



# EU-Manufacturing Data Spaces Update



Brokering event DEP Data for EU  
DSBA

16. Dezember 2021

[#DigitalEuropeProgramme](#)

Matthias Kuom



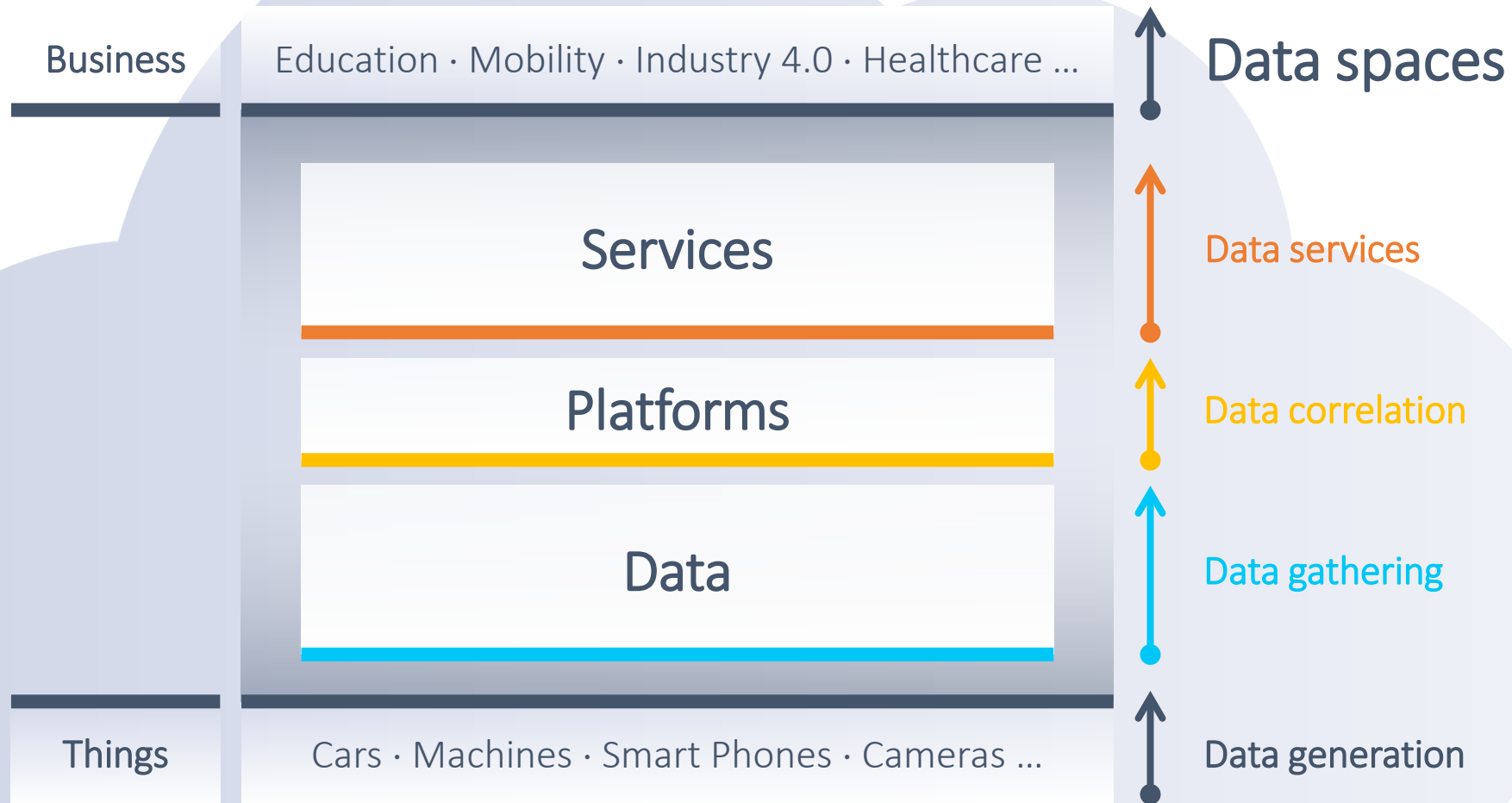
*“My ambition is that European data will be used for European companies in priority, for us to create value in Europe”*

The aim is to make Europe *“the most data-empowered continent in the world”*

*Thierry Breton,  
Commissioner for the Internal Market*



# What is a 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

Deadline for submission:

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



# Leveraging the momentum

Centre for the Fourth Industrial Revolution Japan

**Developing a Responsible and Well-designed Governance Structure for Data Marketplaces**

BRIEFING PAPER  
AUGUST 2021

**World Economic Forum**

**Study on technological and economic analysis of industry agreements in current and future digital value chains**

**Data for Common Purpose Initiative**

The World Economic Forum-led Data for Common Purpose Initiative (DCPI) is a global initiative that explores data exchanges and marketplaces for the common good. With more than 50 global partners in 20 countries, including seven governments, the project looks to embed trust and fairness into the global data ecosystem by promoting the use of data, driving innovation and enhancing public good in the Fourth Industrial Revolution.

