DATA SPACES SUPPORT CENTRE

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Data is a pillar of EU competitiveness

Data is *crucial* for AI

"Companies in Europe struggle to get access to the data they need – while large foreign tech companies use European data to fuel their business."

Political Guidelines, July 2024

Those who can freely access new research, increasingly **accurate data**, and more efficient technologies can **innovate more quickly**, improve their processes, and **maintain competitiveness** in the global market.

Letta report, April 2024

The EU should **promote cross-industry coordination and data sharing to accelerate the integration of AI** into European industry.

Draghi report, September 2024

Source: EC, European Data Innovation Board meeting, 11 December2024
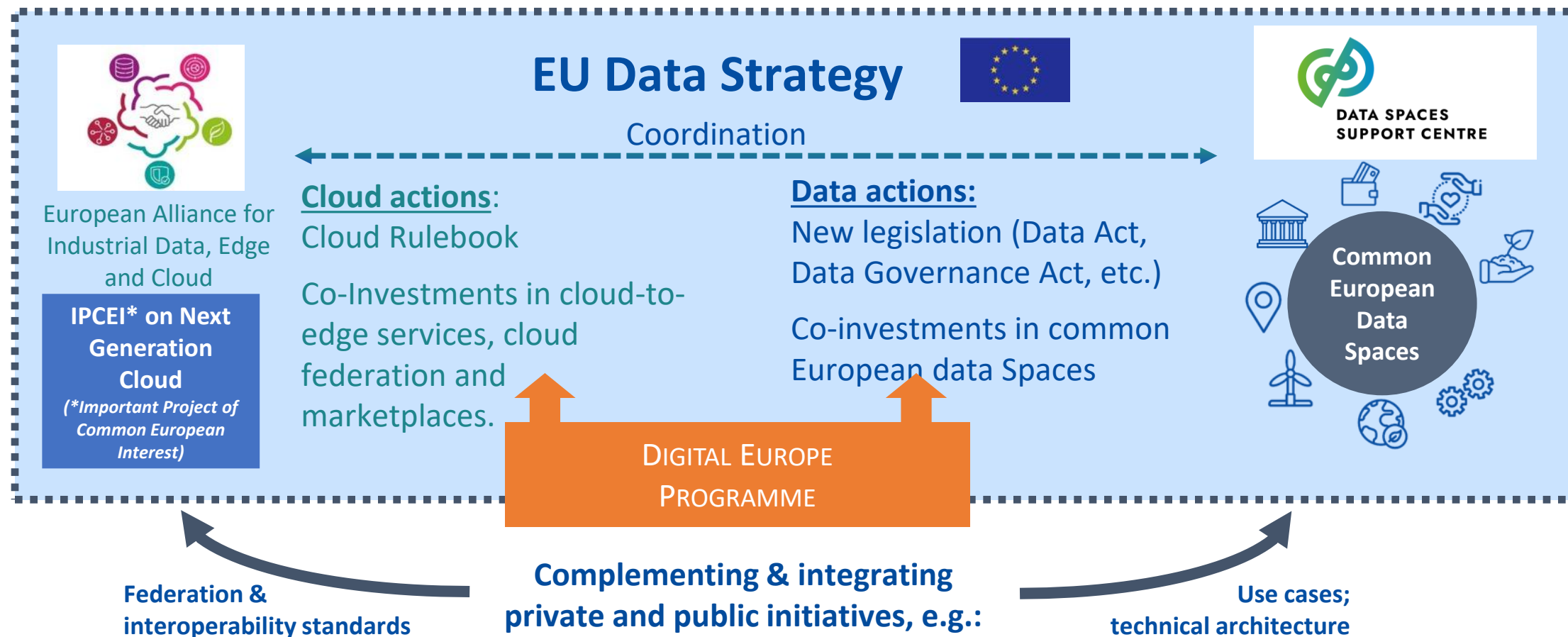
What's a data space?

A data space is an **interoperable framework, based on common governance principles, standards, practices and enabling services, that enables trusted data transactions between participants**.

