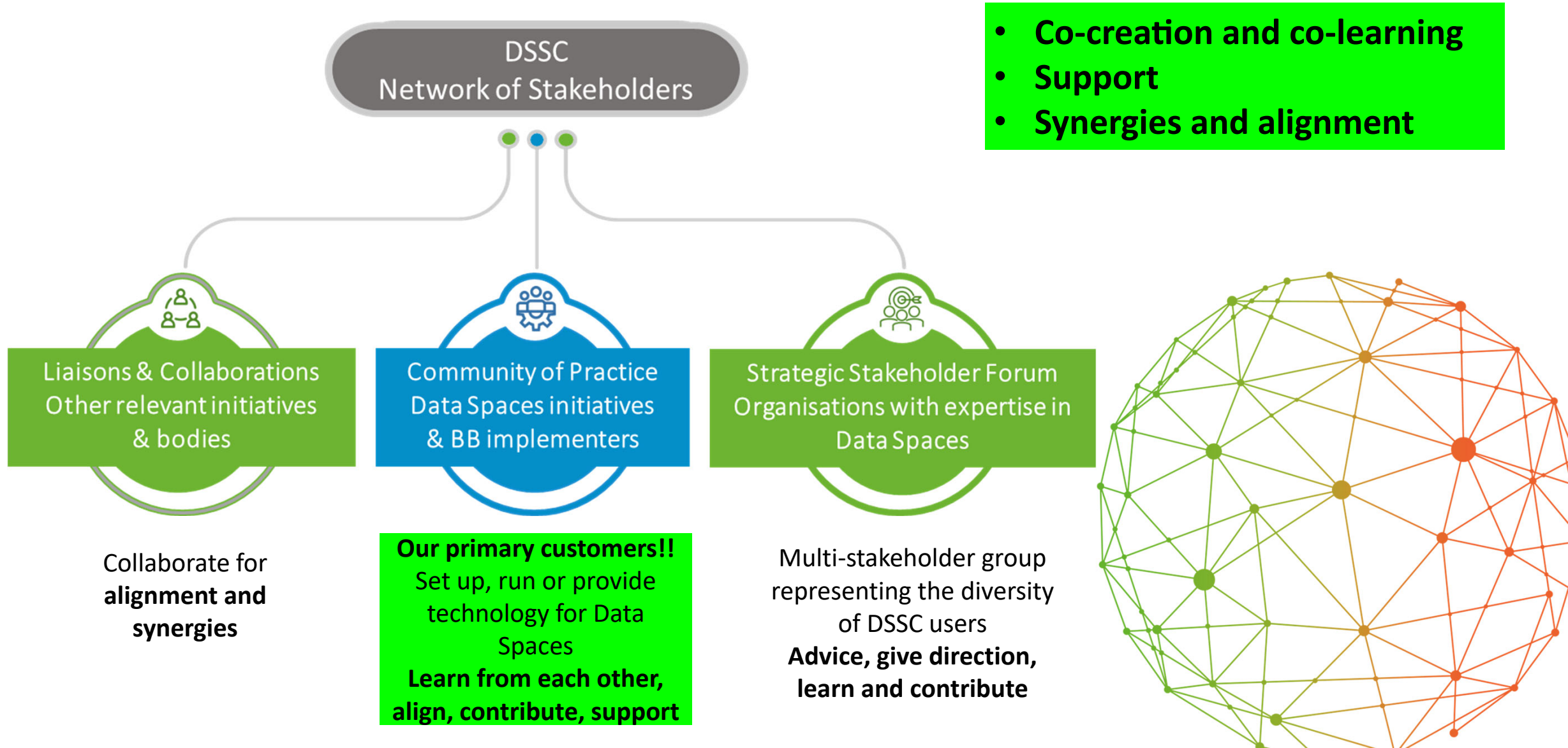
More ▾



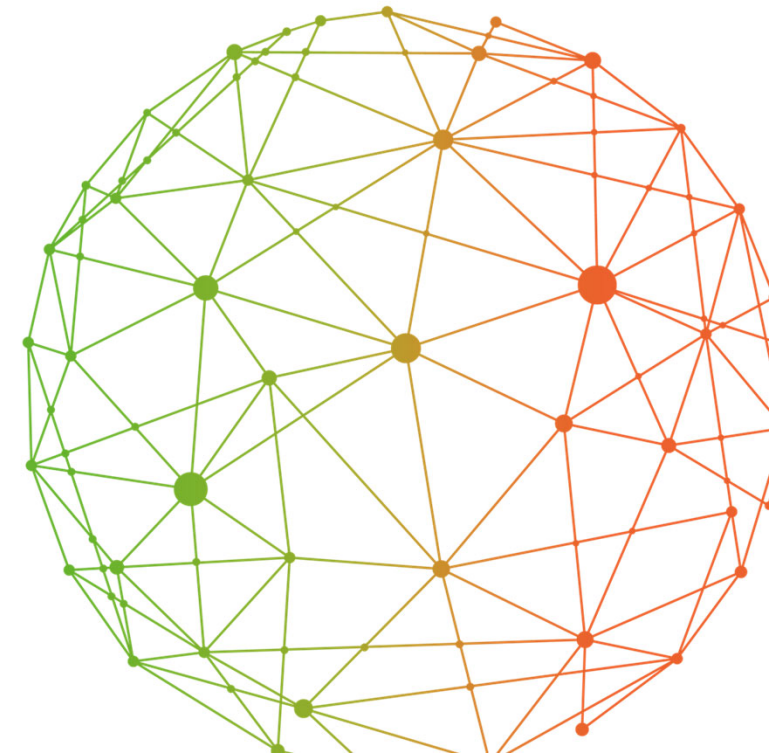
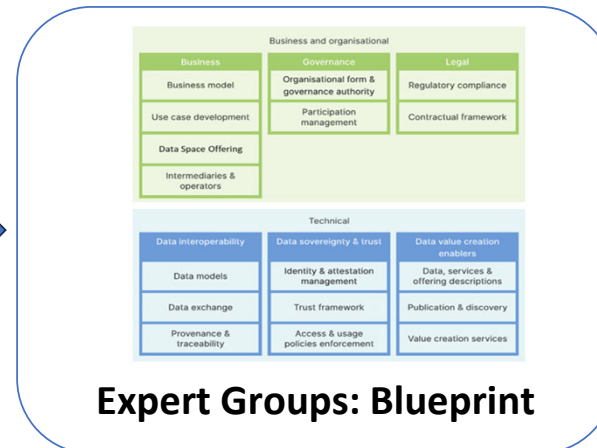
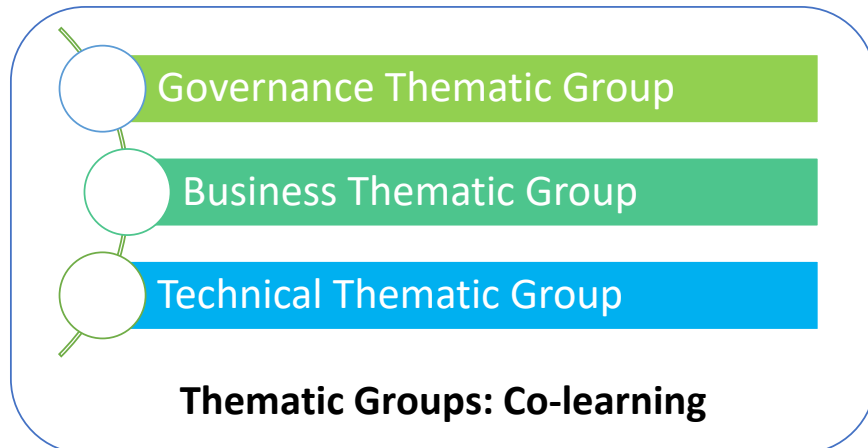
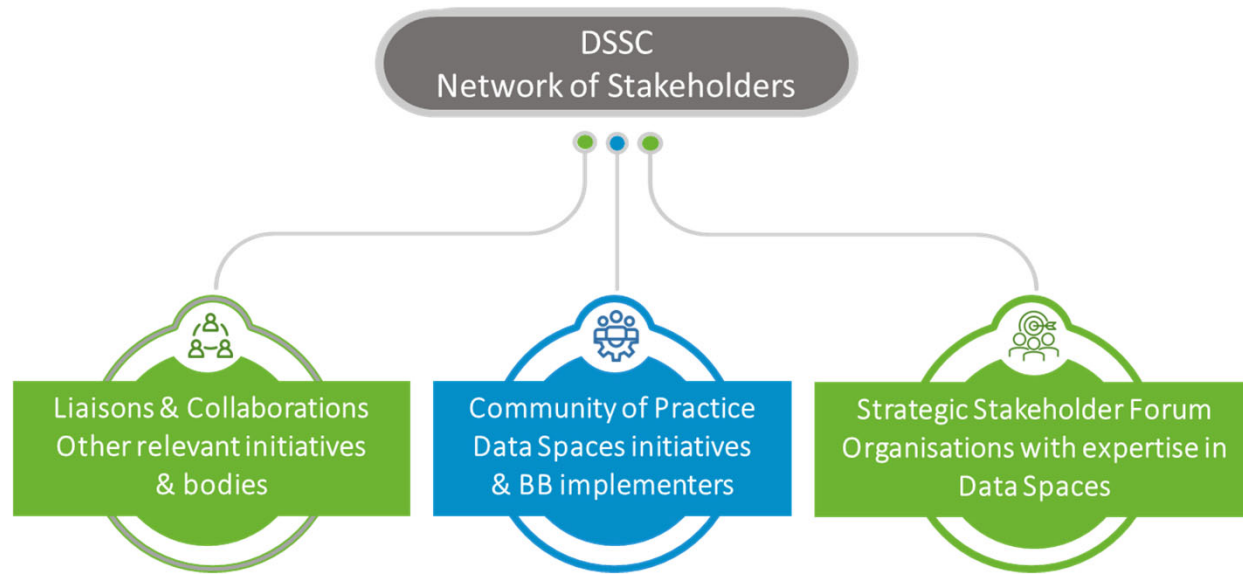
Organizations and initiatives involved in the development of data spaces



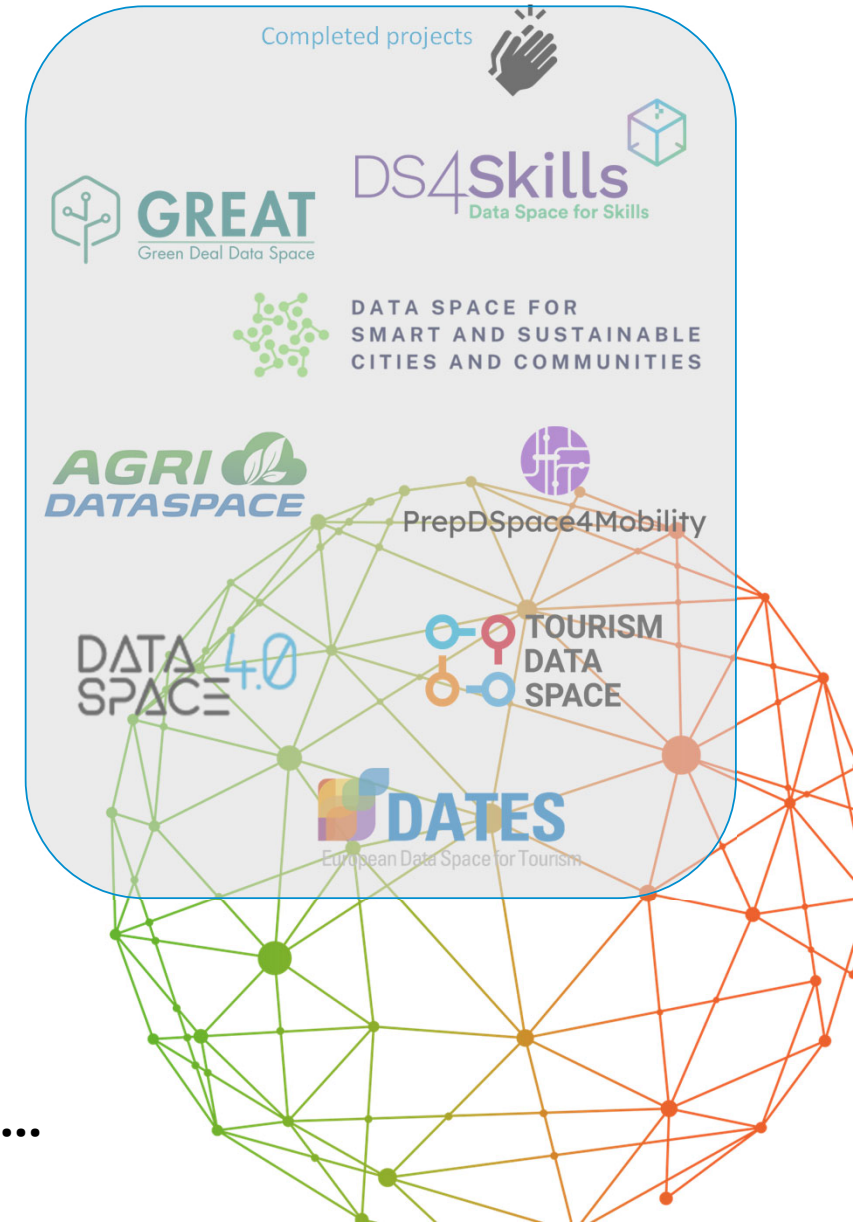
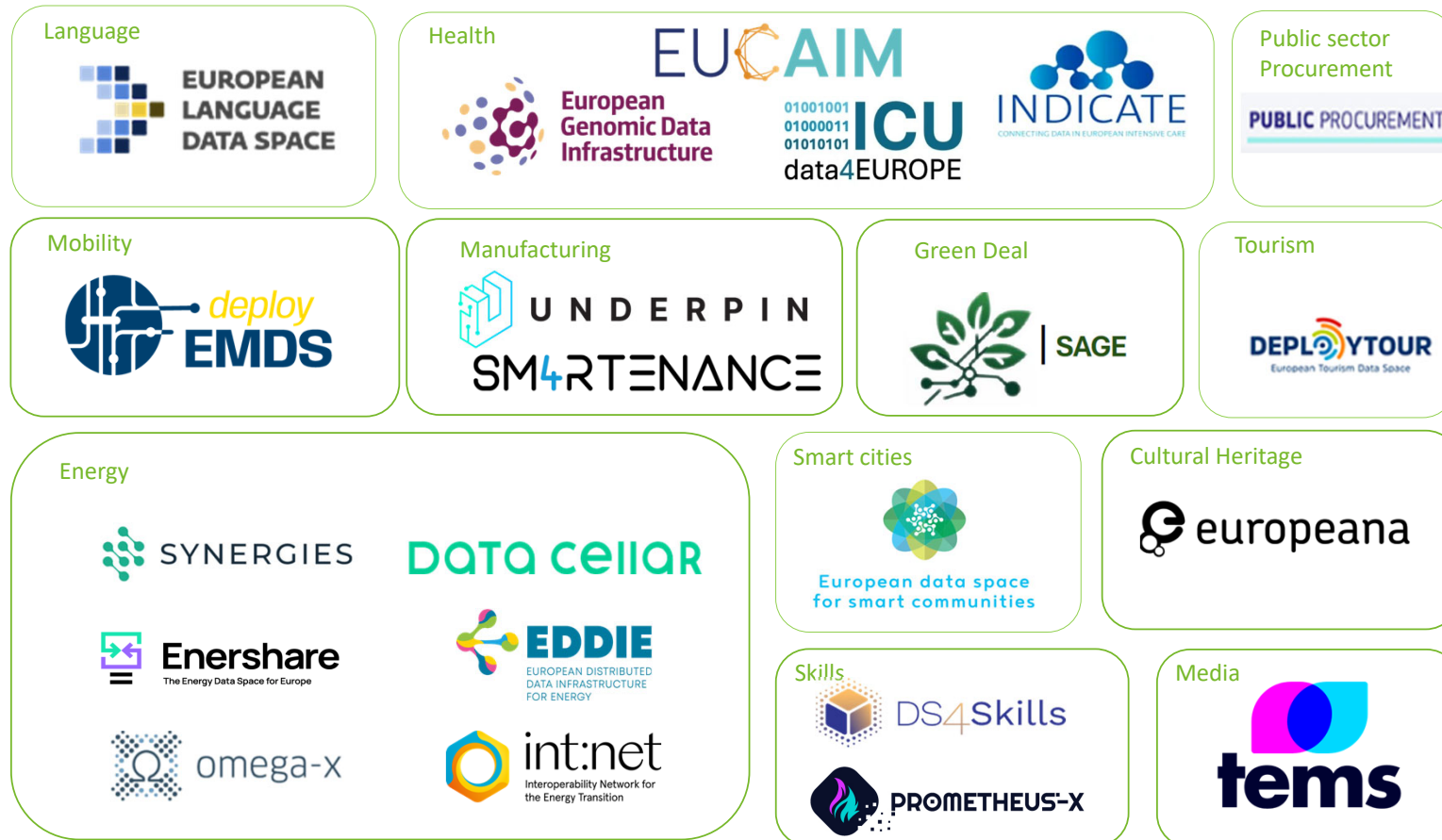
NoS: how is it organised ?