In December 2020, the Forum's Centre for the Fourth Industrial Revolution Japan launched the Study Group on Visualization of Data Marketplaces, a coalition of experts from government, private sector and academia in Japan to explore data marketplaces as a model for advancing the aims of the DCPI and as a starting point of data marketplace exploration for Japan.

**DMSPs: A key governance component**

The exchange of data and its use are essential to addressing urgent problems – from fighting COVID-19 and improving the state of global healthcare, to preventing and responding to natural disasters. But many barriers to data exchange exist: governance, policy and regulation to accelerate the exchange and to address the challenges and fast innovation in technology make the ability to share data through data sharing possible and responsible data sharing and

Relative to the vast amount of data that is exchanged, the amount that is exchanged remains small. The market for data lacks depth for a variety of reasons. The general public remains concerned about data privacy. Simply put, people do not control their data.

**OPEN DEI TASK FORCE 1**

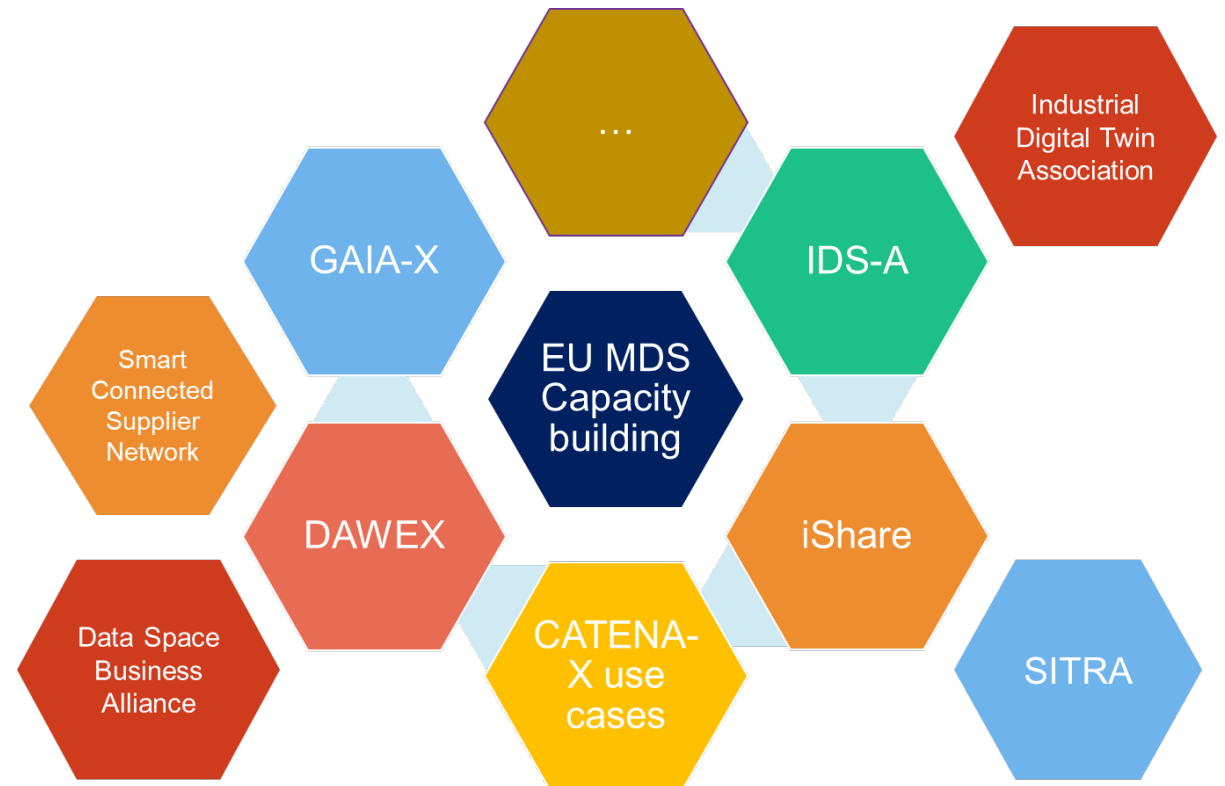
**Design Principles for Data Spaces – Position Paper**

