

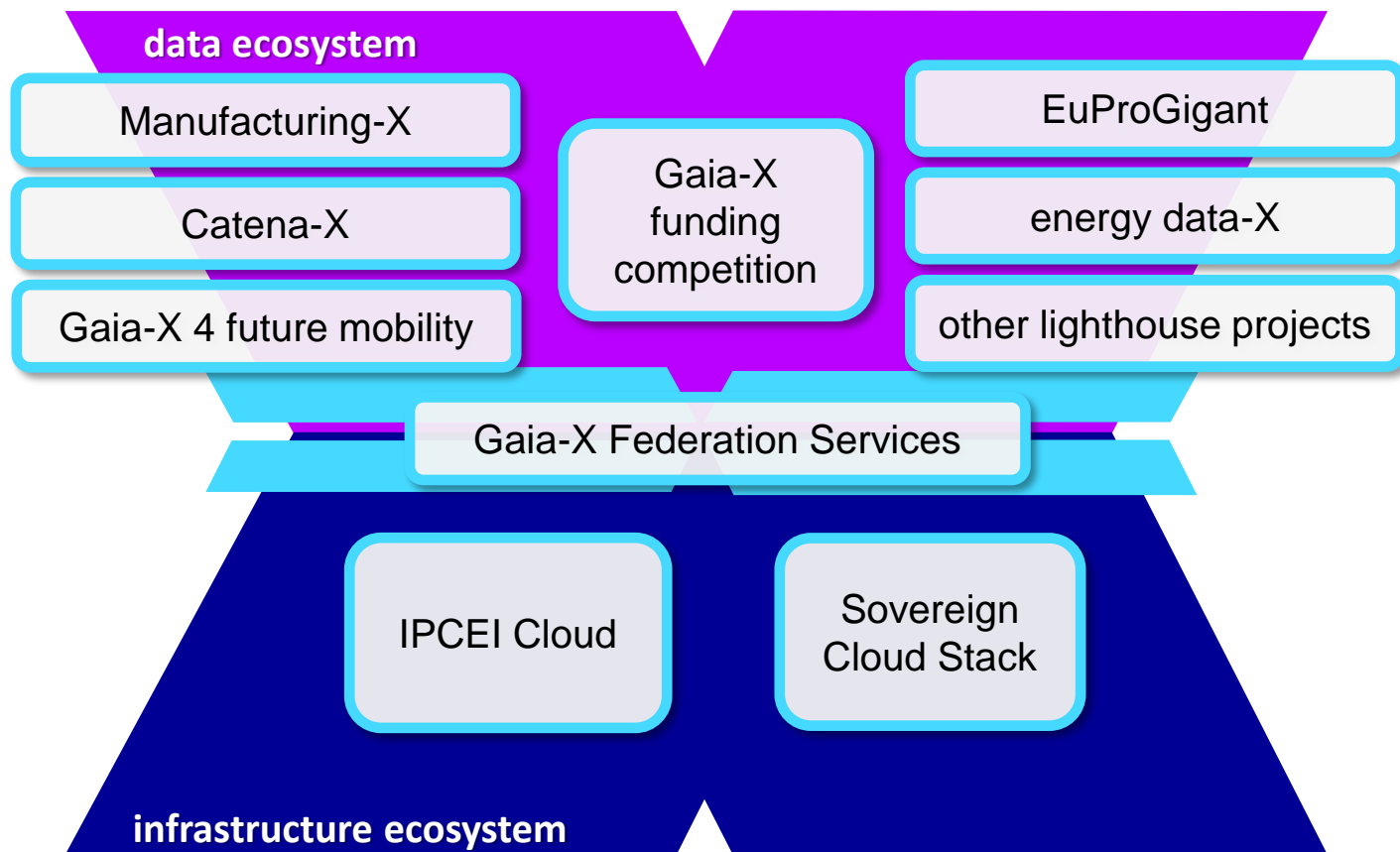


Federal Ministry
for Economic Affairs
and Climate Action

Strengthening our economy with data spaces

Ernst Stoeckl-Pukall, Darmstadt, March 13th
Head of Division, Digitization, Industrie 4.0

Funding programs for data ecosystems



The Industrie 4.0 ecosystem

PLATTFORM INDUSTRIE 4.0

Plattform Industrie 4.0 is set up broadly in a close alliance of companies, trade unions, associations, science and politics.