Thematic and Expert Groups



Diving into the NoS: Community of Practice (CoP)

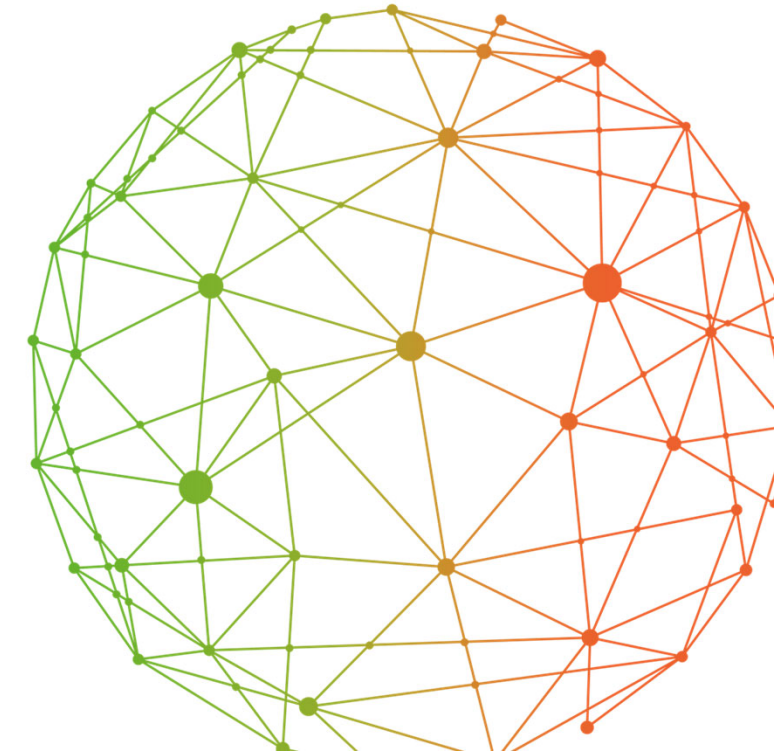
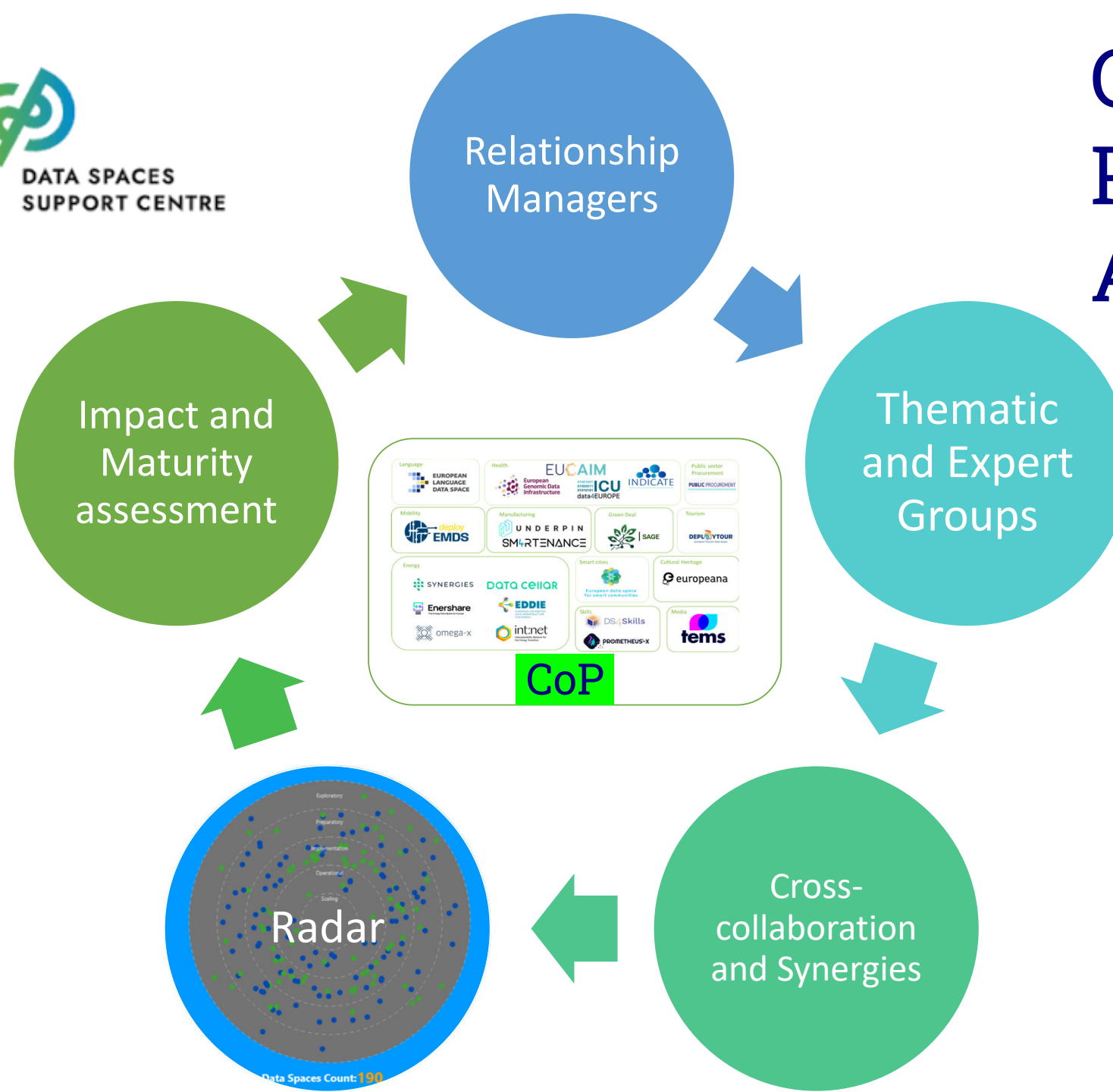


+ Collaboration with Simpl



**Focus on Digital Europe Programme (DEP) funded Data Spaces ...
but ALL Data Spaces are relevant !!**

Community of Practice (CoP): Activities



Diving into the NoS

Strategic Stakeholder Forum (SSF)



**DATA SPACES
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EC different DGs



National Public Authorities & Agencies



Non-Profit Associations & Technology Platforms



RTOs



National/Regional data spaces enabling initiatives



Industry Associations

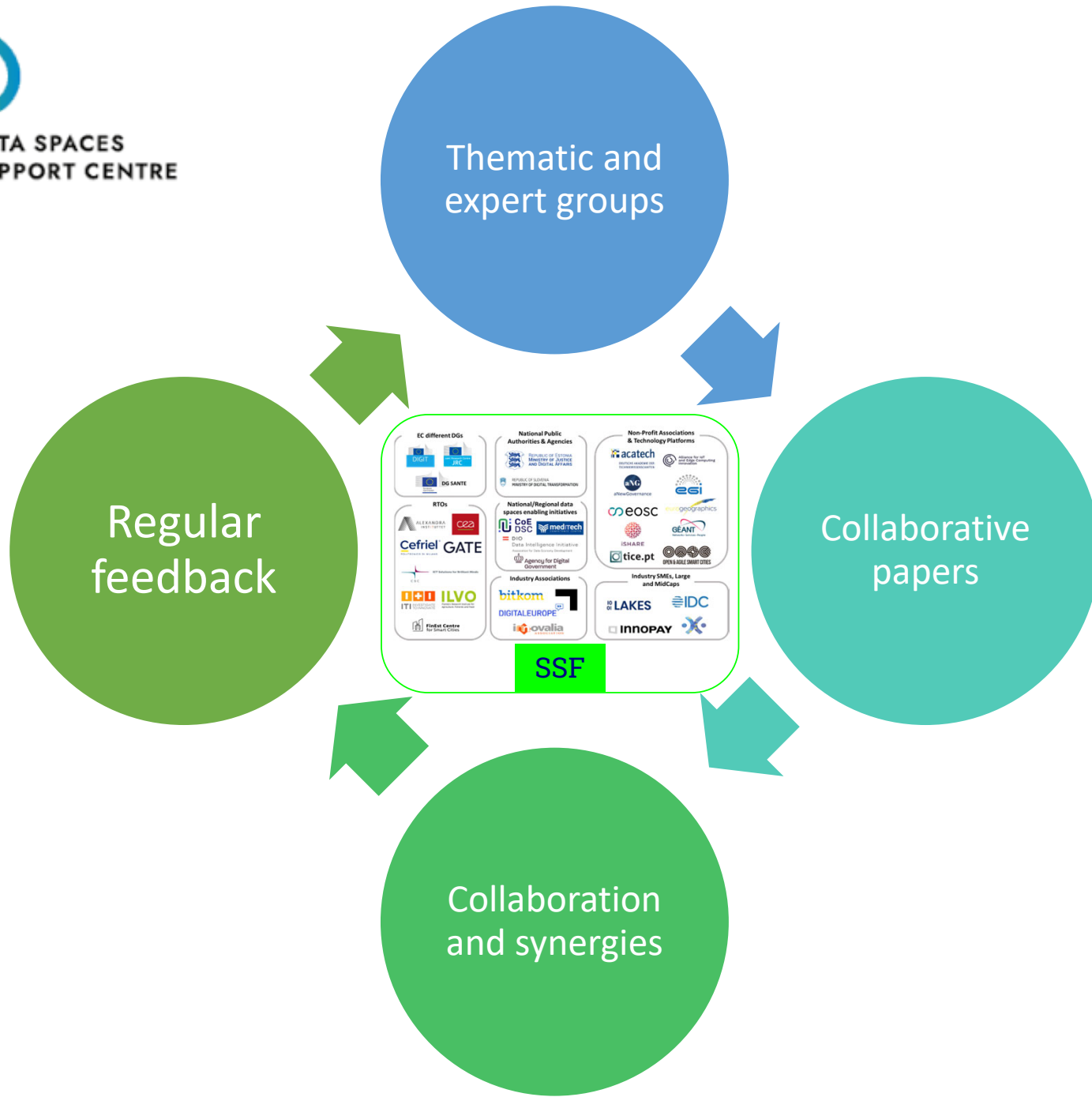


Industry SMEs, Large and MidCaps



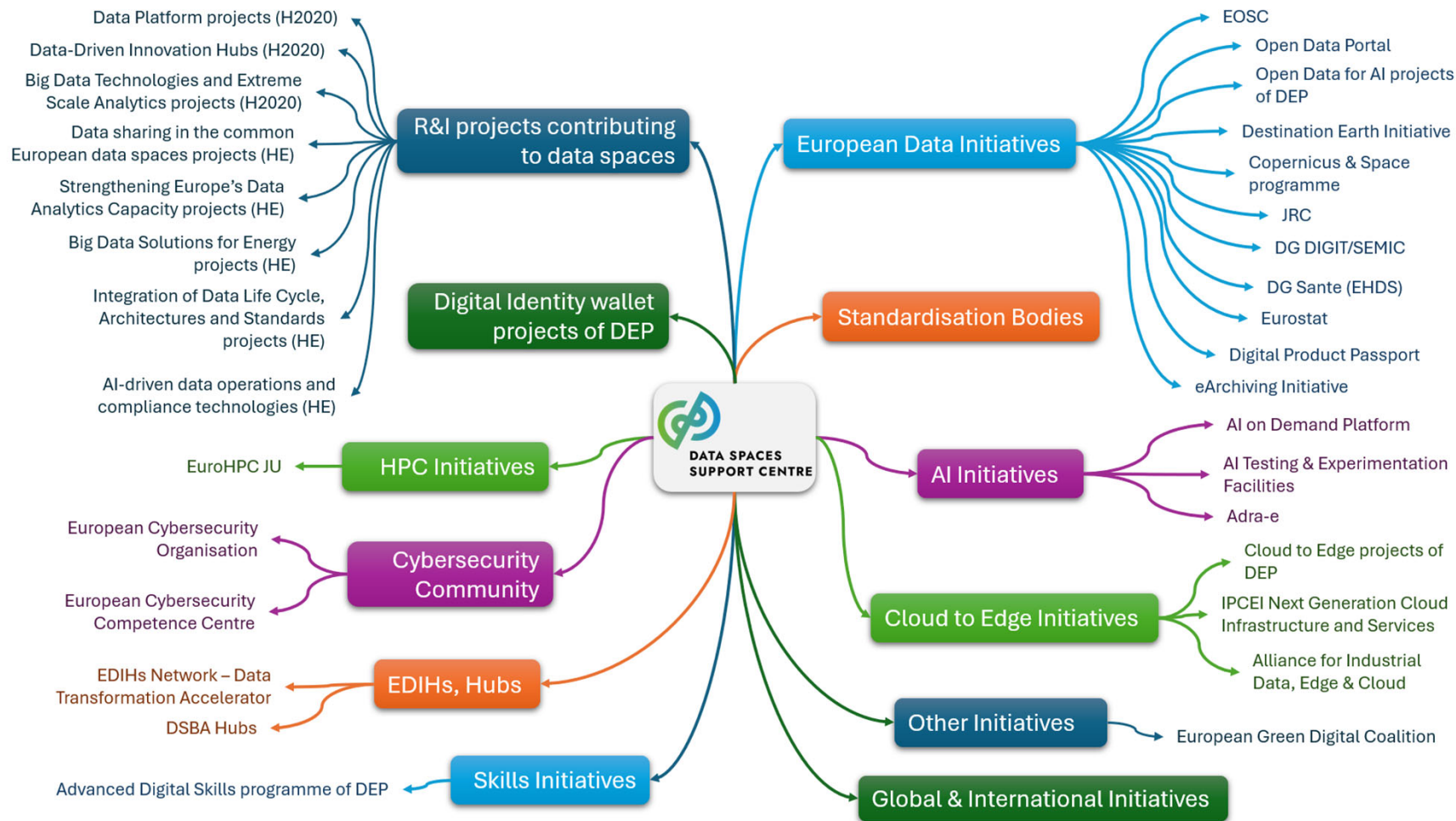
- **Multi-stakeholder group representing the diversity of DSSC users**
- **35 members in the Strategic Stakeholder Forum**
- **Targeting presence in all EU MSs (and beyond)**

Strategic Stakeholder Forum (SSF): Activities



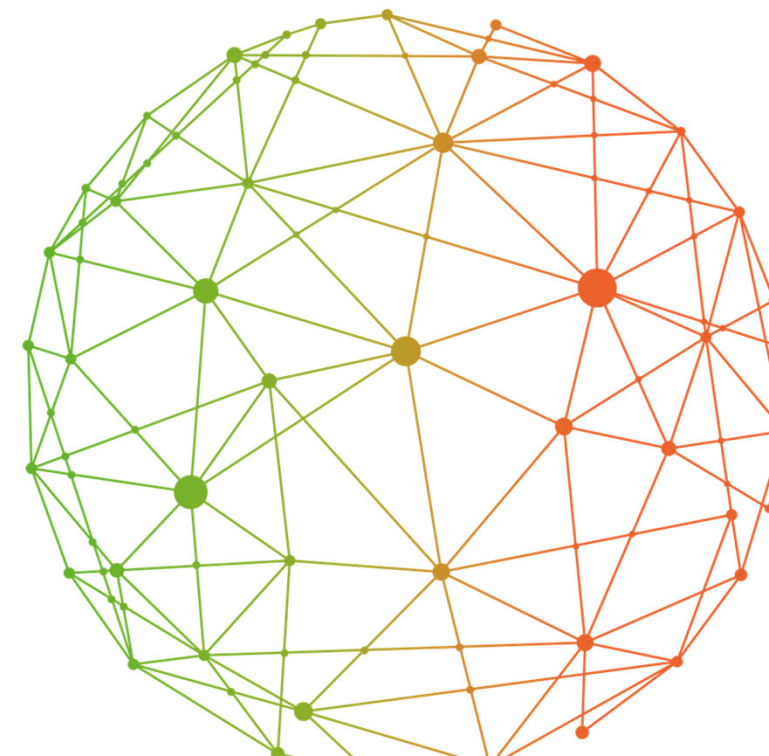
Diving into the NoS

Collaboration and Liaisons (I)