Data space experts team up to define for the first time cross-sectoral and across initiatives the fundamental design principles to build data

FINAL STUDY REPORT  
23 July 2021

Converging guidelines worldwide

## Ongoing data spaces initiatives across Europe





# EC workshops on Manufacturing Data Spaces

2020



2021

- 10.02.2021 [Workshop on initial ecosystems](#)
- 06.05.2020 [Common European data spaces for Smart Manufacturing](#)
- 29.07.2020 [Manufacturing data spaces - predictive maintenance](#)
- 23.11.2020 [Data Spaces for Manufacturing - current state of play](#)
- 16.03.2021 [What role standards play with regard to data sharing](#)
- 10.05.2021 [Manufacturing Data Spaces and their relation to GAIA-X](#)
- 28.10.2021 [The way forward – How to prepare for Manufacturing Data Spaces](#)
- 22.11.2021 [Manufacturing Data Spaces info day upcoming calls](#)



# Manufacturing Data Spaces

## Co-ordination and Support Action (CSA)

### Preparatory action

- To develop multi-stakeholder data governance scheme, sustainable business models, inventory of existing data platforms, agreed set of priority datasets and data themes.

**Call dates:** **First call: Open, Closed: 22 Feb 2022, Evaluation: Q2 2022, Contracts signed: Q3 2022**

**Budget:** **EUR 1 million**

**Funding rate:** 100% eligible costs

**Duration of action:** 12 – 24 months

## Deployment – Simple Grants

**Two projects** to deploy two data spaces for the manufacturing industry at scale for:

- Supply chain operations
- Maintenance operations / Asset management.

**Call dates:** **Third call: Open: Q3 2022, Closed: Q4 2022, Evaluation: Q1 2023, Contracts signed: Q3 2023**

**Budget:** **EUR 16 million**

**Funding rate:** 50% co-funding rate (75% for SMEs)

**Duration of action:** 24 months



# Expected outcome of the CSA

## **coordination of stakeholders & support the deployment**

1. Develop a multi-stakeholder data governance scheme, jointly agree on the data interoperability requirements and interfaces, and data federation models.
2. Delivering sustainable business models for the data spaces, which incentivise data sharing and reuse
3. Inventory of existing data platforms for manufacturing and a blueprint for manufacturing-specific building blocks
4. Agreed set of priority datasets and data themes, including real-time data, conform with the new blueprint standards and principles.



# Objective of the deployment call

- Increase data sharing across manufacturing companies and with service providers
- Demonstrate how sharing industrial data improves company operations in
  - agile supply chain management and execution
  - dynamic asset management and predictive/prescriptive maintenance
- Enhance business opportunities for industrial data value added services by parties outside a production site
- Particularly SMEs will benefit from larger sets of industrial data to broaden their offers in terms of products and services
- Support the transition towards a circular economy



# Timeline

- Call 1 – for preparatory action (CSA)
  - Open: 17 November – 22 February
  - Evaluation: 14 March to 29 April 2022
  - Information on evaluation results: End of May 2022
  - Signature of the grant agreements: September 2022
  - Project duration 12 – 24 months
- Call 2 –
- Call 3 – Deployment call
  - Open: Q3 2022 – Q4 2022
  - Evaluation Q1 2023
  - Information on evaluation results: Q2 2023
  - Signature of the grant agreements: Q3 2023
  - Project duration 24 months

Nov
Dec
Jan 2022
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
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Dec
Jan 2023
Feb
Mar



# outcome 1: governance scheme

## data governance scheme & data federation models

		Policy Rules and Architecture of Standards
		Towards a European Data Sharing Space
		IDS Reference Architecture Model and IDSA Rulebook
		SITRA Rulebook
		MyData Operators
		Data Sharing Canvas
		FIWARE for Data Spaces

Non-exhaustive

Design Principles for Data Spaces v1.0

## Practical Manufacturing Data Spaces Governance Scheme

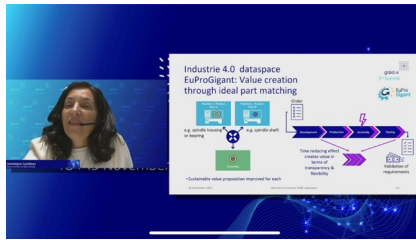
Jointly agreed

- Accession & Roles
- Rules & Procedures
- Soft infrastructure (functional and non-functional requirements regarding interoperability, portability, findability, security, privacy, and trustworthiness)
- Templates and tools that enables federation & scaling up