The Industry declares the Fourth Industrial Revolution.

2011

LN14.0
LABS NETWORK INDUSTRIE 4.0
Test centers enable new technologies and business models to be tried out.

2015

STANDARDIZATION COUNCIL INDUSTRIE 4.0
Industrie 4.0 standards based on European values make their way into national and international committees.

2016

International dialogue starts up – first within the EU and international.

2017

The 2030 Vision for Industrie 4.0 is formed: Shaping Digital Ecosystems Globally.



2019

The next generation of data infrastructure is coming.



Germany-wide demonstrator proves functionality of AAS.



2020

The German federal government supports the digitization of OEMs and supplier industry.



First Industrie 4.0 data ecosystem along automotive production supply chains is developed.

2021

The AAS asserts itself in practice.



2022



Global initiative for the realization of a smart connected industry launches.

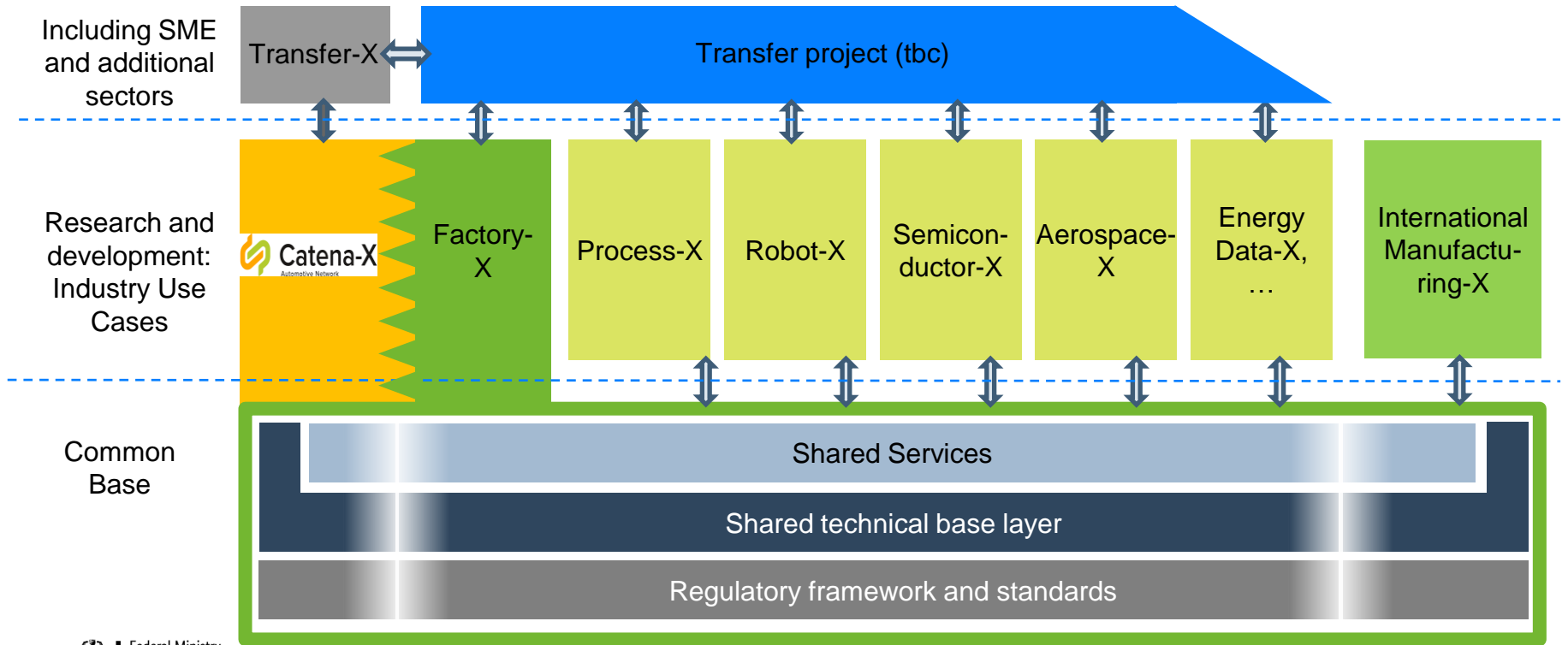
2023

Creation of an important project of common European interest: IPCEI - Industrial Cloud



