



GAIA-X

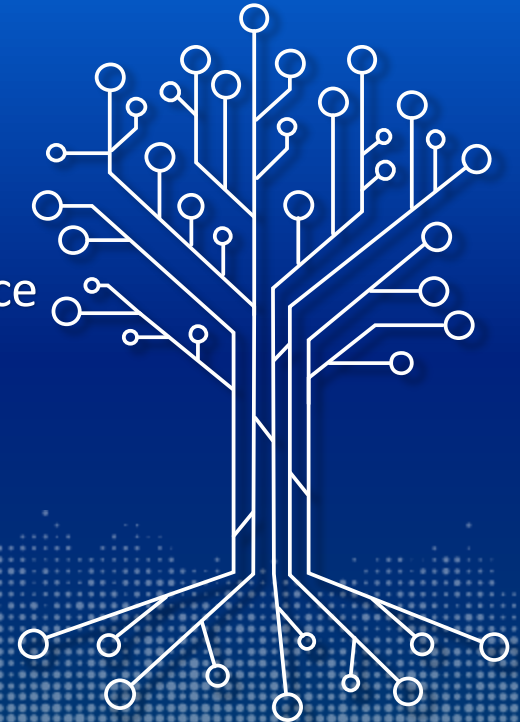
# The European Initiative GAIA-X

Intergovernmental Group of Experts on E-commerce  
and the Digital Economy, UNCTAD, Geneva