CEN Workshop Agreement 18125 (available here)
and Data Spaces Support Centre's Glossary (here)
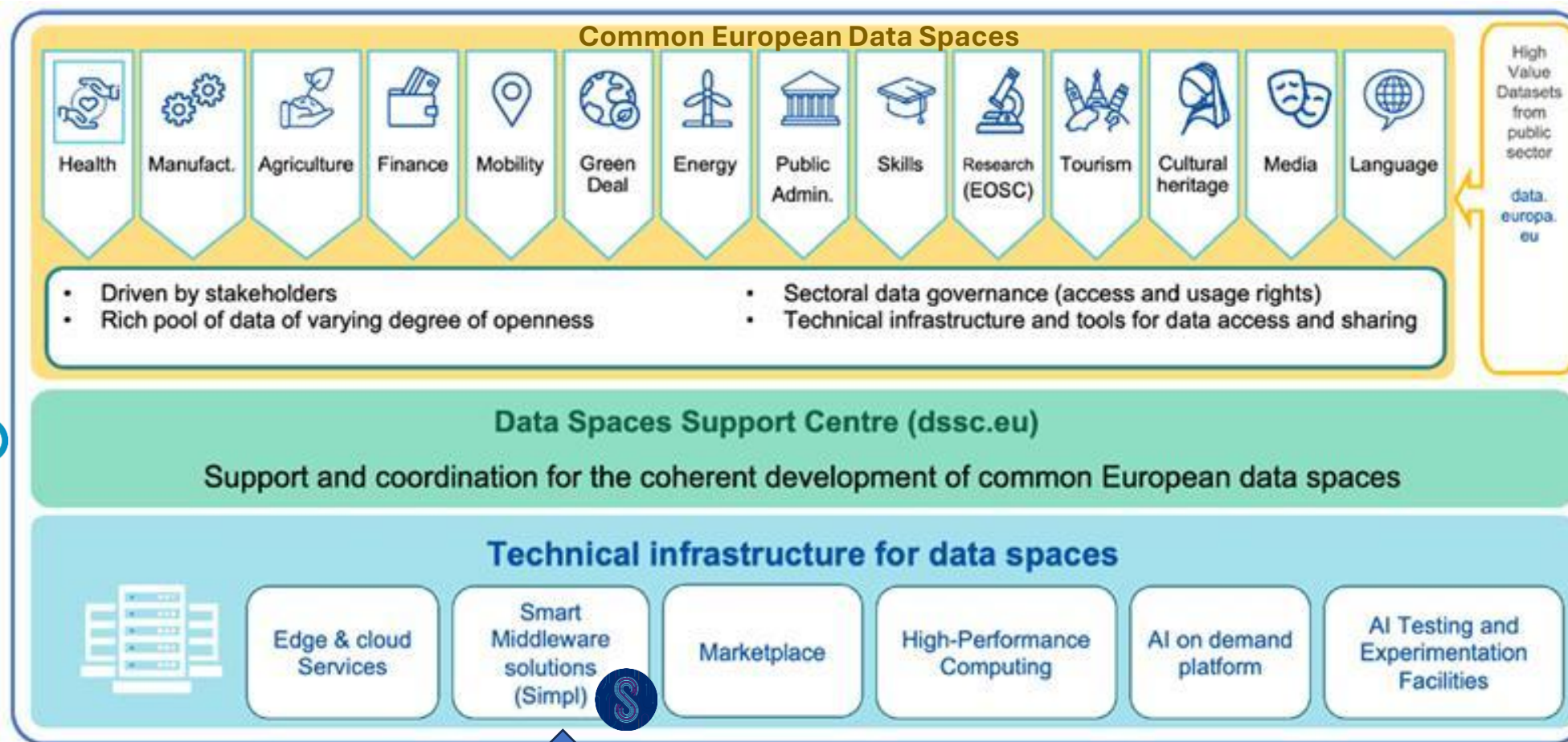
Collaborative data sharing
in data spaces

Funded by
the European Union

Images: Flaticon.com

DATA SPACES SUPPORT CENTRE

The European data space landscape

EU data strategy at a glance

EU Data Strategy

Coordination

European Alliance for Industrial Data, Edge and Cloud

IPCEI* on Next Generation Cloud
*(*Important Project of Common European Interest)*

Cloud actions:
Cloud Rulebook

Co-Investments in cloud-to-edge services, cloud federation and marketplaces.

Data actions:
New legislation (Data Act, Data Governance Act, etc.)

Co-investments in common European data Spaces

Common European Data Spaces

DIGITAL EUROPE PROGRAMME

Federation & interoperability standards

Complementing & integrating private and public initiatives, e.g.:

Use cases; technical architecture

Source: European Commission, Rizzi, D. (2022).