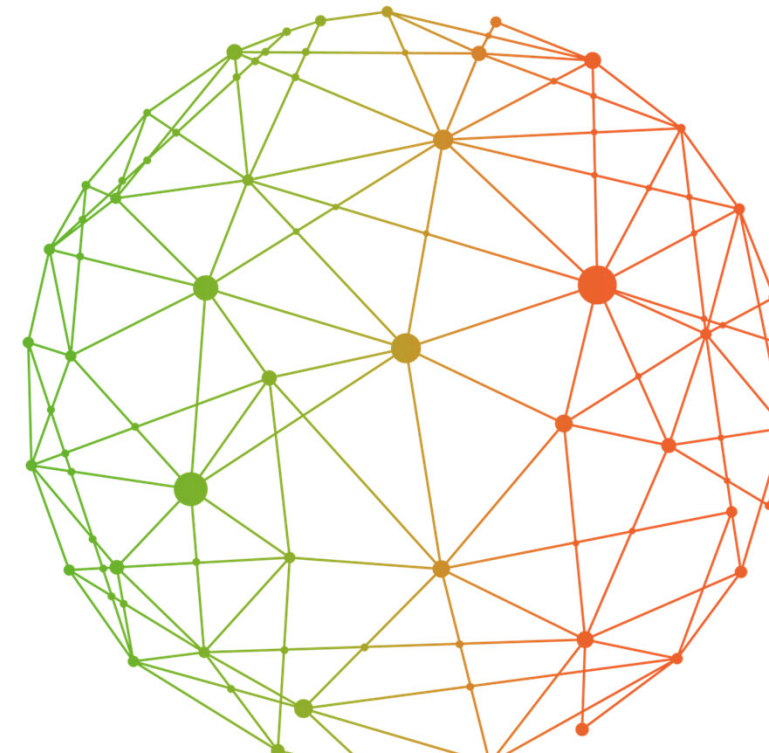
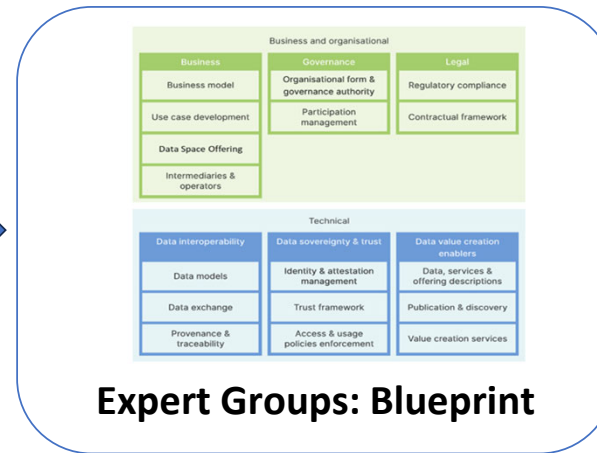
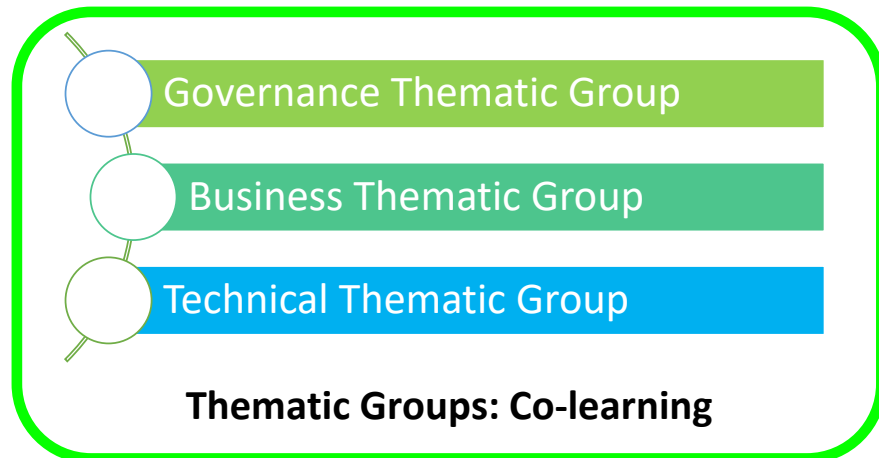
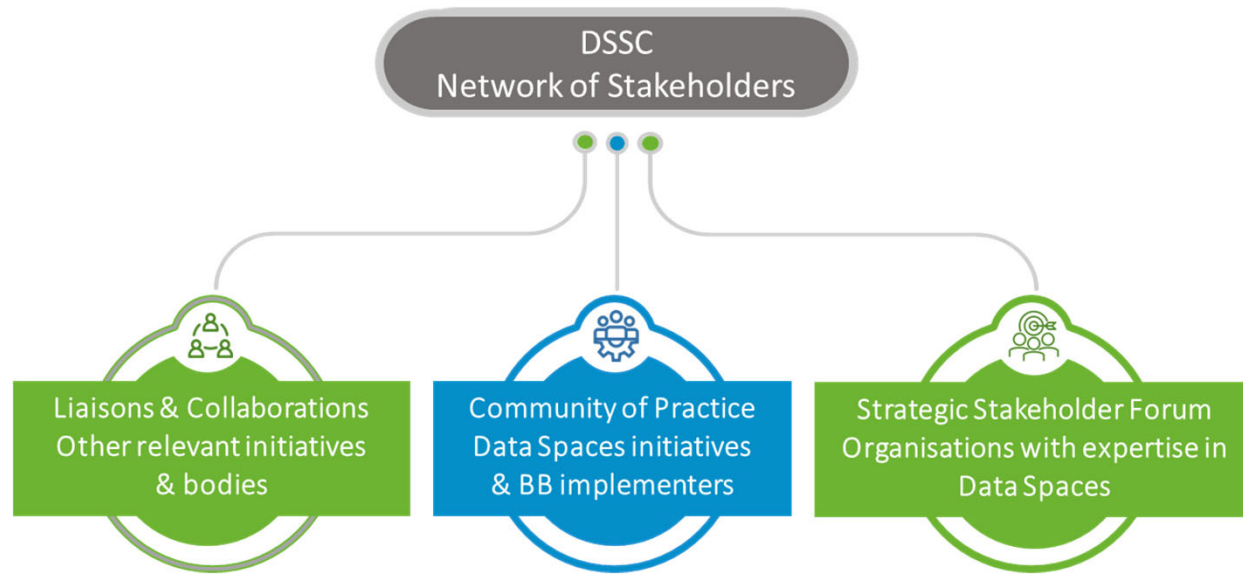


Collaboration with the
**European Data
Innovation Board
(EDIB)**

100+ initiatives engaged for alignment, influencing, knowledge sharing and bringing requirements



Thematic and Expert Groups



Example Thematic Groups: Technology Thematic Group



Meetings / Topic	
Follow up meeting 14/12/2023 - Provenance and Traceability	Eight meeting
Follow up meeting 11/01/2024 - Value Added Services	Nineth meeting
Follow up meeting 15/02/2024 - Consent Management I	Tenth meeting
Follow up meeting 07/03/2024 - Data Quality I	11th meeting
Follow up meeting 04/04/2024 - Blueprint v1.0	12th meeting
Follow up meeting 08/05/2024 - Consent Management II	13th meeting
Follow up meeting 13/06/2024 - Data Quality II	14th meeting - Technology TG (13 June 2024)
Follow up meeting 04/07/2024 - Data Space Connectors	15th meeting - Technology TG (4 July 2024)
Follow up meeting 05/09/2024 - Data Spaces Federation	16th meeting - Technology TG (5 September 2024)
Follow up meeting 10/10/2024 - DSSC Blueprint v1.5	17th meeting - Technology TG (10 October 2024)
Follow up meeting 07/11/2024 - DSSC Blueprint v2.0	18th meeting - Technology TG (21 November 2024)
Follow up meeting 12/12/2024 - Data Spaces architectures and infrastructures	19th meeting - Technology
Follow up meeting 23/01/2025 - Data Provenance and Traceability	20th meeting - Technology
Follow up meeting 20/02/2025 - SIMPL architecture and components	21st meeting - Technology

Thematic Group Technology of Data Spaces

About

The "Technology of Data Spaces" Thematic Group brings together experts, professionals and researchers interested in technology and technical challenges in Data Spaces with the main objective of sharing knowledge, sharing best practices and identifying and co-creating new knowledge. If your organisation is part of the Strategic Stakeholder Forum, Community of Practice or our larger Network of Stakeholders (NoS) and you are interested and can contribute to this topic you are very welcome to join us!



Meet the Thematic Group leads



[Clara Pezuela](#)
VP Funded Programs



[Daniel Alonso](#)
Senior Technical Lead Big Data and AI ecosystems

Interested in collaborating with us?

Join us !!!



DSSC Support

Welcome! You can raise a request among the following options.

What can we help you with?



Submission to the Toolbox

Submit a request to list implementations in the DSSC Toolbox.



Get Information

Looking for a document, not sure about a definition, missing an information about the DSSC?



Get Support

Looking for practical support while setting up your data space project?



Get Involved

Looking to collaborate with the DSSC on the co-creation of assets?



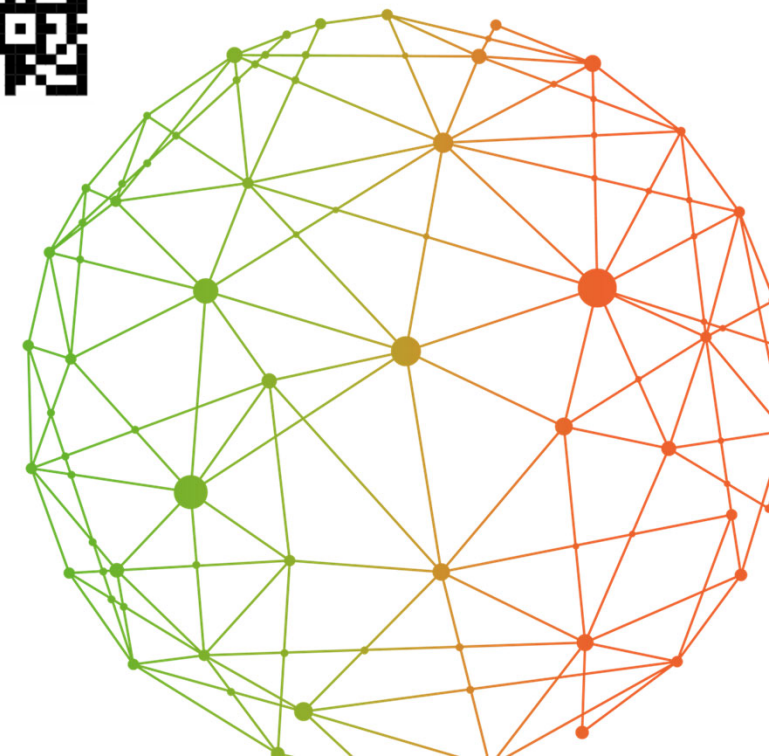
Subscribe to the Newsletter

Get monthly highlights about DSSC activities, events and important publications.



Provide feedback and contributions

Submit your requests for contributions and feedback about DSSC assets, including building blocks implementations.



The Network of Stakeholders

Designing and delivering the European single market for data

Data Spaces Symposium 2025

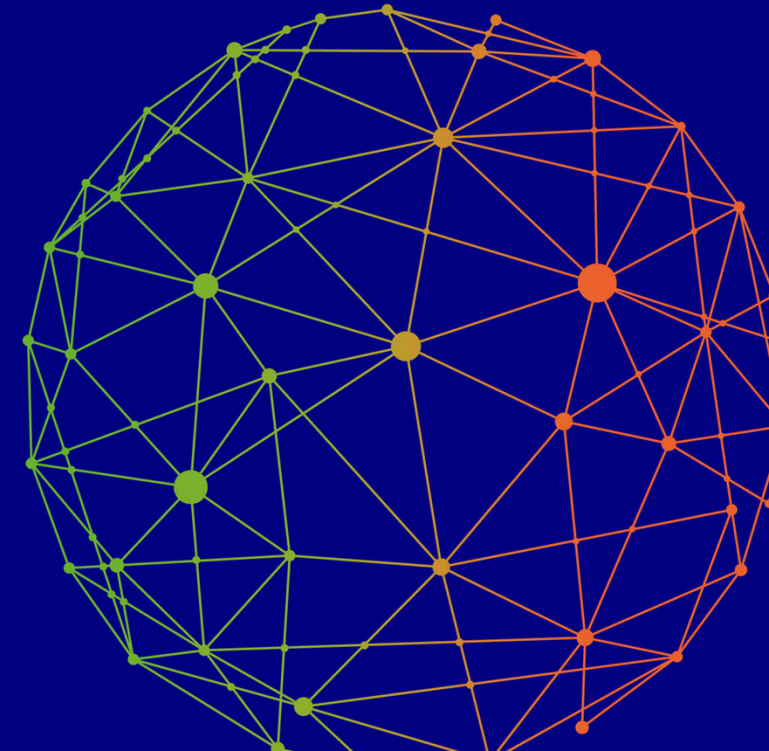
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Starter kit

Designing and delivering the European single market for data

Data Spaces Symposium 2025



Tuomo Tuikka
VTT

Our Guest:



Desislava Petrova-
Antonova
GATE institute

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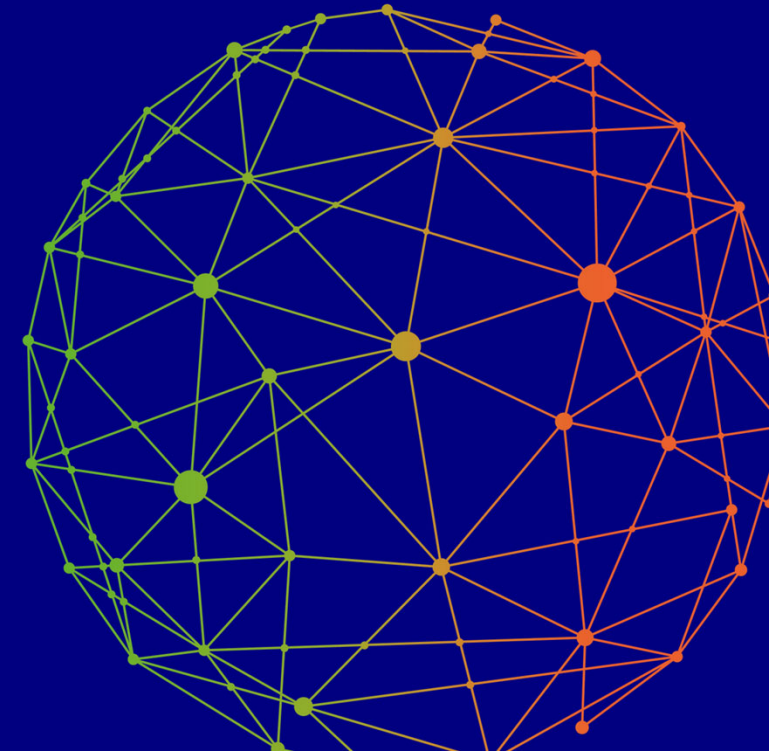