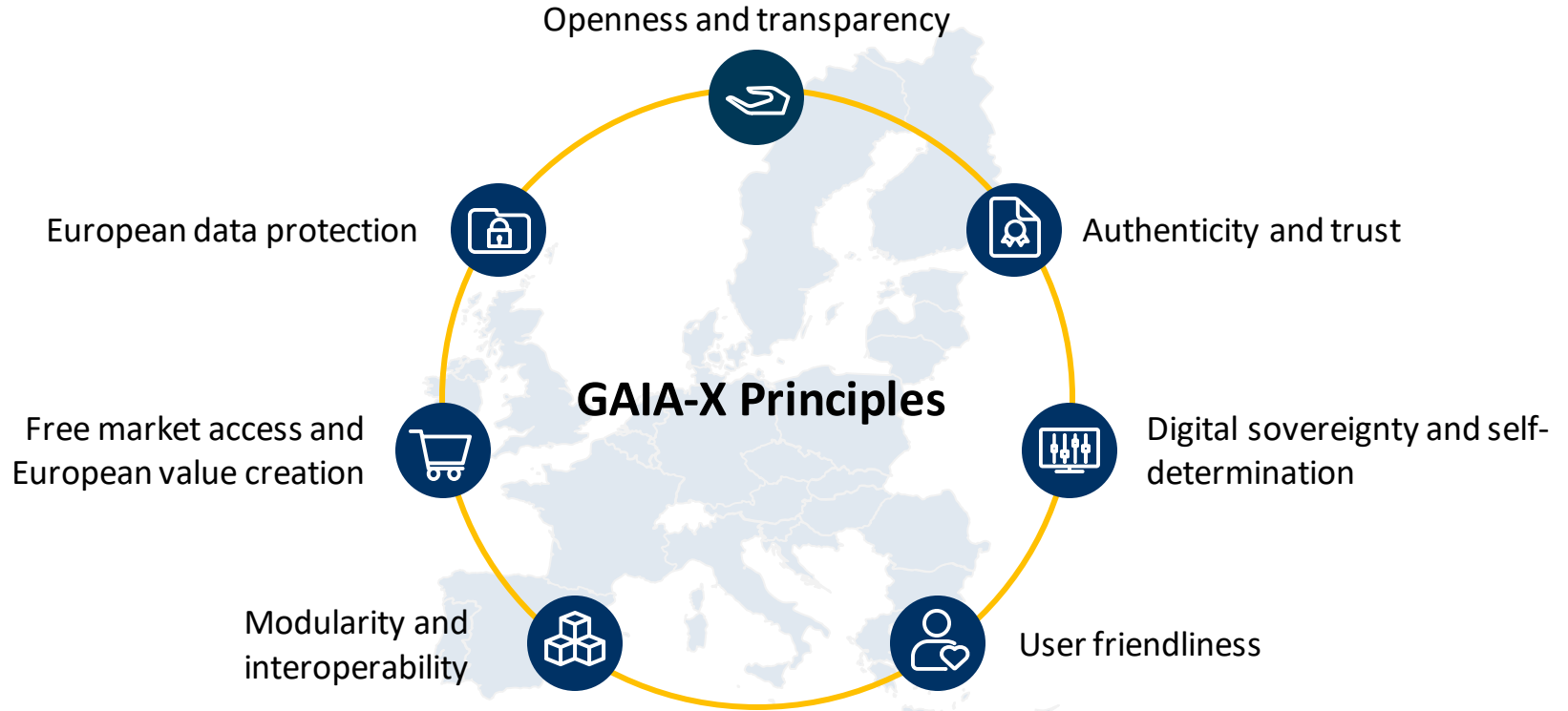
Ernst Stoeckl-Pukall

Head of Division Industrie 4.0

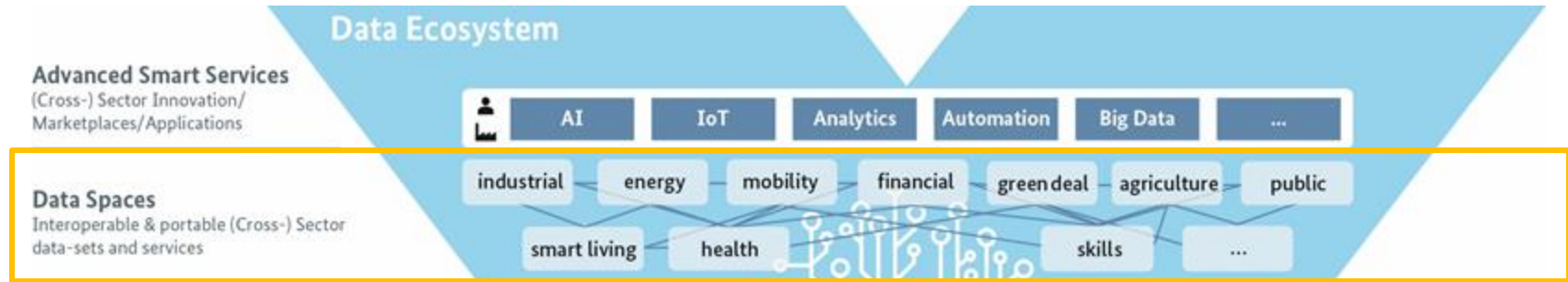
Federal Ministry for Economics and Energy,  
Germany



# GAIA-X follows principles based on European values



# User requirements are at the core of the development of GAIA-X



- In order to facilitate value creation based on digital services and mechanisms, we need **an architecture in the form of an underlying framework common to all domains.**
- GAIA-X allows the emergence of **Advanced Smart Services** such as **AI, Analytics or Big Data** and fosters **innovation in the GAIA-X Ecosystem.**
- GAIA-X offers ontologies for interoperability and API within and across sector specific **data spaces** according to the EU Data Strategy.
- It promotes the opportunity to collaborate in **data-driven horizontal and vertical value chains.**
- As a result, it encourages the emergence of **sustainable business and innovation ecosystems** for the next generation of digital infrastructure.

# GAIA-X aligns various providers in an infrastructure ecosystem

- GAIA-X creates an infrastructure ecosystem by establishing **portability** and **interoperability** between **network and interconnection providers**, **Cloud Solution Providers (CSP)**, **High Performance Computing (HPC)**, **sector-specific clouds** and **edge systems**.
- Mechanisms are developed to **find, combine and connect services** from participating providers in order to enable a **user-friendly infrastructure ecosystem**.
- GAIA-X **supports distributed use cases**, spanning from on-premise set-ups, cloud hosted infrastructure through to facility to edge cases.
- GAIA-X has to address the **complete technical stack**, including infrastructure and existing network/ interconnection requirements (Architecture of Standards) of distributed use cases.