Funded by the European Union

Positioning of the DSSC within the EU Data Strategy implementation actions

Common European Data Spaces

| Health | Manufact. | Agriculture | Finance | Mobility | Green Deal | Energy | Public Admin. | Skills | Research (EOSC) | Tourism | Cultural heritage | Media | Language |

High Value Datasets from public sector data.europa.eu

- Driven by stakeholders
- Rich pool of data of varying degree of openness
- Sectoral data governance (access and usage rights)
- Technical infrastructure and tools for data access and sharing

Data Spaces Support Centre (dssc.eu)

Support and coordination for the coherent development of common European data spaces

Technical infrastructure for data spaces

| Edge & cloud Services | Smart Middleware solutions (Simpl) | Marketplace | High-Performance Computing | AI on demand platform | AI Testing and Experimentation Facilities |

The Data Spaces Radar
Chart View
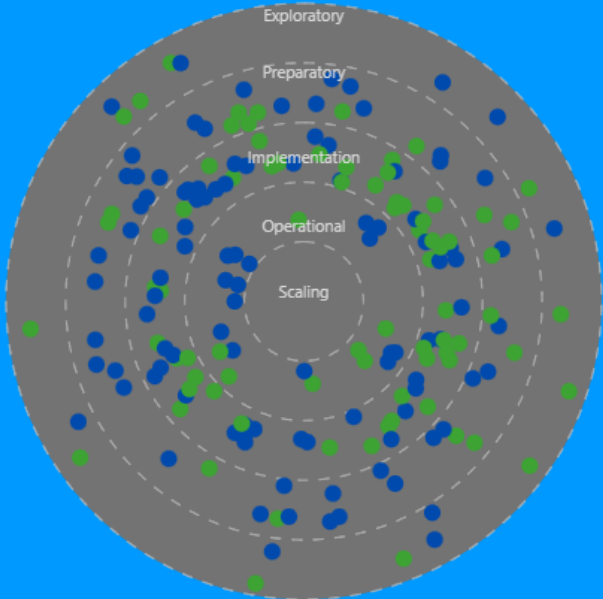
Data Spaces Count: **190**

Filter results:

Sectors
All

Development Stage
All

Geographical Focus
All

Countries
All

Connectors Used
All

Starting Date
1/1/2018   6/3/2024

Source of Funding
All

Type
Data Space | Use Case

Reference Architecture
All

☐ Part of DSSC's Community of Practice

Radar Overview

New Listings
Entries added in the last **6** months

12 Entries

- Agriculture AI Data Space (agriAI)
- COOPERANTS
- Danger spots in traffic
- Data Space Traffic Measurements
- DianShu
- Intelligent Urban Ecosystem for Human centric
- Living Digital Twin
- Machinery-X

Radar Growth
Total number of entries

88 — 105 — 130 — 169 — 190
2022   2024

Development Stage
- Explora... 10.53%
- Implemen... 47.37%
- Operati... 11.58%
- Preparatory 29.47%

Sectors
Other	25.3%
Manufacturing / Industry ...	24.7%
Mobility	12.1%
Energy	11.1%
Smart Cities	9.5%
Green Deal / Circular Econ...	7.4%
Logistics	7.4%
Agriculture / Agrifood	6.8%

Building Blocks
For more information regarding Data Spaces Building Blocks, visit the Data Spaces Support Centre

Data Sovereignty
Identity Management	29.5%
Access & usage policy and control	20.0%
Trust	12.6%

Data Interoperability
Data Exchange	58.9%
Data Models and Formats	24.7%
Provenance and traceability	22.6%

Data Value Creation
Data, Services and Offerings...	28.9%
Publication & Discovery	27.4%
Marketplaces & usage acco...	10.5%
Other	1.1%

Key Highlights

Reference Architecture
IDSA	53.7%
Gaia-X	11.6%
Other	11.1%
FIWARE	5.8%
DSBA	1.6%

Data Space Connector
Eclipse Dataspace C...	41%
Other: i3-Market Da...	14%
True Connector	8%
MDS Connector	6%
Dataspace Connector	4%
Ocean Enterprise Pr...	4%
Customization of EDC	2%

Source of Funding
EU funding	20.0%
Gover... funding	5.8%
Private funding	4.2%
Other	3.7%