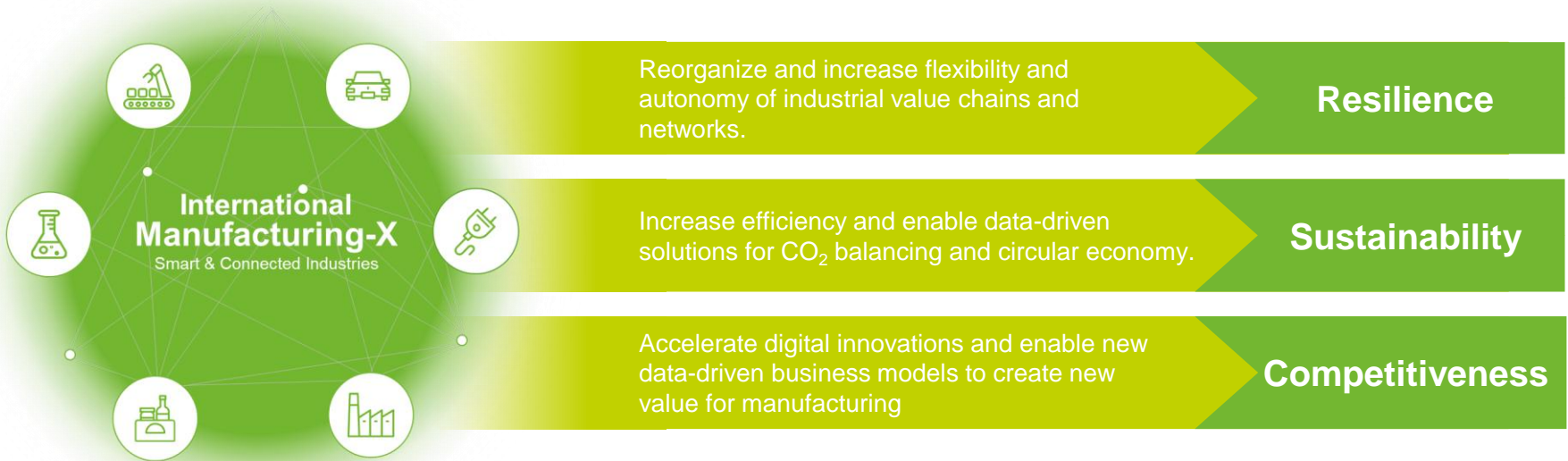
2024

Systemic approach to „Manufacturing-X“



International Manufacturing-X (IM-X): Make Data Work

- IM-X will implement a federated, decentralized and collaborative data ecosystem for smart manufacturing. Open, global and cross-sectoral.

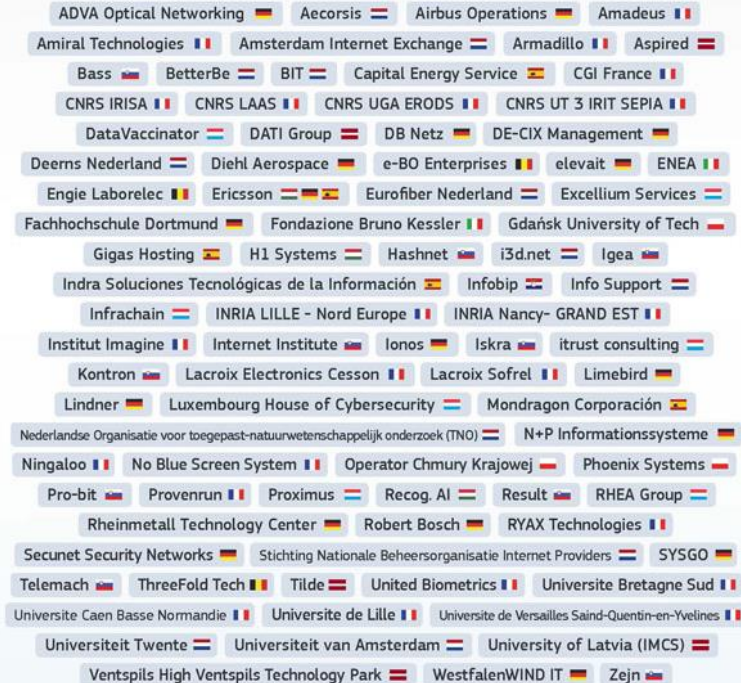


IPCEI-CIS: Industry Partners

Direct Participants



Indirect Partners



- **Approved by EU COM** on December 5th 2023
- **12 Member States** committed
- **109 European projects** involved (19 direct partners and 90 indirect partners)
- Total investment volume of all projects of approx. **EUR 7.8 billion**
- Duration until the **end of 2026**

HOW INDUSTRIAL DATA ECOSYSTEMS WORK?!