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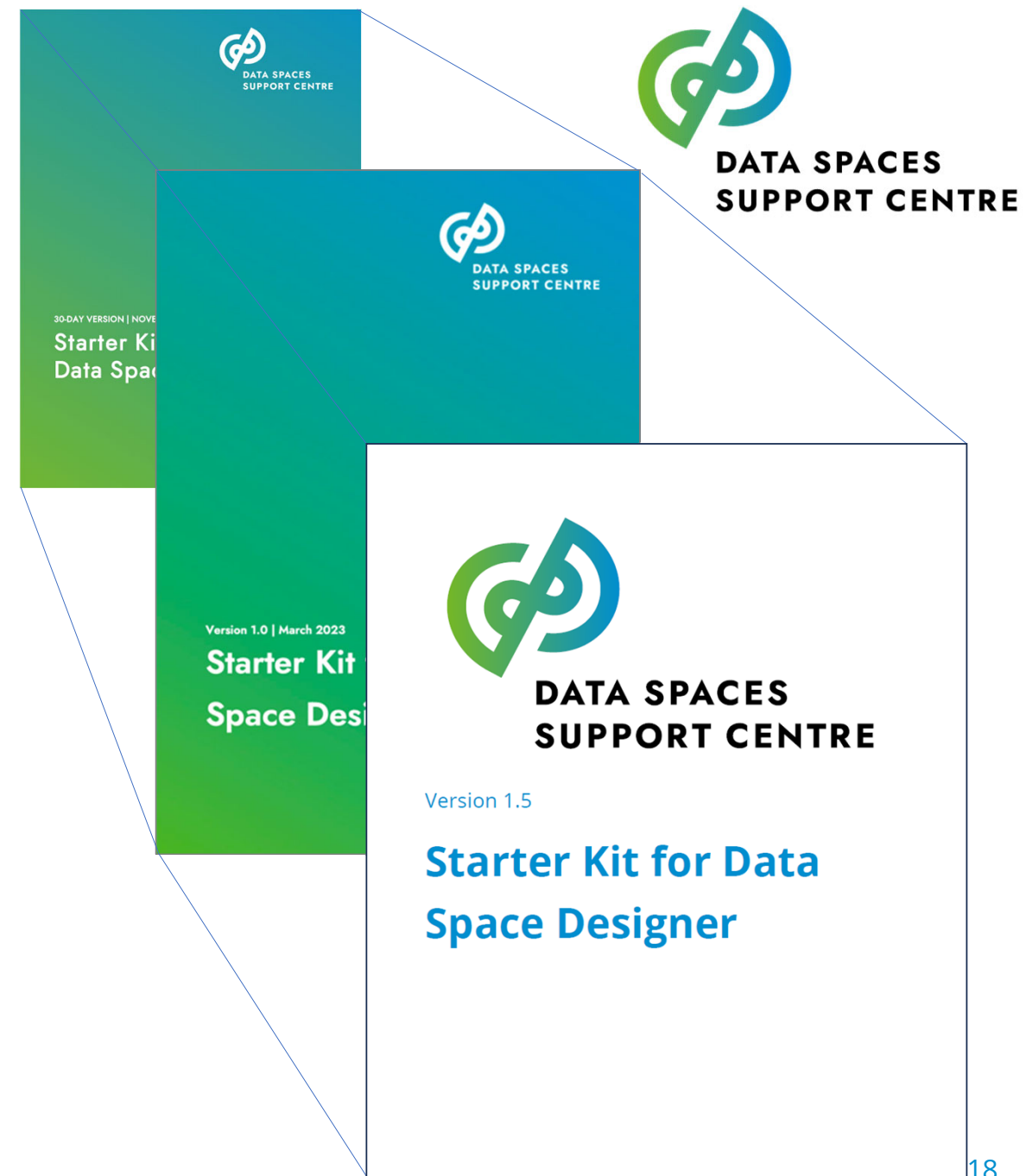
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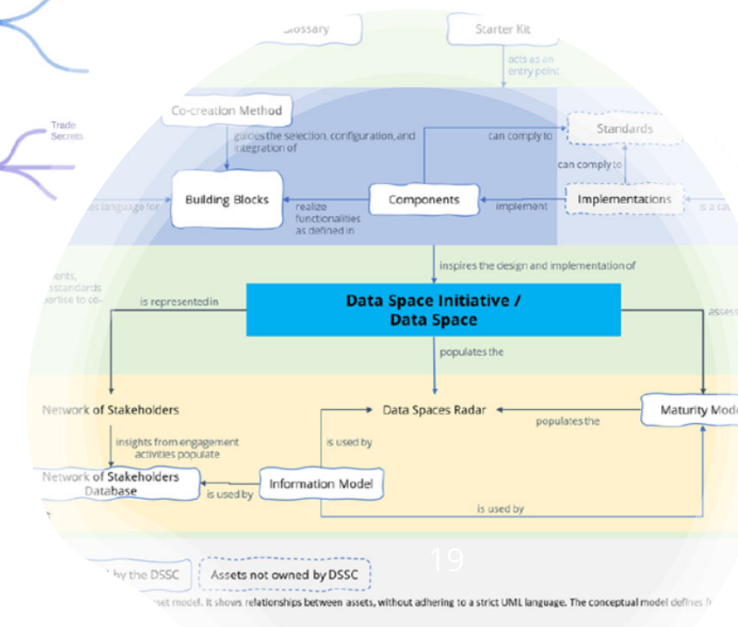
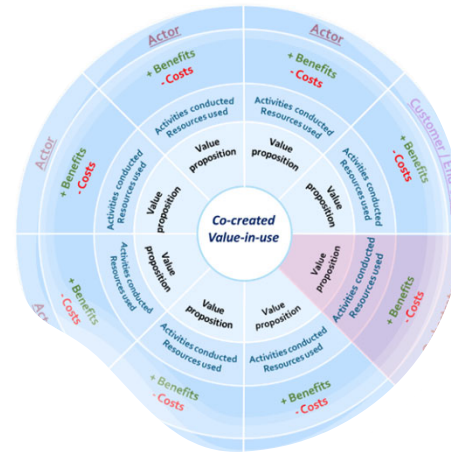
Starter Kit

- An easy introduction to data spaces and Data Spaces Support Centre
- Helping emerging data spaces
- For data space designers, data producers, data consumers, providers of intermediary services, or services and business applications.

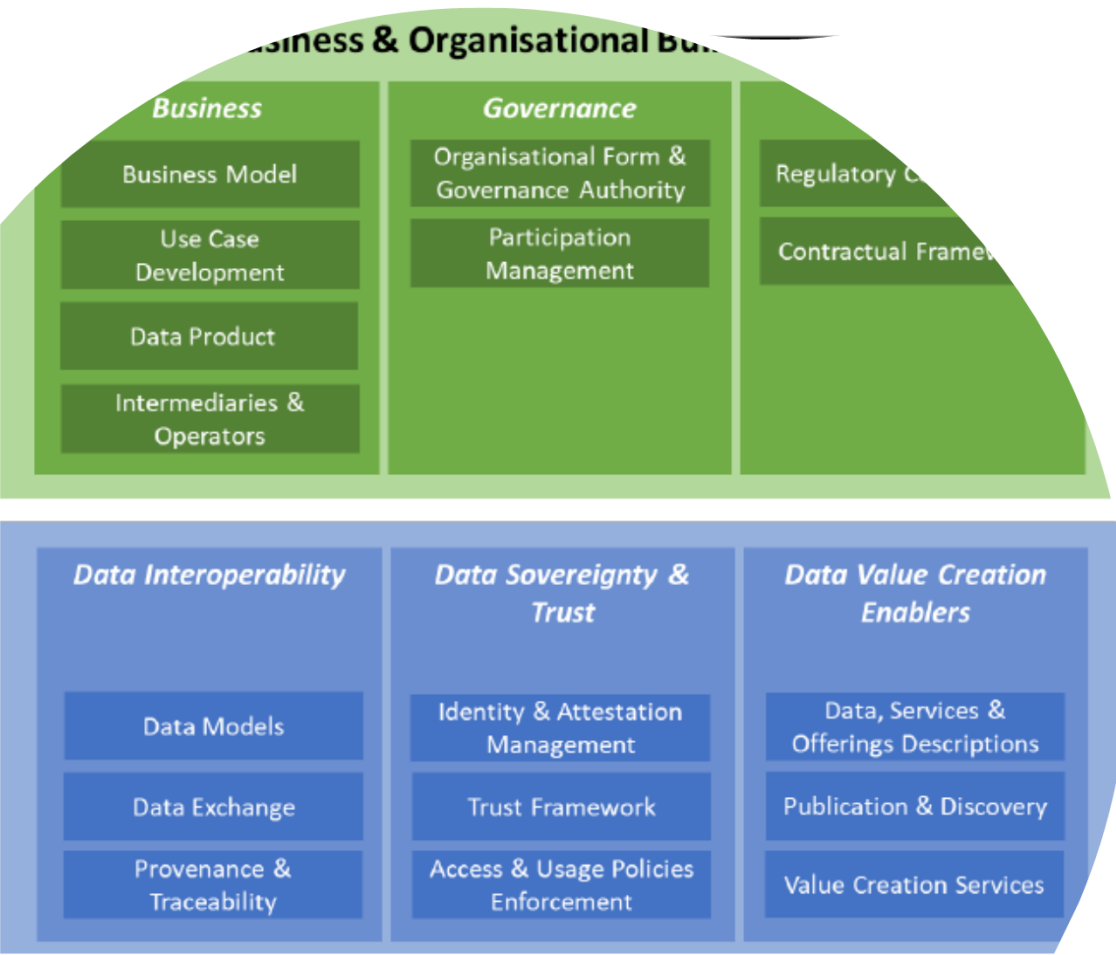


Starter kit contents

- Explaining basic concepts
- Data Spaces Support Centre assets
- Data Space Start-up Checklist
- Design Approach
- Resources



Intra-Data Space Interoperability



Updates 2024 ->



Interoperability and data quality section

Data interoperability
Intra-data space
cross-data space



Glossary checks



Building block overview

Starter kit

Designing and delivering the European single market for data

Data Spaces Symposium 2025



Tuomo Tuikka
VTT

Our Guest:



Desislava Petrova-
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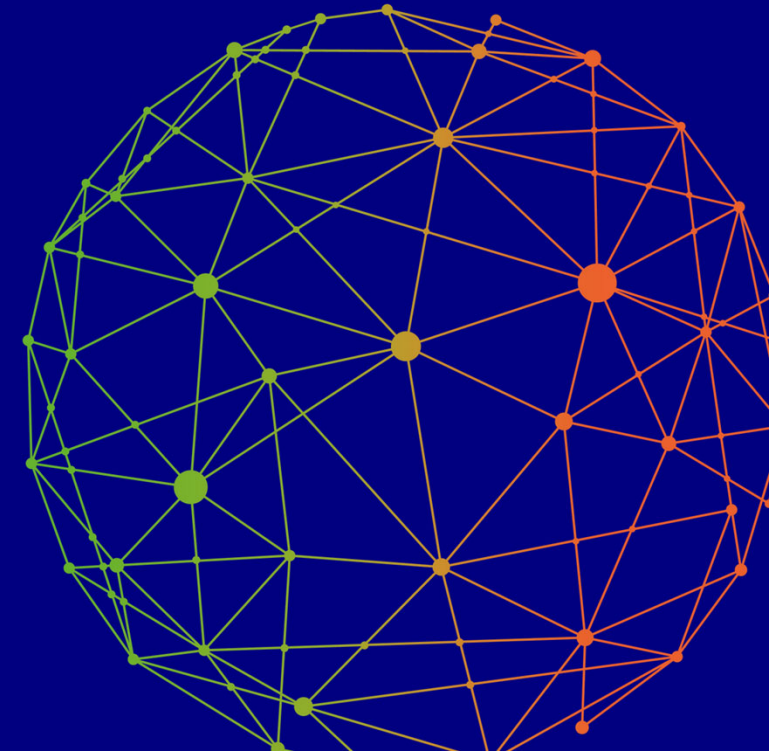


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The Design Principles

Designing and delivering the European single market for data

Dr. Rafiqul Haque, NUI Galway

Data Spaces Symposium 2025



Dr. Rafiqul Haque
Insight, National
University of Galway

Our Guest:



Valentine Charles
Europeana
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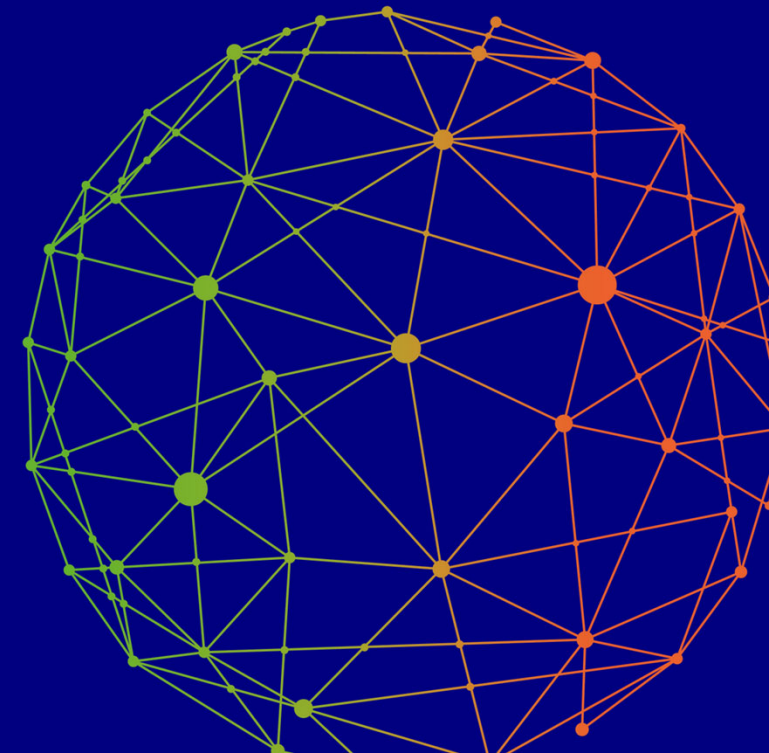


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What is in it for data spaces?



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Inspiration



“A **principle** may relate to a **fundamental truth** or **proposition** that serves as the **foundation** for a **system** of **beliefs** or **behaviour** or a **chain** of **reasoning**” – Stevenson, Angus; Lindberg, Christine A.

WHAT ARE DATA SPACE DESIGN PRINCIPLES?

- ✓ Set of guidelines
- ✓ Helps data space initiatives making informed design decision
- ✓ Focuses on core values essential for the success of data spaces
- ✓ Built upon the expertise of data space professionals



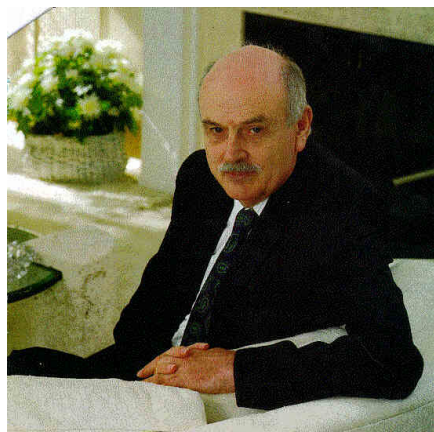
“**Principles** can make **values** explicit, transforming them into **rules** and **standards** that **guide behaviour** and **decision-making**.”

WHY DESIGN PRINCIPLES?