Business Case Pattern
Joint Innovation	35%
Shared Cost	16%
Shared Marketplace	16%
Combined Forces	14%
Greater Community ...	14%

Map View
Country	Count
Germany	44
Spain	38
Italy	37
France	28
Austria	27
Belgium	27
Finland	27
Nether...	27
Greece	25
Portugal	24
Denmark	21
Ireland	20
Romania	20
Sweden	20
Poland	19
Slovenia	19
Bulgaria	18

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The Data Spaces Support Centre - DSSC and its mission

Partners

BDV BIG DATA VALUE ASSOCIATION
Capgemini invent
FIWARE FOUNDATION
Fraunhofer
gaia-x
INTERNATIONAL DATA SPACES ASSOCIATION
KU LEUVEN
MyData
OLLSCOIL NA GAILLIMHE UNIVERSITY OF GALWAY
SITRA
TNO innovation for life
VTT

Associated and collaboration partners

acatech DEUTSCHE AKADEMIE DER TECHNIKWISSENSCHAFTEN
Alliance for Internet of Things Innovation
cea
Cefriel POLITECNICO DI MILANO
CoE DSC
DIGITALEUROPE
EGI
ILVO
INNOPAY
Innovalia ASSOCIATION
iSHARE
ITI INVESTIGATE TO INNOVATE
meditech COMPETENCE CENTRE
OASC OPEN & AGILE SMART CITIES
GATE
aNG aNewGovernance

Data Spaces Support Centre mission

- **Facilitate interoperable data sharing** across sectors while respecting the EU values

- **Co-create, develop and evolve guidance through assets and services** such as the data spaces "Blueprint", together with stakeholders and experts

Support the EU Data Strategy

Coordinate the development of a data space blueprint

Support the European Commission

Support community of stakeholders

- **Assist the European Data Innovation Board** in setting guidelines for common European data spaces

- **Promote adoption** through support activities, a knowledge-sharing platform, and engagement with stakeholders

What DSSC does?

The European Commission's efforts to promote and support data space development

The roles of the Data Spaces Support Centre project and the Simpl programme, and their offering

DATA SPACES SUPPORT CENTRE

What we do

- We engage and create a community of EU-funded data space initiatives and other EU stakeholders…
  … but not only: we look outside and learn from other initiatives, like in the private sector.

- The learning we acquired from the community, existing practices and standards are researched, structured and distilled into meaningful inputs for the following stages.

- Volunteer experts from the public and our own staff join in working groups to combine our learning and co-create our guidance.

- Expert technology contractors and the open-source community (soon) select, customise and maintain a suitable complete selection of software components to implement core data space functionality.

- We enable European data spaces to move from learning to designing, building and operating, and support them in the process.

- We disseminate our assets so that the EU-funded data spaces – and everyone, really! – is informed of their availability and evolution.

| Community building | Distillation | Synthesis | Build | Guidance and support | Dissemination |

What we offer

Community building
- "Relationship management" and facilitation of a **Community of Practice** for the EU-funded data spaces
- Beyond the data spaces, the facilitation of a wider **Network of Stakeholders** in dedicated Thematic Groups (technical, business, legal…)

Distillation
- **Review of pre-existing specifications and standards**
- **Review of pre-existing open-source software** for data sharing and related functionalities
- Architecture landscape
- Best practices
- Demonstrations and test infrastructures

Synthesis
- The **Starter Kit**
- The **Design Principles**
- The **Glossary** and **Conceptual Model**
- The **Blueprint** as a specification of functional building blocks that cover the full spectrum of a generic data space's needs
- The **Co-Creation Method** to assist designers in choosing the building blocks suitable to your data space

Build
- **Simpl-Open:** the open-source software stack that powers data spaces and other cloud-to-edge federation initiatives
- **Simpl-Live:** the adoption of Simpl-Open in specific data space instances
- **Simpl-Labs:** the playground environment for Simpl-Open to test interoperability

Guidance and support
- The **Radar:** a crowdsourced catalogue of known data spaces in operations and their characteristics, in the EU and beyond
- The **Toolbox:** a crowd-sourced catalogue of components that implement parts of the Blueprint's functionalities, software but also business and legal
- **Support**
- The upcoming CEN/CENELEC **Maturity Model** to measure how compliant your data space is with EU legislation and guidance