## Portability, Interoperability & Interconnectivity

Technical: Architecture of Standards  
Commercial: Policies

## Compliance

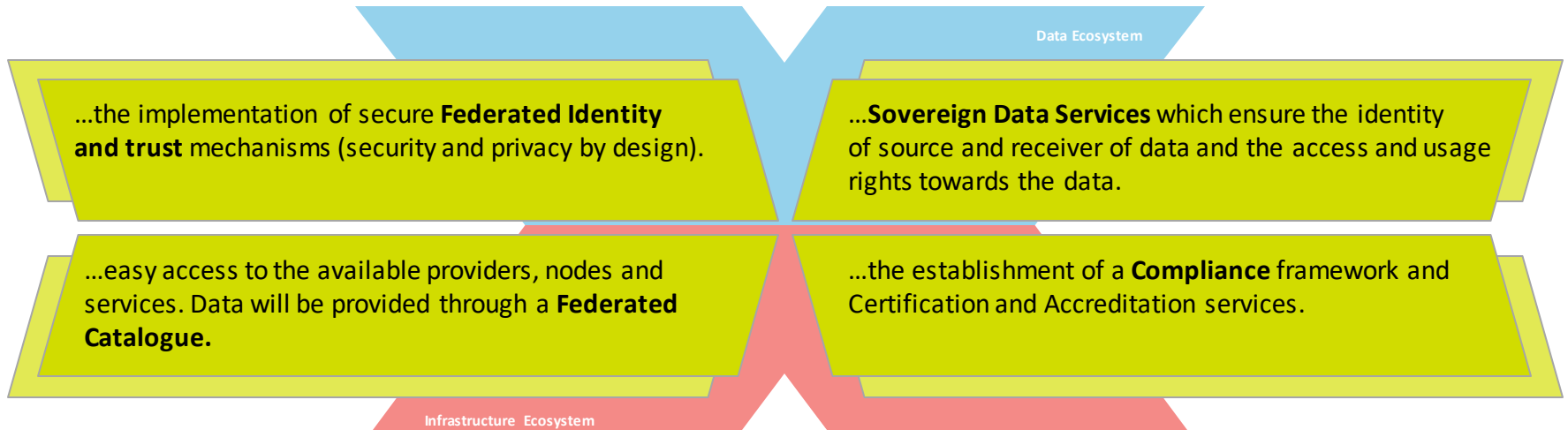
Legal: Regulation & Policies

## Infrastructure Ecosystem



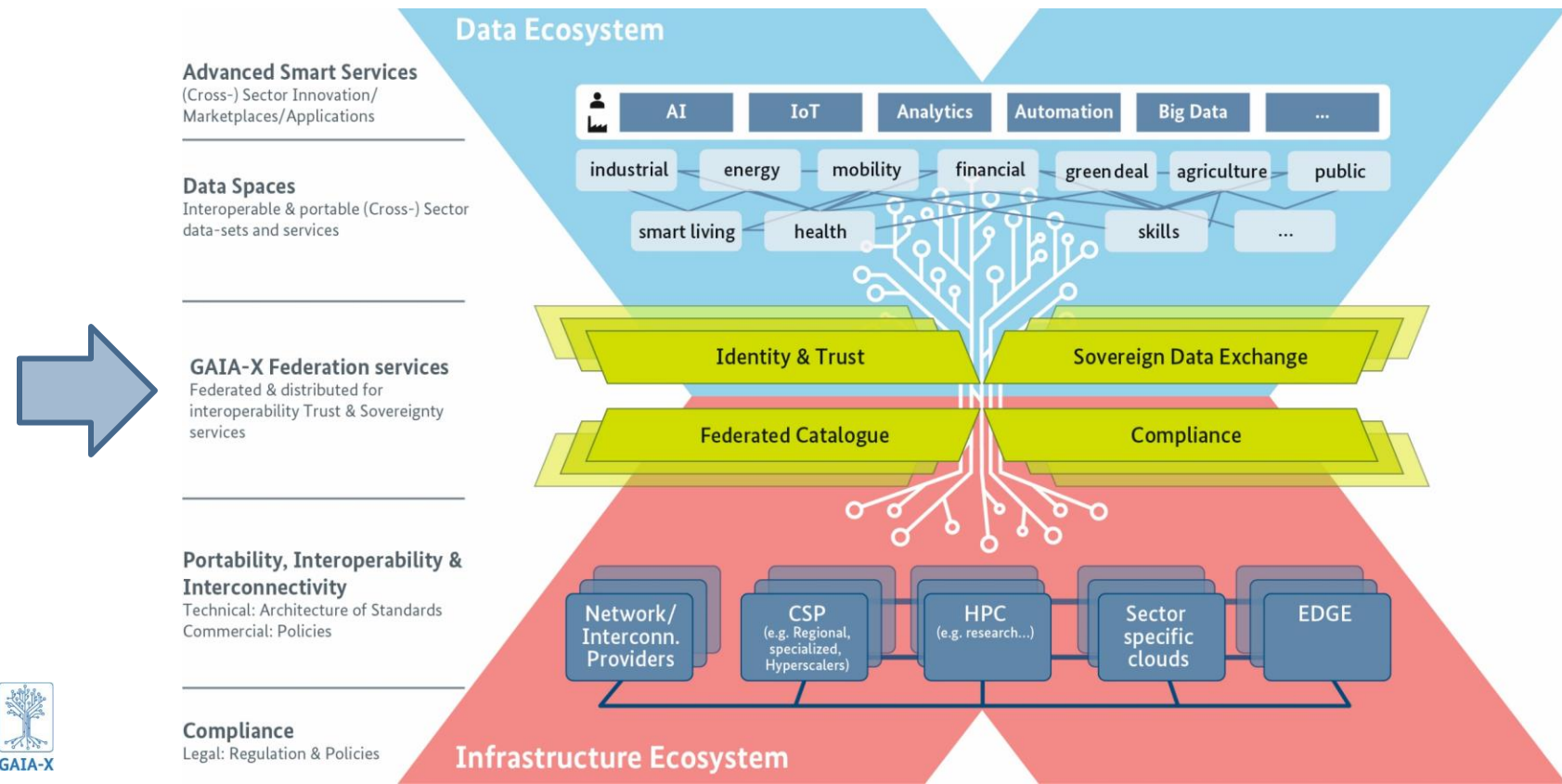
# GAIA-X Federated Services are at the core of the technical infrastructure

The technical implementation of these Federation Services focuses on...



GAIA-X identifies the minimum technical requirements and services necessary to operate **the Federated GAIA-X Ecosystem**. The development of these services will follow the principles of **Security-by-Design** and also include the concept of **Privacy-by-Design**.

# Overview: GAIA-X provides a user-friendly and homogenous ecosystem of services and data





# A strong alliance has already joined GAIA-X; through an association membership, a participation in the community or in the regional hubs



**500+** participants from **more than 350** companies and organisations



**3 out of 4** organisations are private companies, **about half** of which are SMEs\*



Organisations from different industries, such as Mobility, Energy, Manufacturing, Finance etc.



Large companies



SMEs



Start-ups



Universities



R&D



Associations



Public Sector





## Further information about GAIA-X is available on our website



### Information

- Descriptions of the mission, project structure and workstreams
- Overview and download of publications



### Blog

- Publication of blog posts linking to news, developments, discussions and comments on events and articles



### Use cases

- Overview of the current use cases
- Individual one pager with further descriptions and information on each use case



### Glossary

- The glossary is intended to list and explain important terms used in the GAIA- X context



### FAQ

- The FAQ list offers a collection of frequently asked questions and answers about the project and GAIA- X

[www.data-infrastructure.eu](http://www.data-infrastructure.eu)