- ✓ Ensure that design choices are consistent and aligned with strategic objectives of data spaces
- ✓ Mitigate the risks of unexpected behavior at runtime
- ✓ Ensure that functional and non-functional requirements are adopted



Conceptualization



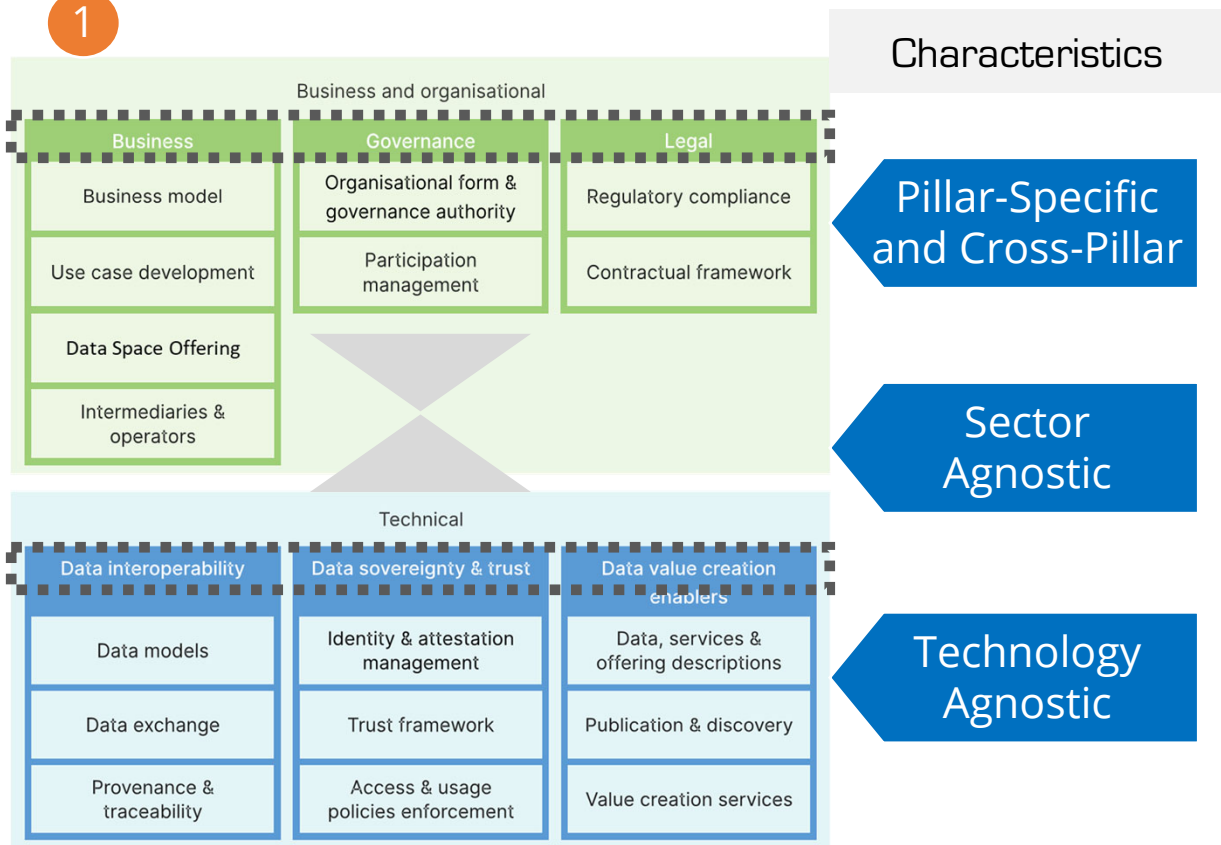
Reasoning

The Development of Data Space Design Principles

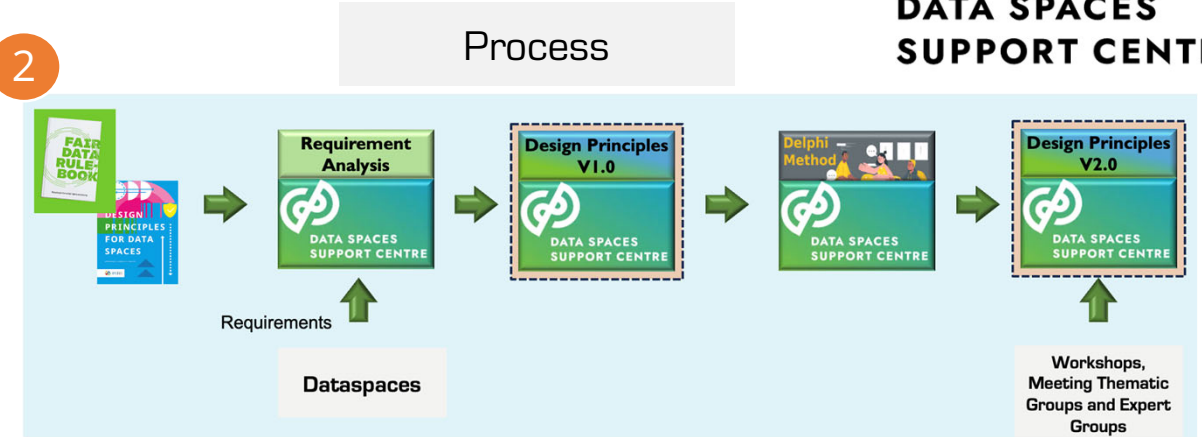


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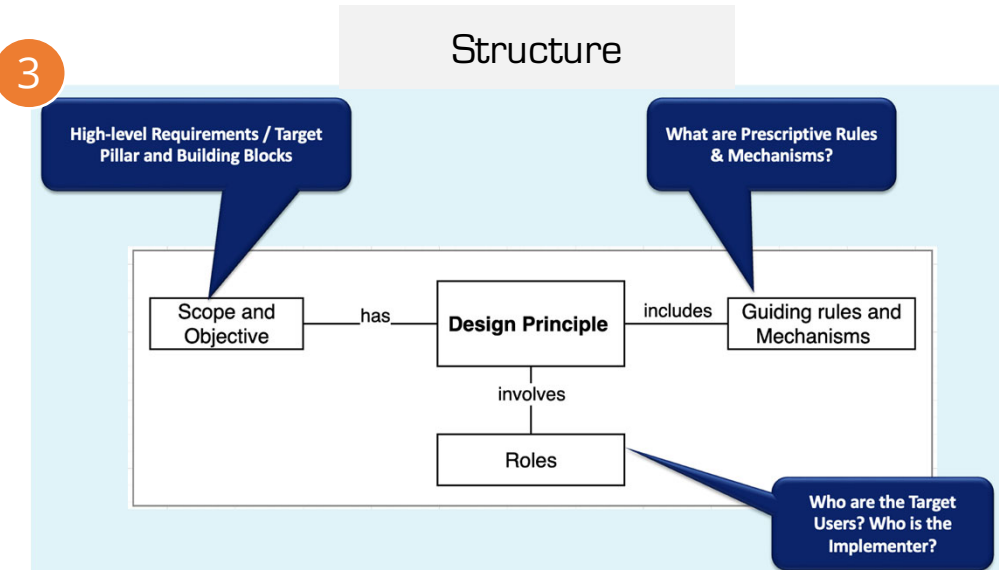
1



2



3



The DSSC Design Principles for Data Spaces

DSSC's 13 Design Principles

S#	Design Principles	Category
1	Reusability of Data	Pillar – Specific Design Principles
2	Pursuit Quality by Design	
3	Adaptable Data Space Governance Framework	
4	Establish a fit-for-purpose Contractual Framework	
5	Ensure Data Interoperability in Data Spaces	
1	Incentives and Synergies between Data Space Participants	Cross-pillar Design Principles
2	Ensure Compliance with EU Legal Framework and Norms	
3	Discoverability, Availability, and Accessibility of Data	
4	Transparency	
5	Establishing Trust and Security in Data spaces	
6	Ensure Participants Rights in Data Sovereignty	
7	Promote Participation through Inclusivity	
8	Promote Environmental Sustainability	

The Impact of Design Principles on Critical Success Factors

User Centricity

**Trust, Security
and Privacy**

Compliance

Value Driven

Inclusivity

Curious to know more?



Design Principles Interim Report

Web Link: <https://dssc.eu/space/DDP/117211137/DSSC+Delivery+Plan+-+Summary+of+assets+publication>



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Interim Report

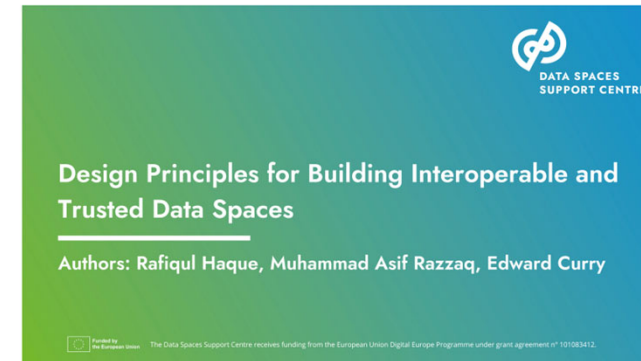
Data Space Design Principles

Design Principles Blog

Read our blogpost: <https://dssc.eu/space/News>

Design Principles for Building Interoperable and Trusted Data Spaces

Last updated 9 January, 2025



Ask your Question About Design Principles

Help Center / DSSC Support



Welcome! You can raise a request among the following options.

What can we help you with?



Get Support

Looking for practical support while setting up your data space project?

The Design Principles

Designing and delivering the European single market for data

Testimonial

Data Spaces Symposium 2025



Valentine Charles
Europeana
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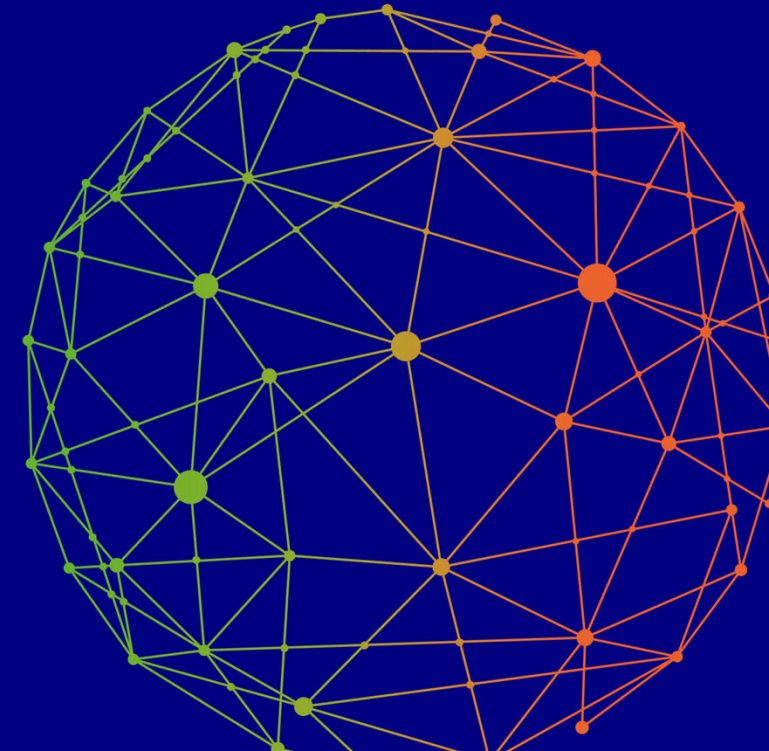


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The Co-creation Method

Designing and delivering the Common European Data Spaces

Data Spaces Symposium 2025



Jelte Bootsma, TNO

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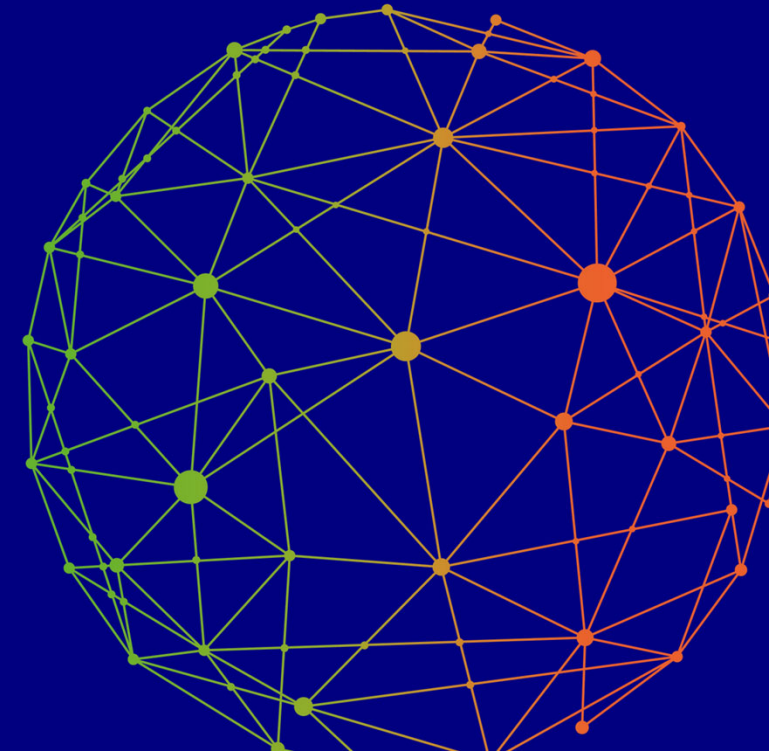


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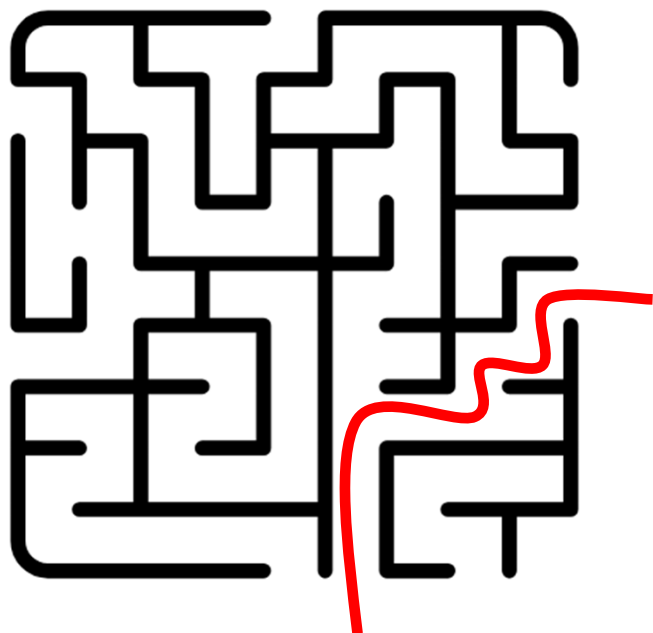


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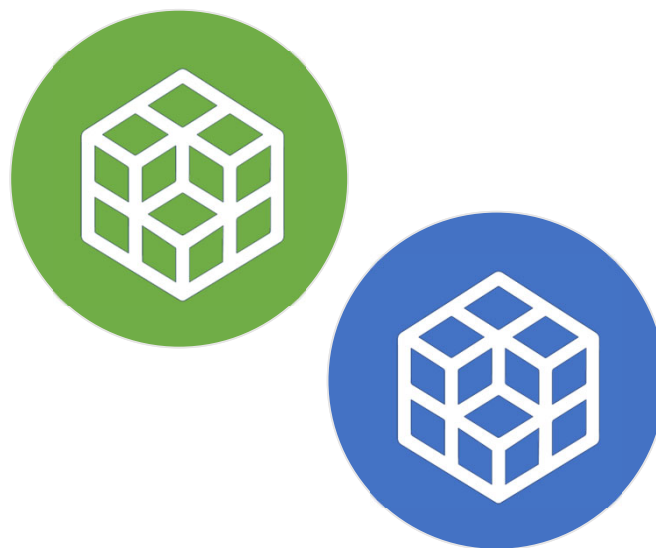
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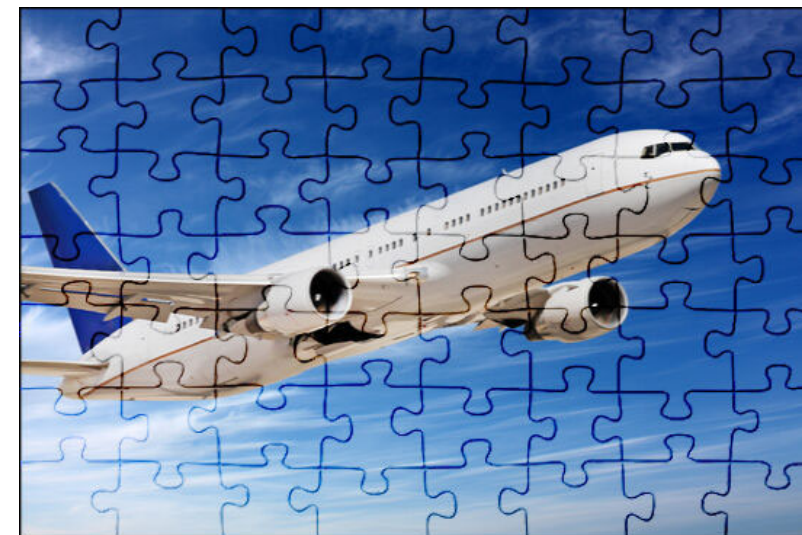
Why a Co-Creation Method?