Dissemination
- **Communications:** the website, social media…
- **Engagement of the public:** webinars, the live events, participation to other relevant initiatives' events…
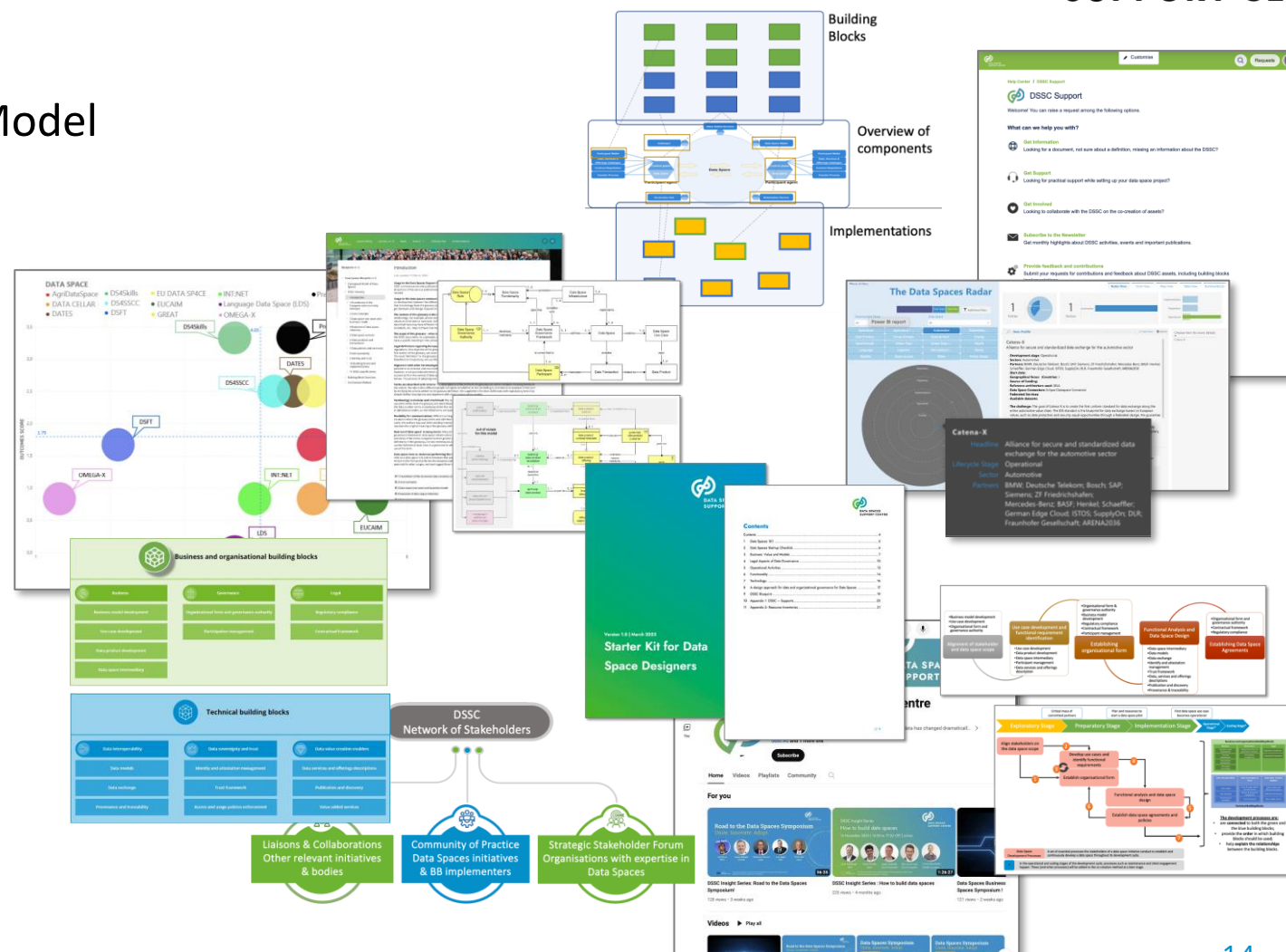- **Engagement of Standard Development Organisations**

DSSC offerings (dssc.eu)