# outcome 2: business models

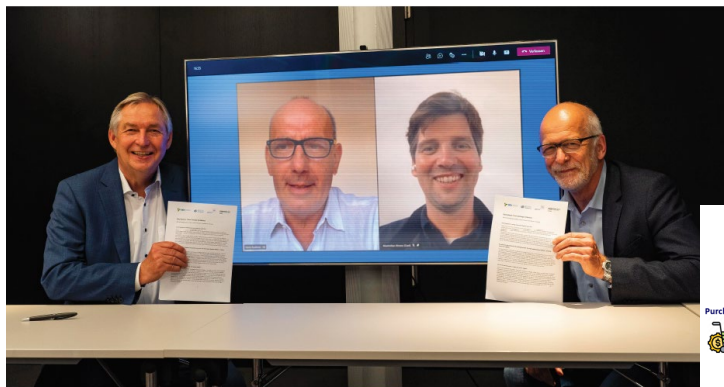
## sustainable business models that incentivise data sharing and reuse



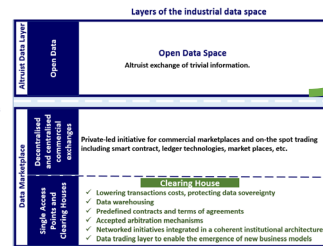
Data Spaces Business Alliance



Study on technological and economic analysis of industry agreements in current and future digital value chains



FINAL STUDY REPORT  
23 July 2021  
A study prepared for the European Commission DG for Communications Networks, Content & Technology by:



## From use cases to business models

- Methods to estimate the value of data shared
- non-financial incentive mechanisms
- Business models for intermediation services
- Quality assessment methods
- Agreement mechanisms (e.g. Smart contracts for value sharing)

that enable to share the benefits



# outcome 3: Inventory and a blueprint

## Inventory of existing data platforms & manufacturing-specific building blocks

Analysis of examples (incl. maturity) to identify commonalities and key features

- Open source components
- Methods to estimate the value of data shared
- Use of intermediation services
- Templates and tools

that enable to share the benefits, develop a blueprint; and act as a transition guide

Platform Industrie analyzed digital ecosystems in industry  
Typology, examples and future development

**INDUSTRIE 4.0**

**BDI**  
Bundesverband der Deutschen Industrie e.V.  
HANDELSBLATT | DIGITALPOLITIK | PLATTFORMÖKONOMIE  
Deutsche digitale B2B-Plattformen  
Digitalisierung und Nachhaltigkeit  
sinnvollere Entwicklung eines industriellen B2B-Plattformökosystems in Deutschland fördern.

**SINTEF**  
Maritime Data Space  
Data Space #10

**CHALLENGE**  
Maritime shipping companies are required by law to transmit a set of important data before entering every port. There are various industry solutions for this data exchange such as the already established in the market today. All of them are very complex and time intensive to manage.

**SUCCESS**  
The IIS-based Maritime Data Space brings together all participants and provides a one-to-one and secure data ecosystem. It ensures transparent access to ship-related data, enables secure, stable and efficient communication between ship and shore, and provides value-added and trusted services for ship operations.

**COMPONENTS**  
• Industry Industry Data Platform  
• BDI Connectors  
• IIS Identity Provider (CA, SAML, OAuth)  
• IIS Metadata Broker

**PARTNERS**  
• Shell  
• Maersk  
• Hapag-Lloyd  
• Wilhelmsen  
• DNV-GL

**BENEFITS**  
• Transparent access to all relevant ship-related data  
• Secure, robust and efficient communication between ship and shore  
• Simplified provision of trusted services for ship operations  
• Interoperability and data sovereignty for all involved parties



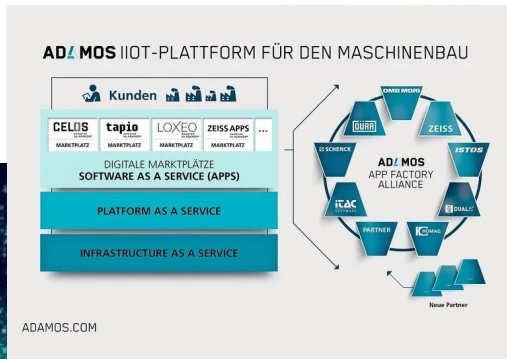
# outcome 4: Agreed datasets and themes

**Bring an agreed set of datasets and data themes, including real-time data, into line with the new standards and principles of the blueprint**

 Space Data Marketplace



- Analysis of available datasets
- Prioritization
- Adapt to standards and principles identified in the blueprint



To create critical mass of initial data to share



# Keep in touch

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