A guide through the blueprint,
to make choices about the set-
up of the data space!



ငါတို့အတွက် ဤကဲ့သို့ ဖြစ်ပေါ်လာခြင်းကို
 ချစ်ခင်အားပေးသော ဤကဲ့သို့ ဖြစ်ပေါ်လာခြင်းကို
 ဤကဲ့သို့ ဖြစ်ပေါ်လာခြင်းကို ချစ်ခင်အားပေးသော



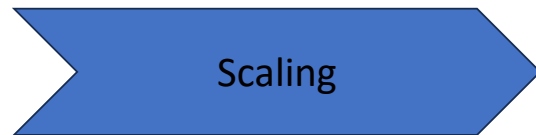
Faster creating data spaces

Contents of Co-creation Method 2.0

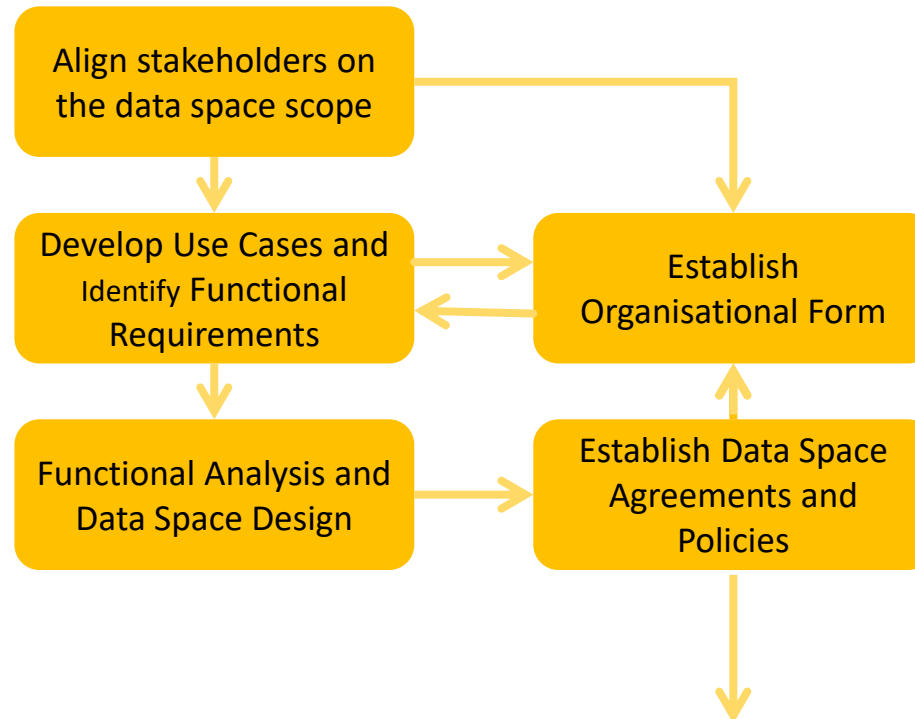


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Life cycle stages



Data Space Development Processes



Links to Building Blocks



The development processes are:

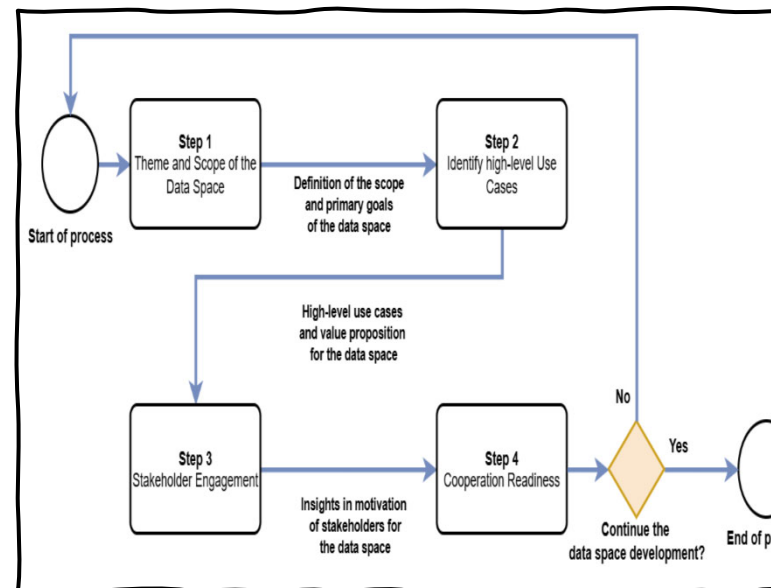
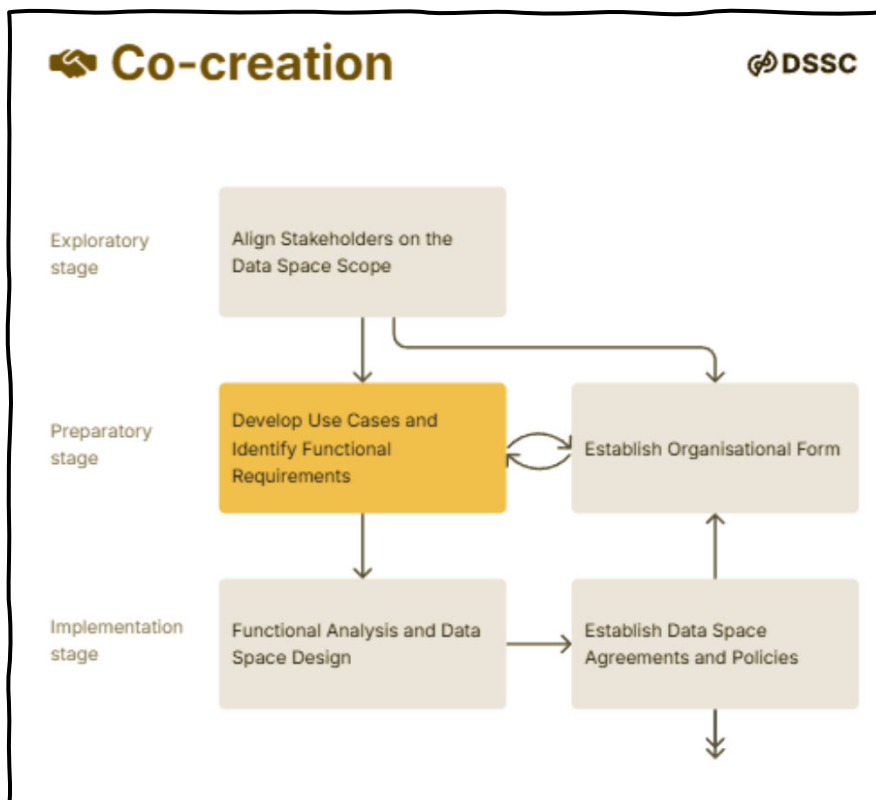
- are **connected** to both the green and the blue building blocks;
- provide the **order** in which building blocks should be used;
- help **explain the relationships** between the building blocks.

What are highlights in v2.0?

1. A new start page and overview in relation to the DSSC toolbox.

2. Multiple steps per process!

3. Each step comprises several questions that relate to the building blocks and potential outcomes



Step 1 - Formalising Commitment and Investment Decision			
The parties that ultimately sign the constitutional agreement will either become the governance authority or assign one in their stead.			
Objective: Formalise the division of roles and responsibilities in the data space.			
#	Question	Building Block Provides	Potential Outcomes
1	What are the roles and responsibilities of the data space founders that will become part of the governance authority?	As explained in the Organisational Form and Governance Authority building block, the establishment of the data space requires the parties involved to agree to commit funds, capital, or in-kind contributions.	Here, the partners commit resources to one another. The manner in which these resources are brought in, informs the decision regarding the organisational form made in step 2. It should be clear what each partner contributes to the foundation and maintenance of the data space.
2	What is the business model for the governance authority?	The Business Model building block provides guidelines for considering new business models and successfully developing one, outlining financial and sustainability strategies for the governance authority in particular.	Here, the divisions of profits and losses are agreed upon. Once again, this informs the decision regarding the organisational form. It is important to agree on who will make decisions about how money is spent and who will contribute which amounts of resources in case the data space requires additional funding.

Co-creation method

Testimonial

Data Spaces Symposium 2025



Manlio Bacco | JRC, EC

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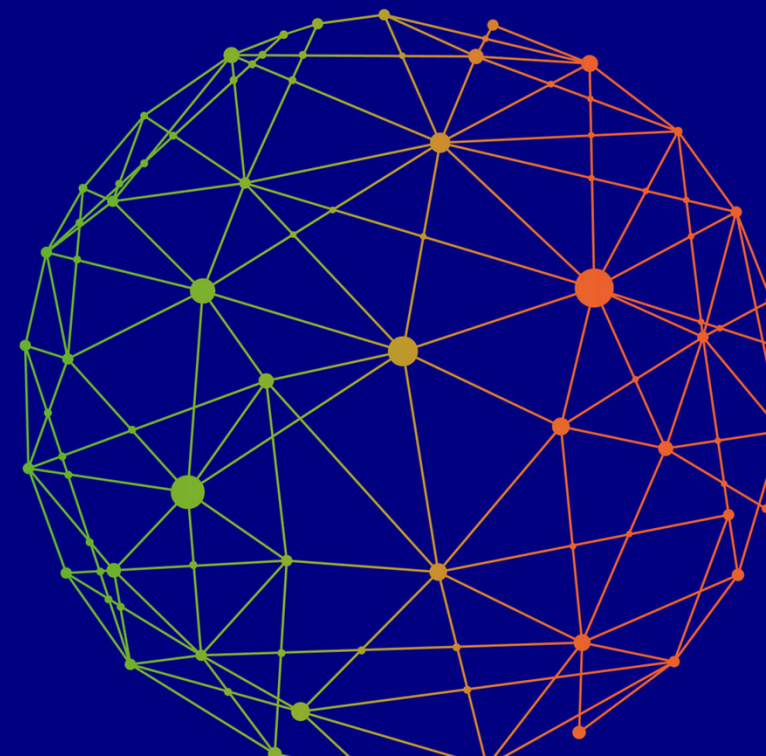


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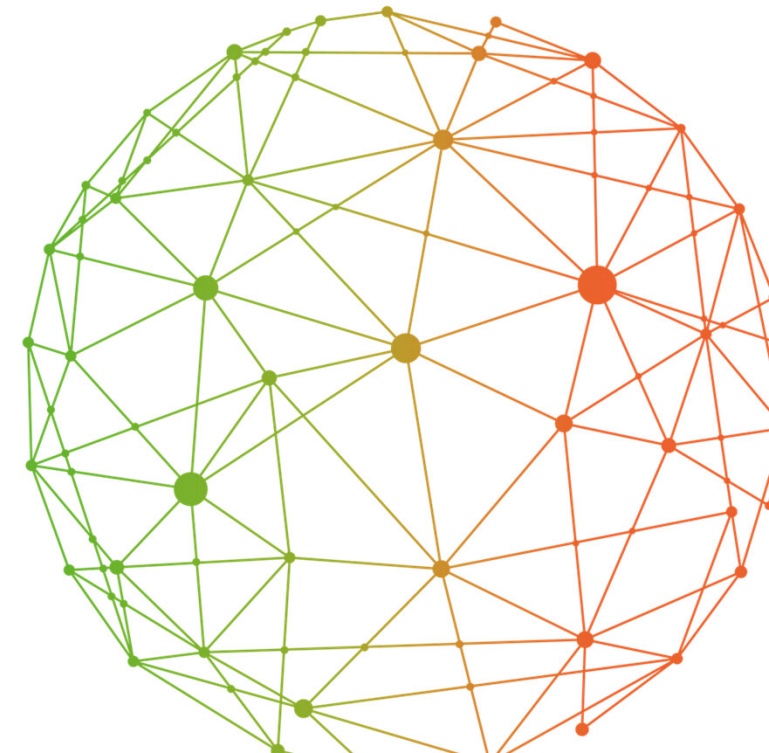
Co-Creation Method at JRC, EC



The **Joint Research Centre** (JRC) is the European Commission's science and knowledge service. JRC scientists carry out research to provide independent scientific advice and support to EU policy.

In the activities of the ENABLED project (in Directorate JRC.T - Digital Transformation and Data), we prioritise an **experimental approach** (social and technical) in a **Data sharing innovation lab**.

As part of the Strategic Stakeholder Forum of the DSSC, we invited DSSC experts, internal and external colleagues from research and policy, to a **role play experience**.



Use of wearable data in the EHDS

Role Play organised by the DSSC and hosted at the Joint Research Centre, EC, in Ispra (IT) on September 27th, 2024

DSSC Organisers

Gianfranco Cecconi, IDSA

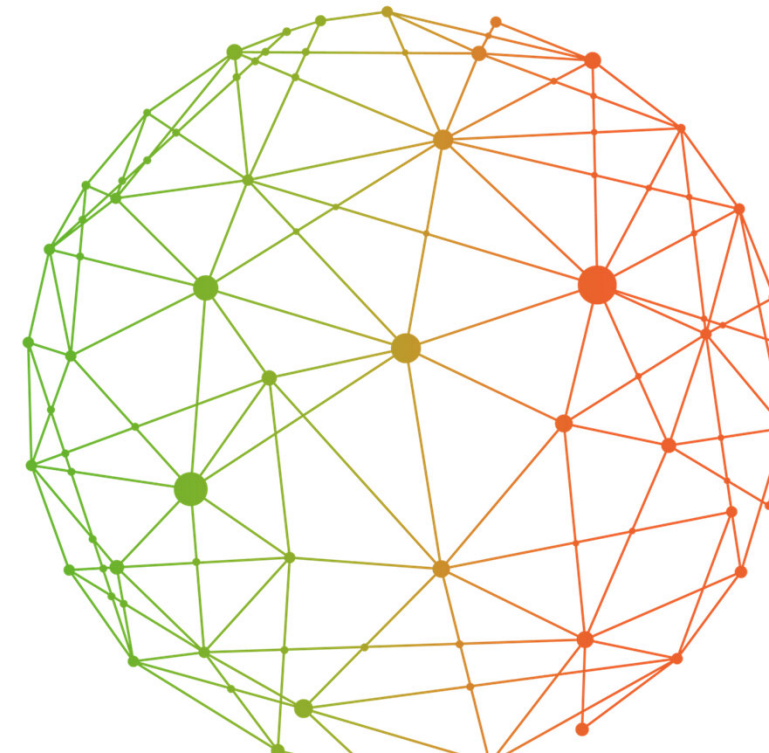
David Regeczi, TNO

Olga Batura, TNO

Geert Lamerichs, TNO

8 actors: JRC colleagues, external experts

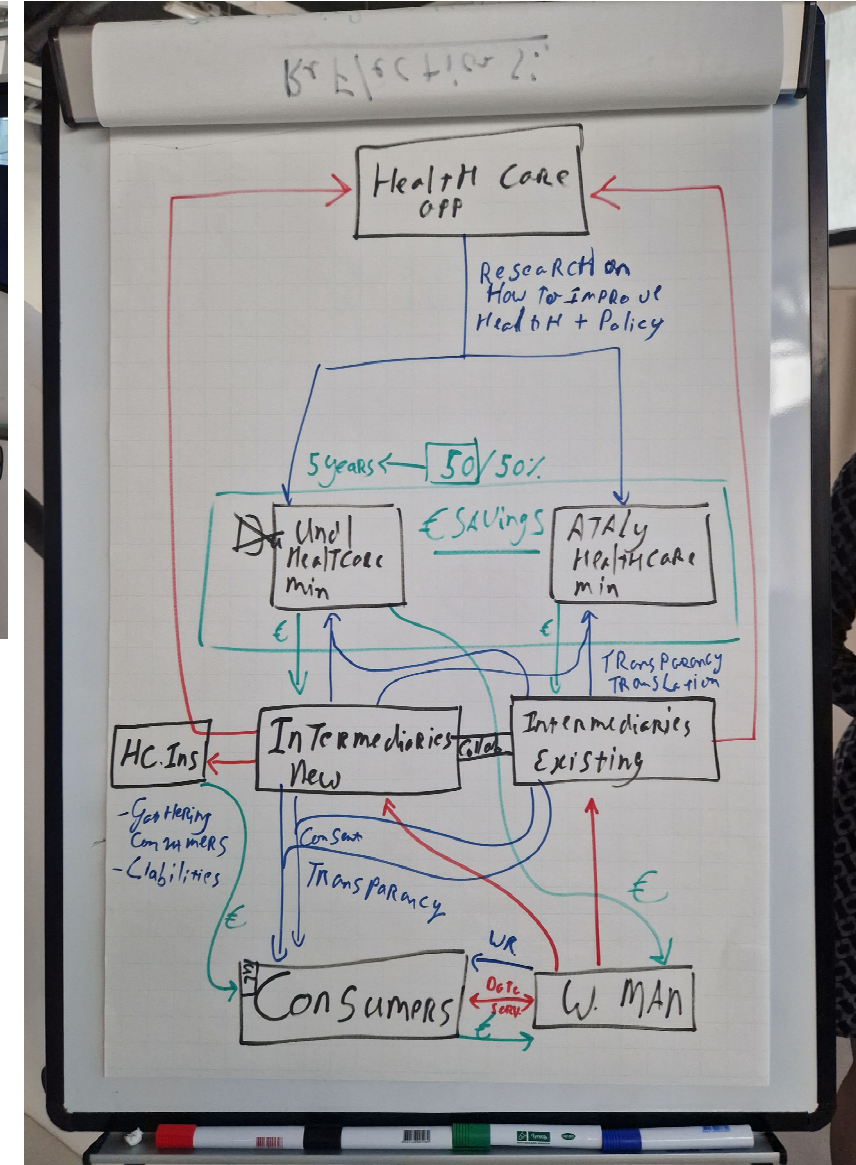
roles: ministries of health, private insurances, data service providers, health operators association, consumers association, wearable manufactures association