- The Network of Stakeholders
- The Glossary and the Conceptual Model
- The Starter Kit
- The Collection of Standards
- The Blueprint
- The Co-Creation Method
- The Toolbox
- The Radar
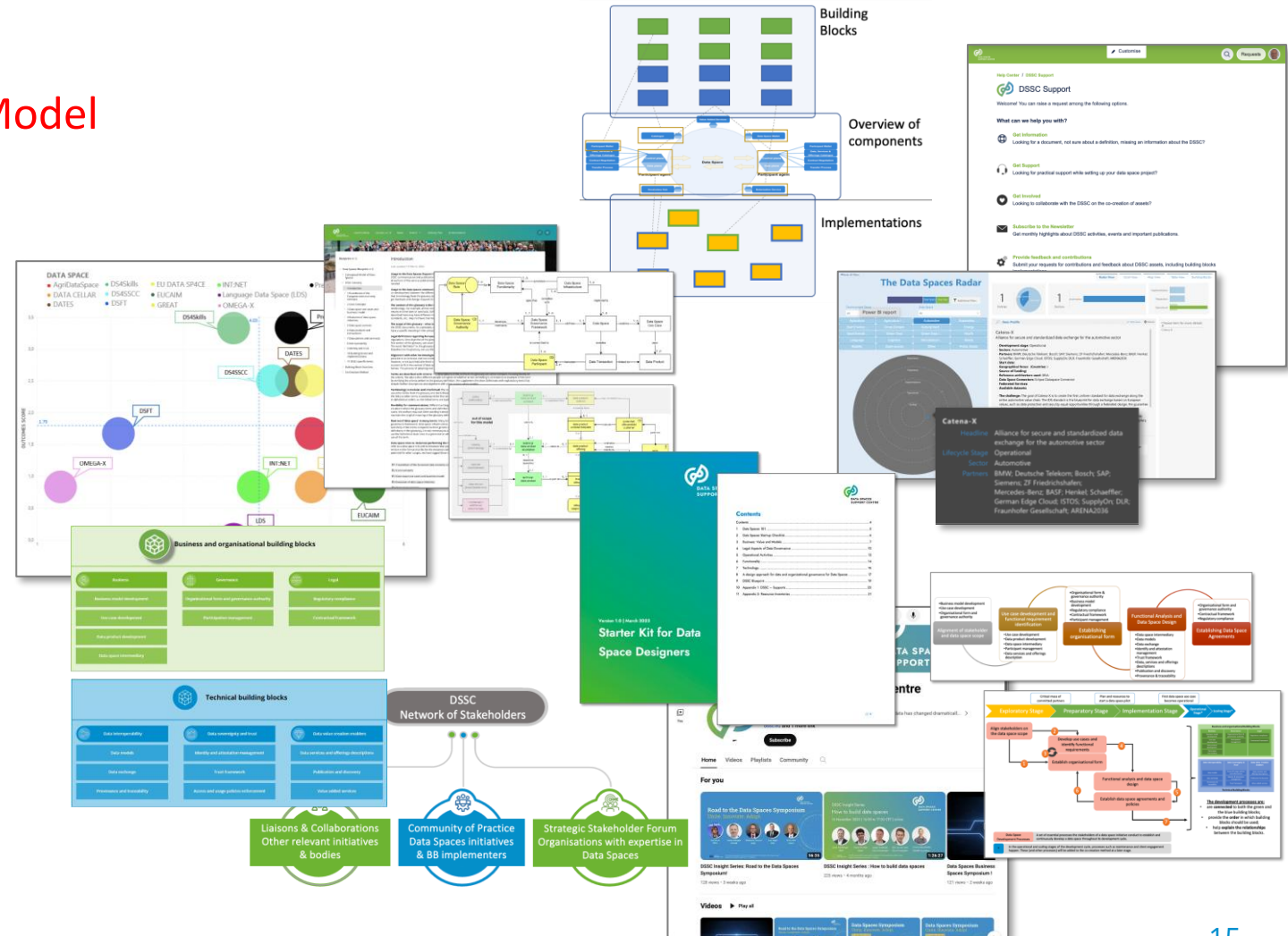- Impact monitoring and evaluation
- Support
- Communications