DRAFT
not for
distribution!



Align objectives & vision |
Agree governance & rules |
Design concepts, principles & road maps



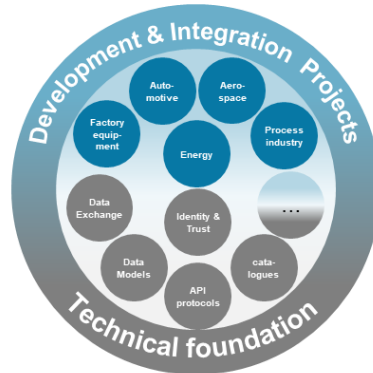
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Integrate technical building blocks



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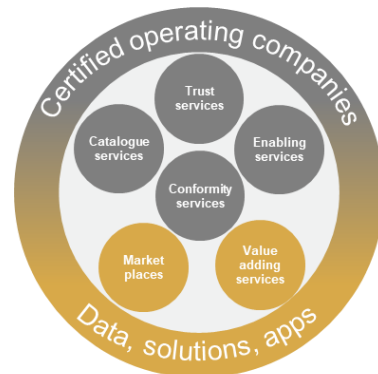
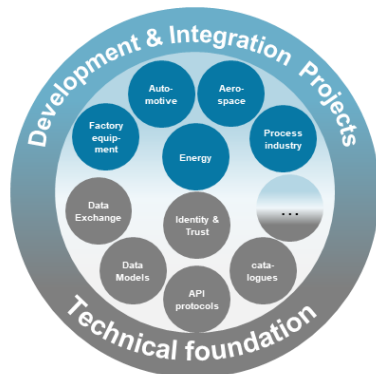
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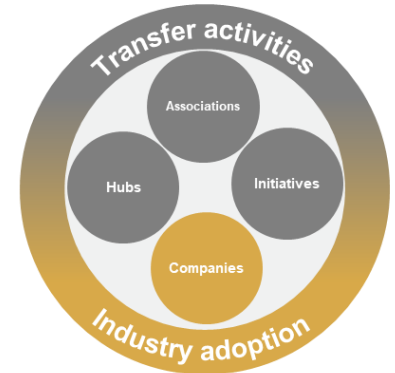
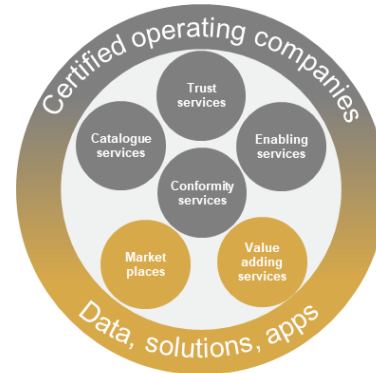
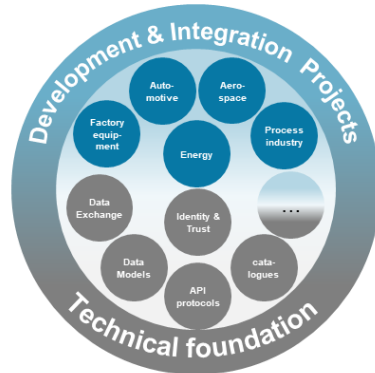


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SME support activities | consulting &
training | Test beds & test support |
Roll out of use cases



Summary

1. Internationalization with equal partners!
2. Develop trust in the data ecosystem as a whole!
3. Definition of roles – what is your center of gravity?
4. Transparency about processes and procedures!
5. Scalability requires a common understanding of the data ecosystem
6. A open system requires active contribution in various communities (FOSS)
7. Smart development and integration of various governance structures

Live up to the new paradigm of data usage and openness!