Use of wearable data in the EHDS

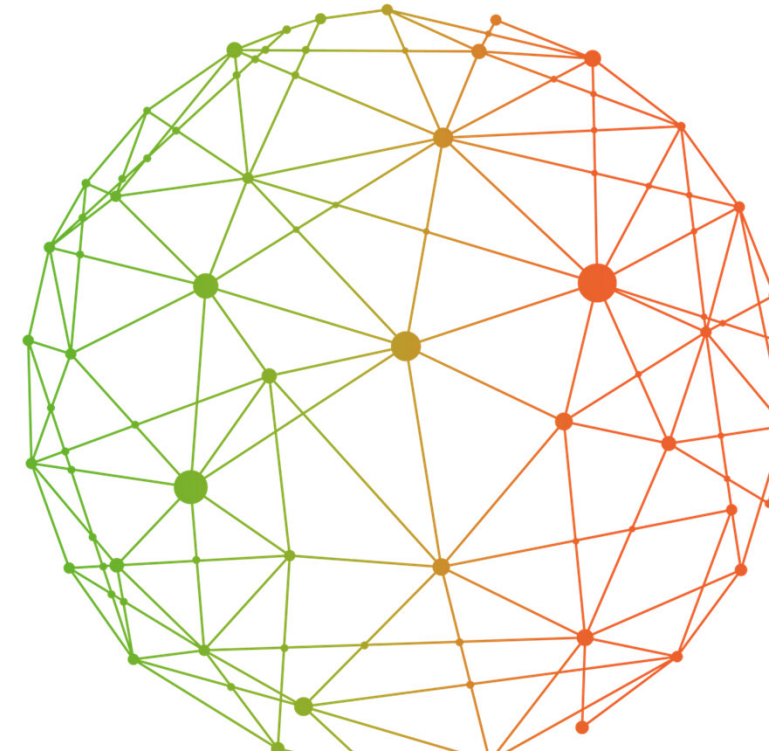


several colleagues participated; different expertise at the table; clear understanding of the problem mimicking challenges and opportunities of the data economy



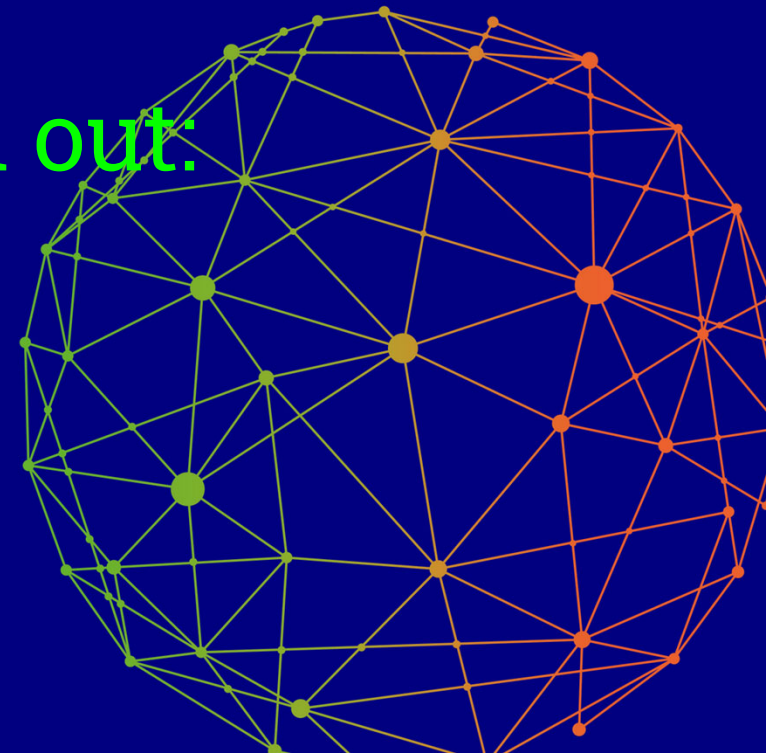
Next steps

- The data sharing innovation lab will serve as proof of concept to showcase the benefits and complexities of developing data spaces and to promote wider data-sharing at the JRC and beyond
- Experiment with SIMPL, the secure middleware platform for data spaces supporting data access and interoperability in European data initiatives
- Develop and test AI-based solutions to generate AI-ready data so to foster the data market



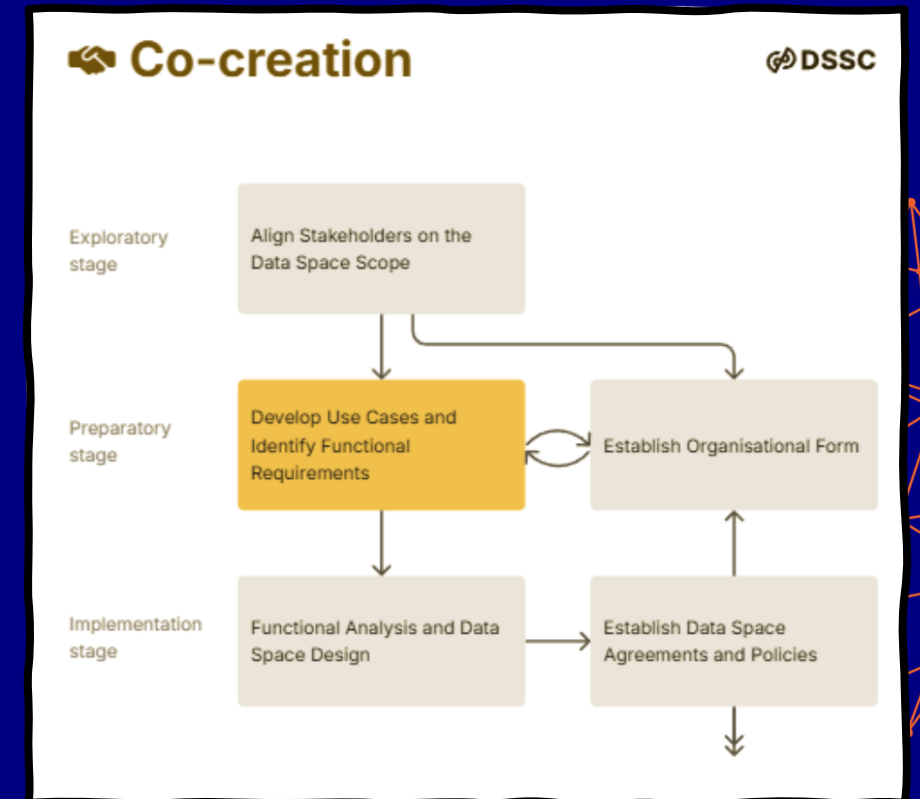
Thank you!

Any questions please reach out:
jelte.bootsma@tno.nl



Connect, use and contribute

Use the DSSC Co-creation Method to develop or enhance the rulebook of your own dataspace