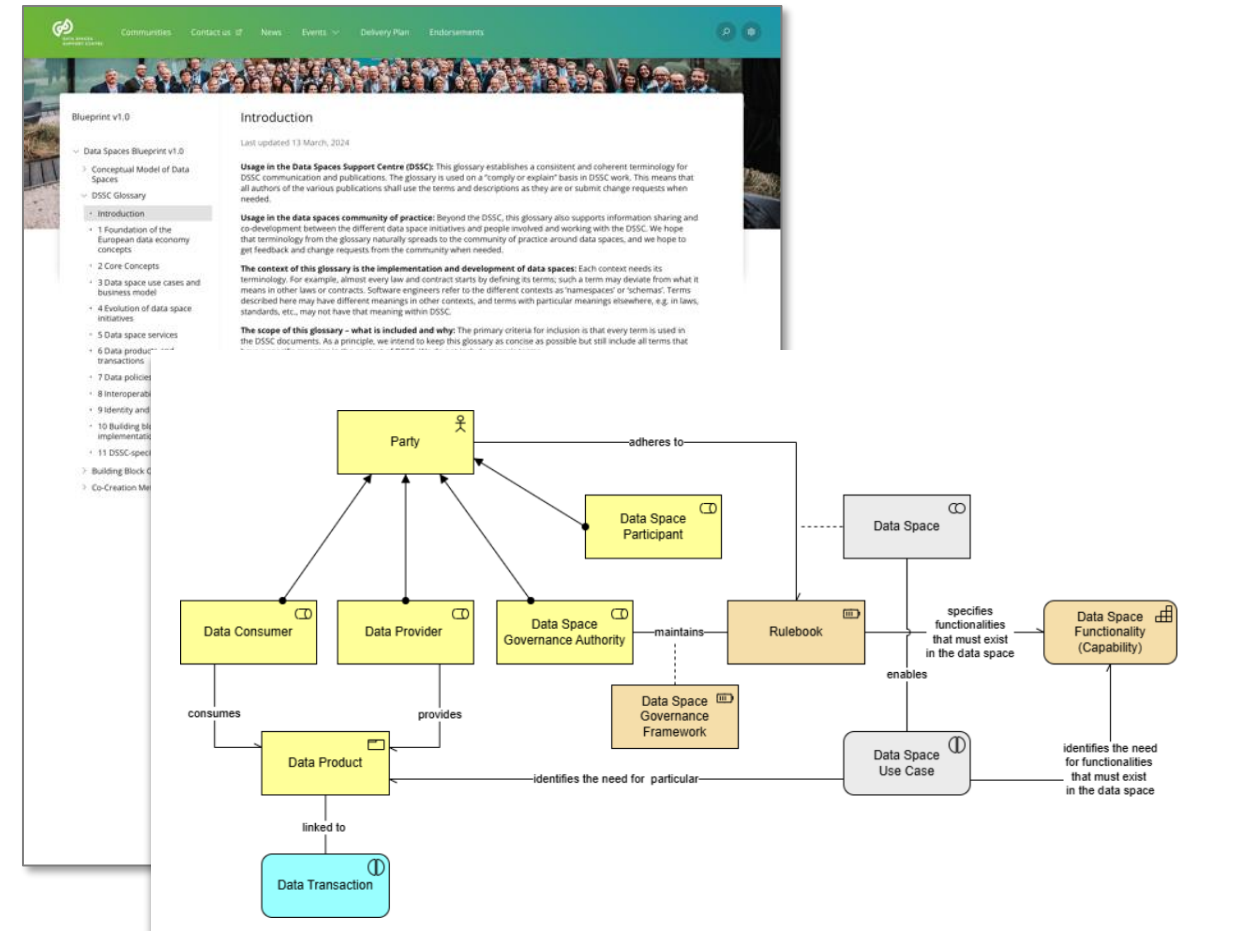# DSSC offerings

- The Network of Stakeholders
- The Glossary and the Conceptual Model
- The Starter Kit
- The Collection of Standards
- The Blueprint
- The Co-Creation Method
- The Toolbox
- The Radar
- Impact monitoring and evaluation
- Support
- Communications

The Glossary and the Conceptual Model

- Data spaces are a new discipline.
- Among practitioners, concepts and terminology can be ambiguous or subject to different interpretation.
- Converging on language is necessary for clarity and collaboration

Blueprint Publication

Rationale: all DSSC offers for all users' type at a glance

For **Building Blocks makers**:
- Implementers of BBs
- Data Space deployment projects
- Contributors to BBs specifications
- Data Space services developers

For **Data Space makers**:
- Data Space initiatives at every stage

For **business users**:
- Data Spaces landscape
- Market analysis
- Support and services
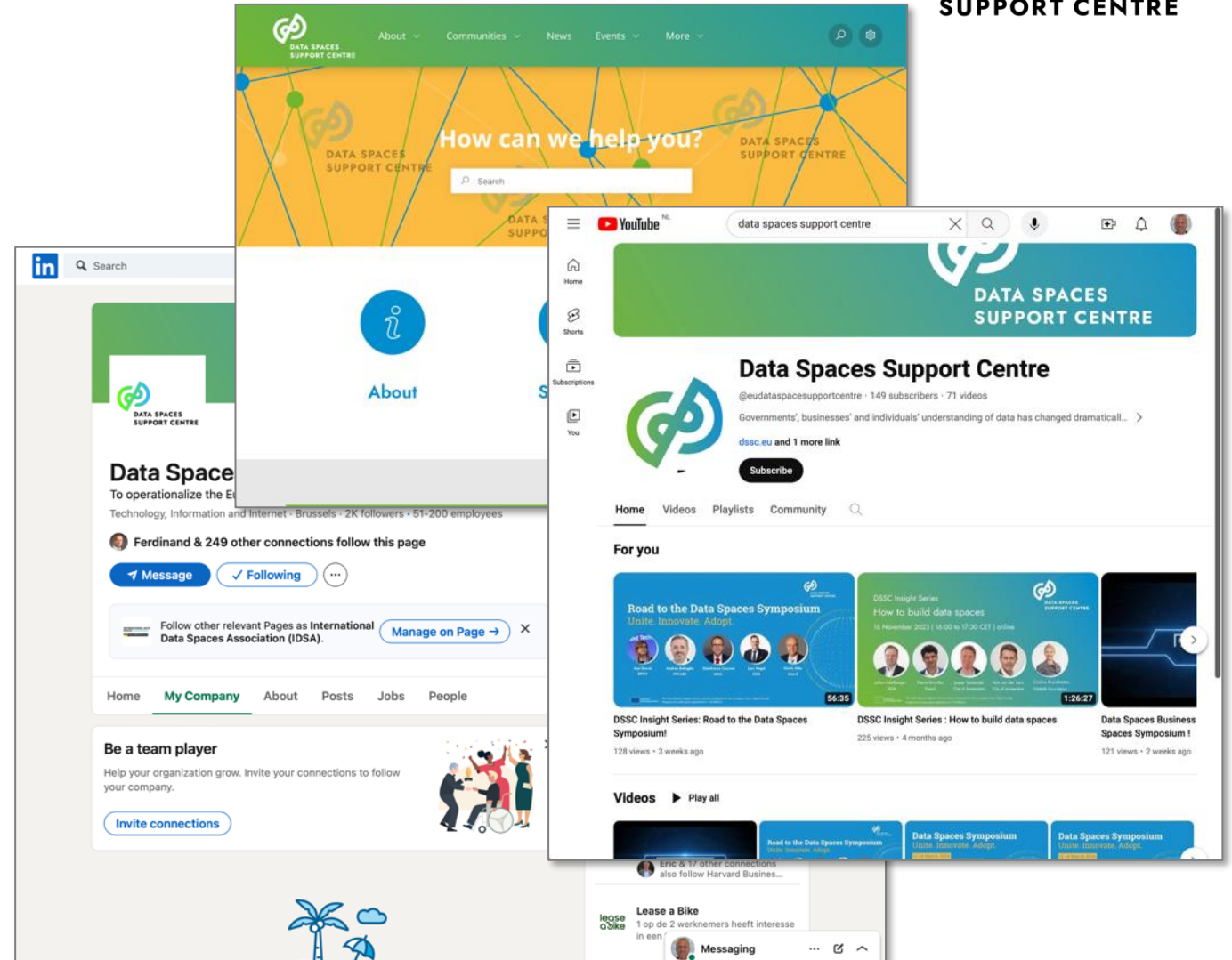

Provide feedback &
Get support

….at any time

Communications

- Keeping you connected and informed.
- https://dssc.eu
- By the way, you're already subscribed to our newsletter, right?

Take a look at DSSC.EU

Stay up to date with Data Spaces Support Centre and the European Union's programme supporting the Common European Data Spaces.

Subscribe to the DSSC Newsletter at <u>tinyurl.com/dssc-newsletter</u>.

Watch again the recordings from all our public events and webinars, including the monthly Insight Series.

DATA SPACES SUPPORT CENTRE

Funded by
the European Union

Thank you!

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