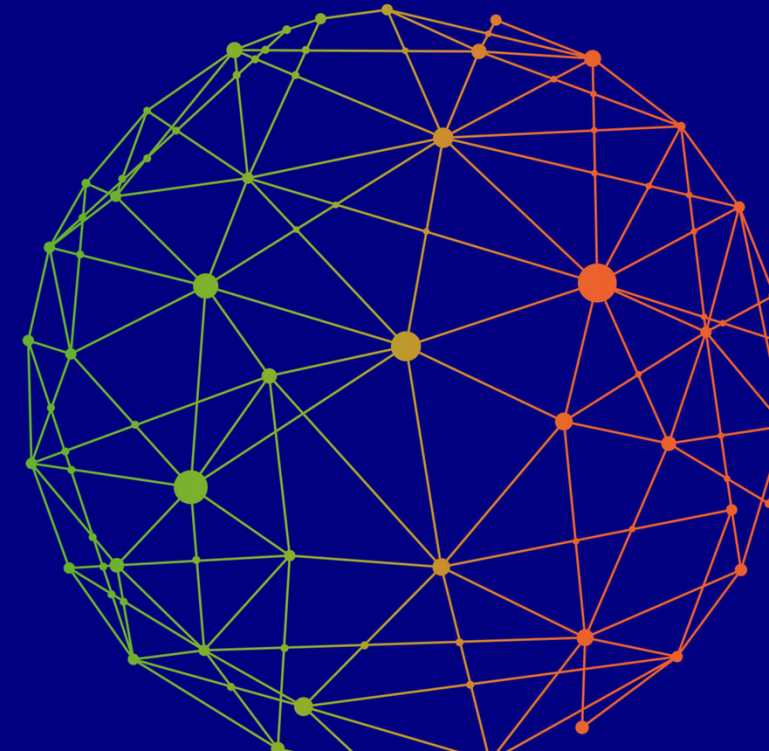


Our Support

Designing and delivering the European single market for data

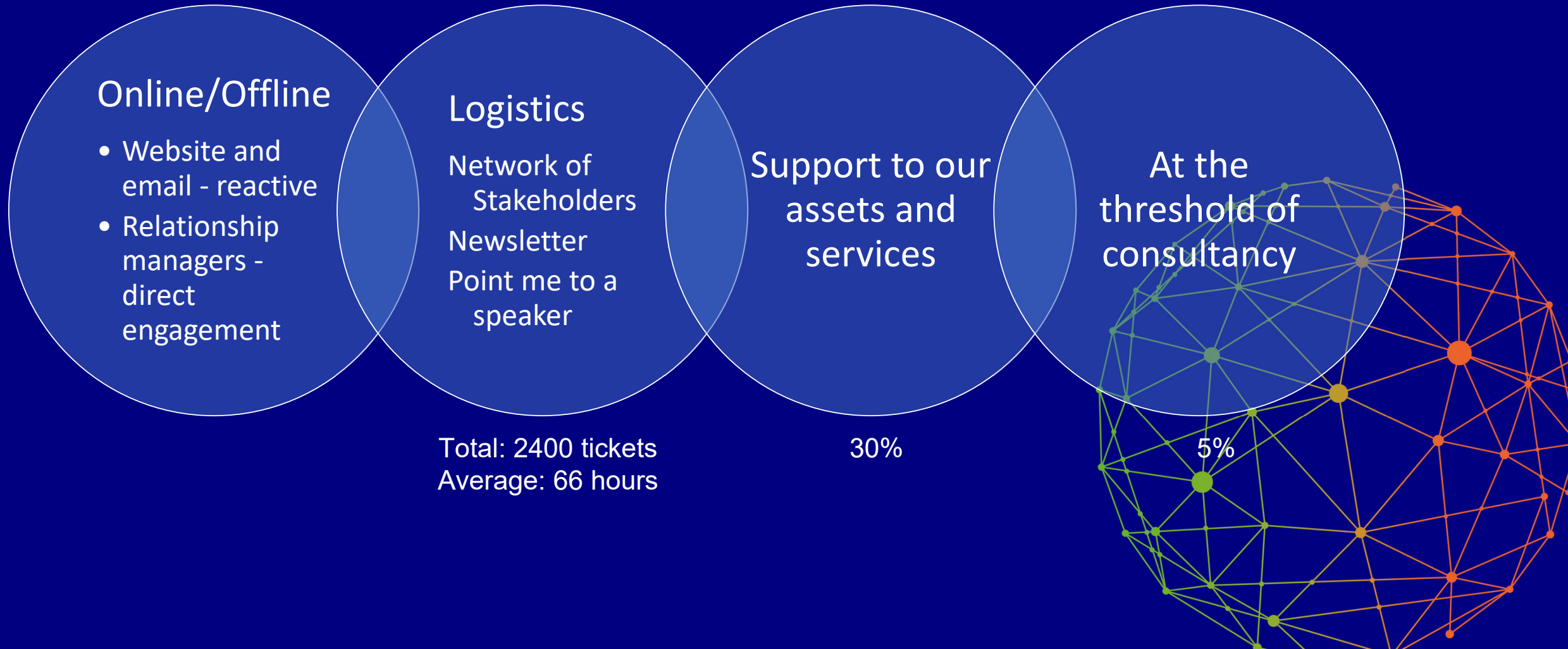
Mariano Blaya-Andreu, IDSA

Data Spaces Symposium 2025

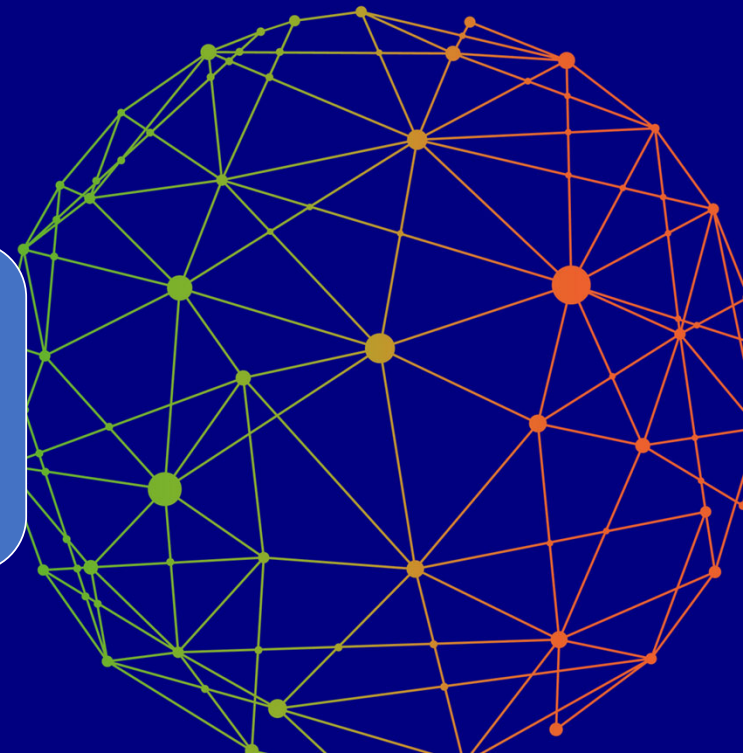
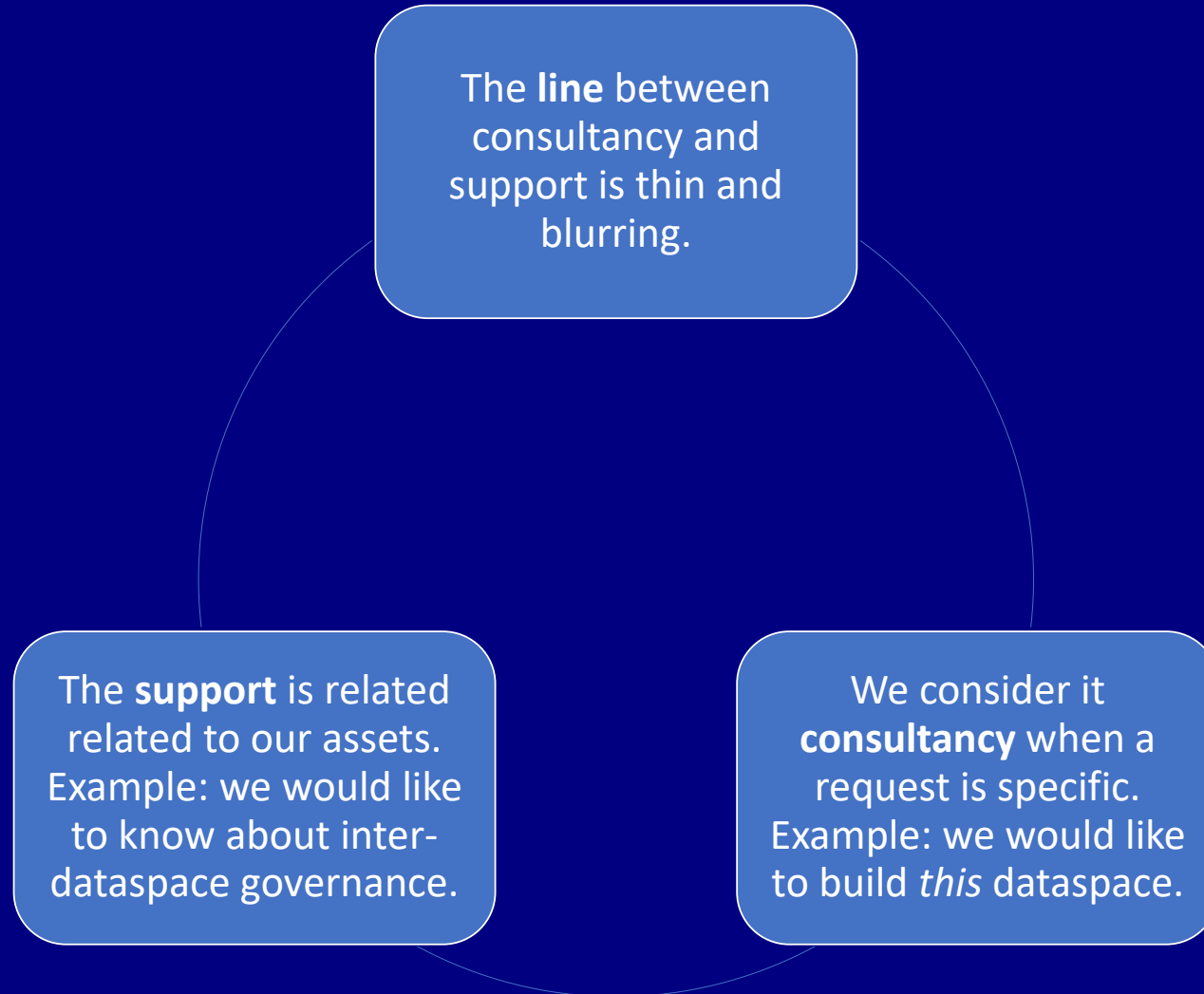


The Data Spaces Support Centre receives funding from the European Union Digital Europe Programme under grant agreement n° 101083412

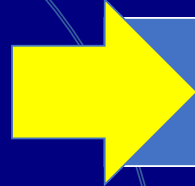
What support means for DSSC



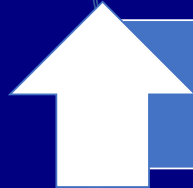
What is consultancy is what is support



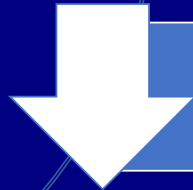
Testimonials from the audience



Those of you who used DSSC online support channels



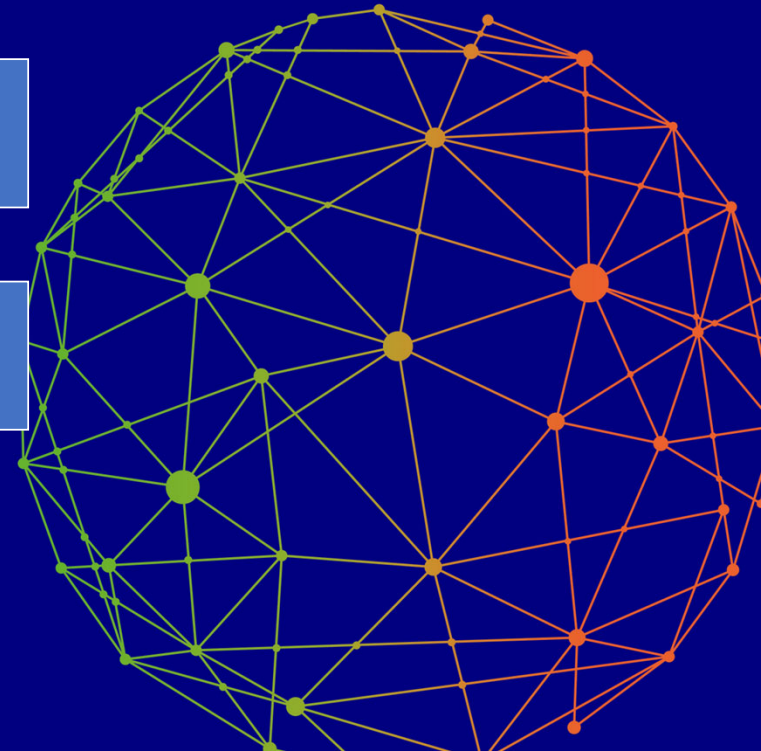
High-medium level of satisfaction?



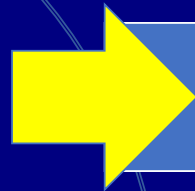
Low level of satisfaction?

contact@dssc.eu

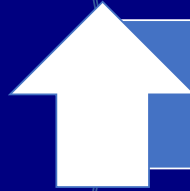
[dssc.eu > support](https://dssc.eu/support)



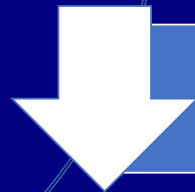
Testimonials from the audience



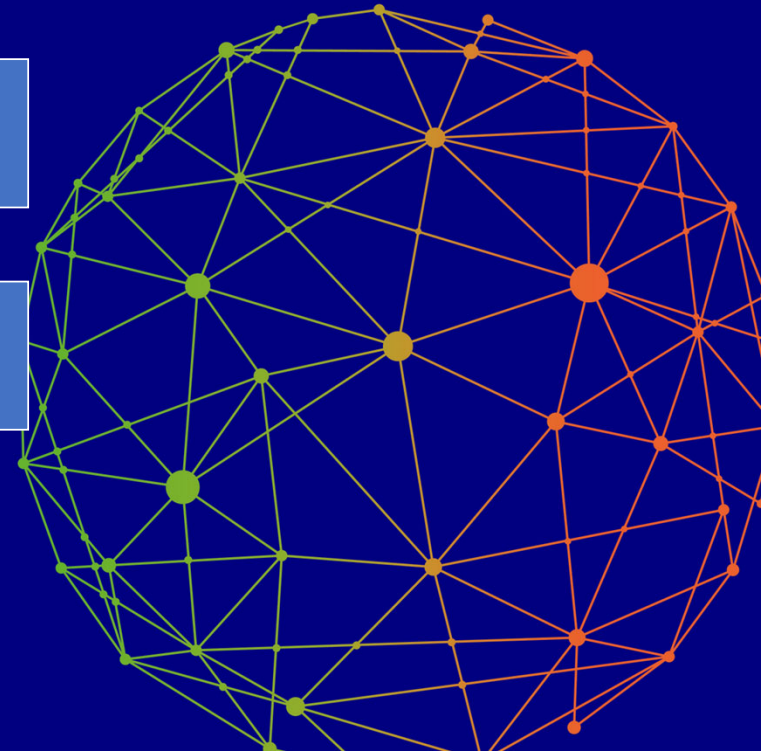
Those of you running data spaces projects



Who finds very useful the support provided by DSSC?



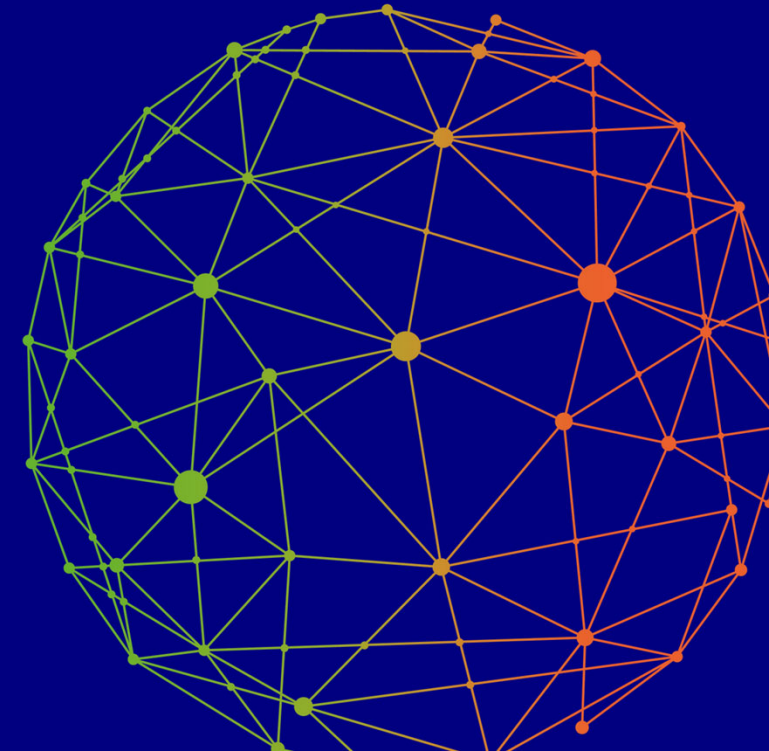
Who sees significant room for improvement?



Thanks!

- Find me

- at the DSSC booth
- contact@dssc.eu
- DSSC.eu > support



Standardization

Designing and delivering the European single market for data

Data Spaces Symposium 2025

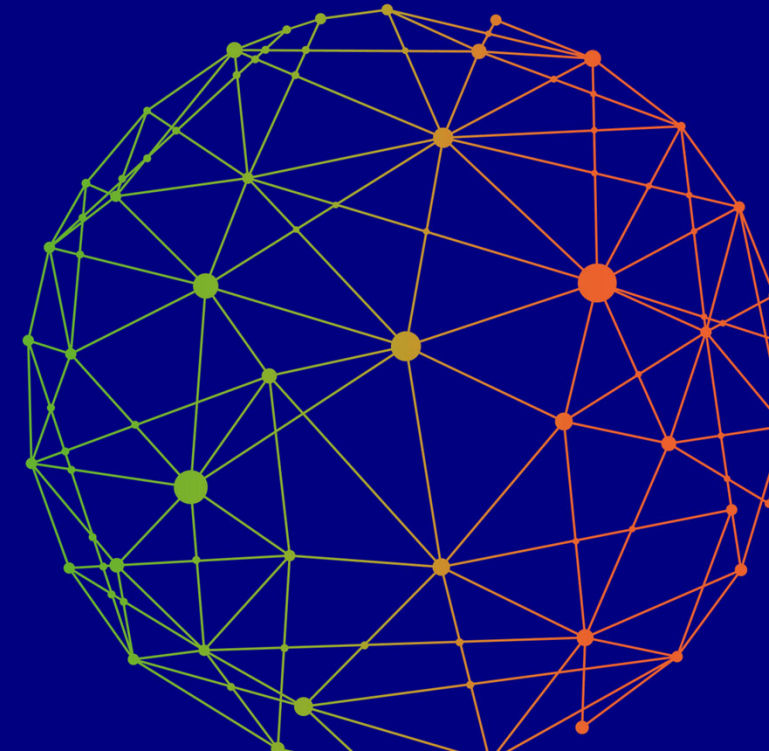


Clara Pezuela
FIWARE

Testimonial



Coen Janssen
EC



DSBA



INTERNATIONAL DATA
SPACES ASSOCIATION



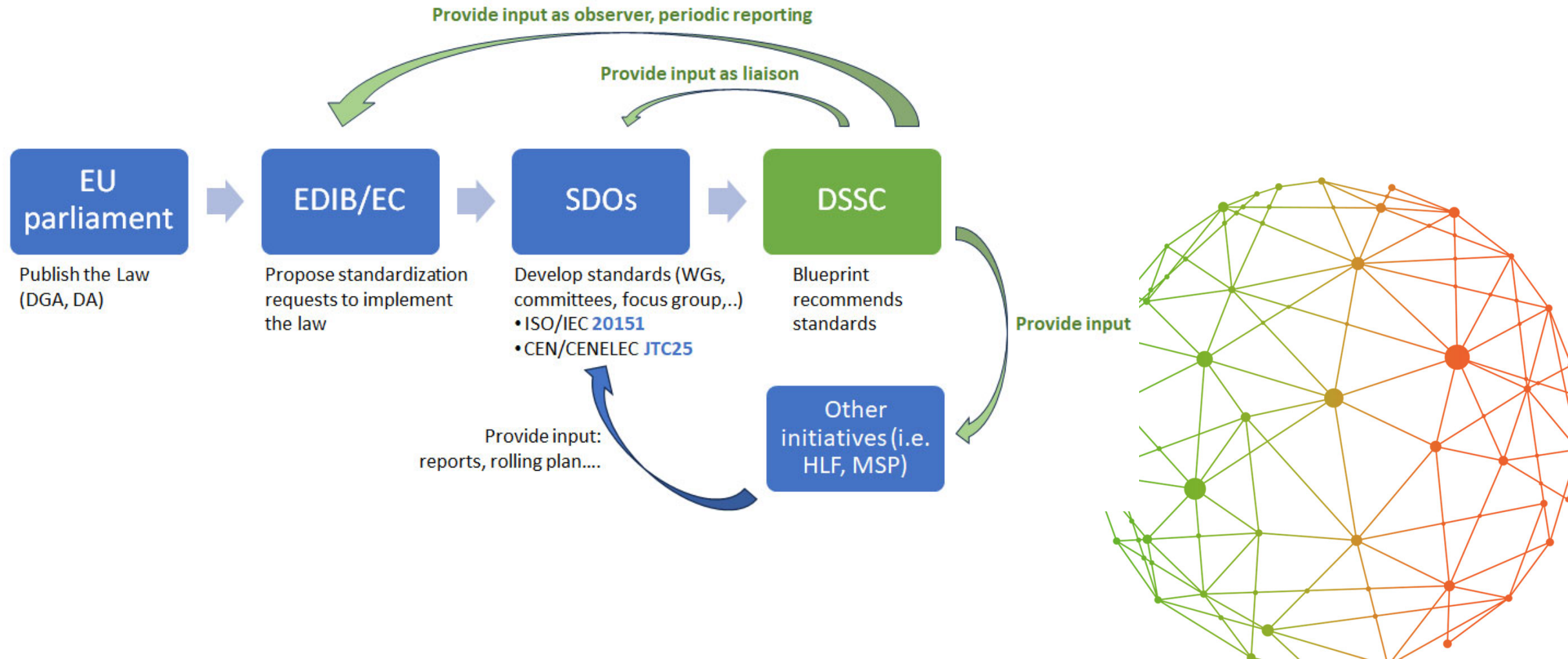
DATA SPACES
SUPPORT CENTRE



Funded by
the European Union

The Data Spaces Support Centre receives funding from the European Union Digital Europe Programme under grant agreement n° 101083412

Role of DSSC in standardization landscape



DSSC activities in standardization

