## **Endorsed Projects**

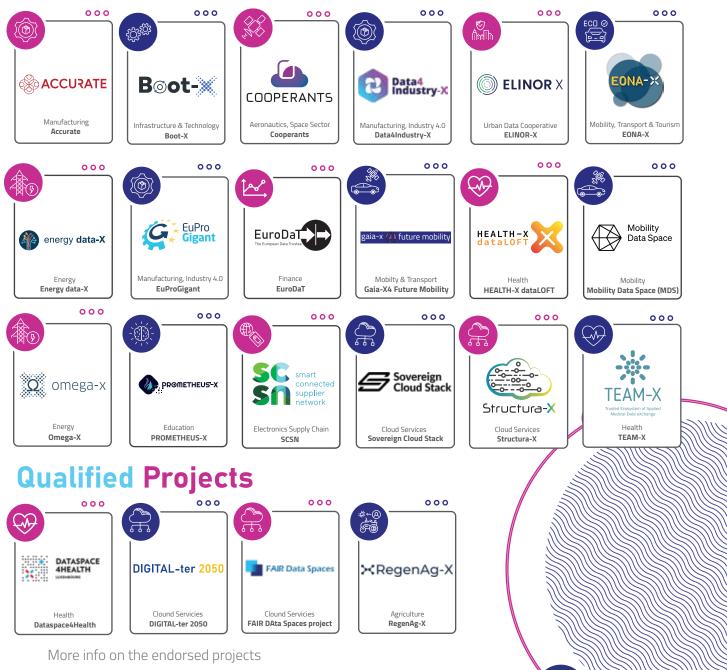


Making strides in navigating digital transformation with lighthouse projects

## Lighthouse Data Spaces



## Lighthouse Projects



gaia-x.eu/services-deliverables/endorsement-programme/

European operator of consents and data exchange platform specialised for farming industry. Agdatahub, the agricultural and agri-food data intermediation platform, trusted third party. Founded by and for the agricultural sector, Agdatahub is the leading player in the circulation of agricultural data in France and Europe in order to meet the food and environmental challenges of today and tomorrow. Our technological solutions are designed to ensure that agricultural data is used in a controlled manner for innovation and consumer information. We put our expertise at the service of one ambition: to bring together all the players in the sectors to disseminate the value of agricultural data!

It is one of the first industrial lighthouse projects of Gaia-X. It aims to create a secure and standardised data-based ecosystem for businesses ranging from OEMs, 1st Tier and to small & medium enterprises in the entire automotive value-chain. A joint task force with Gaia-X ended in November 2021, resulting in full technical compliance of the proposed Catena-X architecture with Gaia-X principles.

This project aims to boost the competitiveness of European manufacturing companies and value chains by improving their sustainability, performance stability, resilience, and ability to manage unforeseen events. To achieve these benefits, ACCURATE will develop innovative approaches and deliver an integrated set of results validated in 3 pivotal use cases covering multiple key European industrial sectors and value networks (aerospace, automotive, biotech, energy, medical, and mobility).

The Boot-X project is a part of Huawei's Exchange Data Space (EDS) and addresses the underlying infrastructure and technology stack for setting up either a complete dataspace environment or all necessary components to participate in an existing dataspace. To contribute to the EDS objectives, Boot-X ensures the compliance to Gaia-X trust framework and IDSA's DSP. Boot-X therefore comes with a built-in features to support generation of VC/VP descriptions for participants and services, according to Gaia-X Trust framework.

Agriculture 000Agdatahub Automotive Supply Chain 000 Catena-X Manufacturing Accurate Infrastructure & Technology 000 Boot-X Aeronautics & Space Sector 000 **Cooperants** 

COOPERANTS (Collaborative Processes and Services for Aeronautics and Space) is the world's only collaborative alliance of industry, SMEs and research institutes in the Aeronautics and Space sector that solves pressing digital collaboration problems by creating a common data space, powered by Gaia-X. The aim of the national consortium is to develop more efficient, decentralised forms for future working methods and processes across the entire lifecycle of space or air vehicles. COOPERANTS develops and operates a digital service infrastructure, powered by Gaia-X, for the low-barrier exchange of heterogeneous data from individual system landscapes as well as for the operation of new, collaborative smart services.

Data4Industry-X is the trusted, secure, compliant and sovereign Data Exchange solution for Industry, improving competitiveness and reducing the carbon footprint of major global industrial organizations. Initially addressing the automotive and power generation industry challenges, Data4Industry-X delivers a powerful response to support the industry digital transformation, boost sustainability objectives and capitalize on the high potential of industrial data.

This project presents the first Gaia-X implementation in Switzerland. A new model of data collaboration is being developed along Elinor Ostrom's Principles of Commons that will enable the public and private sectors to share data easily and targeted. Data is routed based on individually specified and legally binding data sharing agreements, directly from data provider to data consumer, without ever being stored centrally. Elinor-X provides the foundation for data sources of future digital twins that will enable government and other public service providers to solve important and pressing challenges through data-driven decision-making.

Aims to provide a trusted environment to unlock data sets and foster mobility, transport and tourism use cases. A primary focus is the optimisation of multimodal trips to contribute to achieving the zero emission target defined by the EU Mobility Strategy. A powerful demonstrator was delivered based on real time data coming from real production systems of airline and rail industry.

Energy data-X aims to create a common data space for the German energy industry in Gaia-X. The data will remain decentralised with the data owners but can be provided and exchanged according to the developed compliance rules and in a sovereign manner. This creates the basis for improved energy industry processes and new, innovative data-driven applications and business models. A significant contribution to achieving the German and European energy and climate targets is expected.

The European Production Giganet (EuProGigant): It is an Austrian-German lighthouse research project "for calamity avoiding self-orchestration of value chain and learning ecosystems" working on central questions related to the smart and sovereign use of data in manufacturing. Scheduled for the latter half of 2022, the project aims to deliver on machine connection and machine-oriented data processing using Gaia-X compliant edge architecture, thus creating resilience in the value creation ecosystem.

Manufacturing, Industry 4.0 000 **EuProGigant** 



**ELINOR-X** 

Mobility, Transport & Tourism

Energy **Energy data-X** 

**EONA-X** 

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Manufacturing, Industry 4.0 000 Data4 Industry-X



Finance EuroDaT



EuroDaT is an international consortium that aims to establish the legal and technological framework for a neutral data trustee operating in accordance with Gaia-X and the EU Data Governance Act. It is based on the unique principle of data transaction, which ensures the secure and legally compliant exchange of data between any parties and enables independent analyses of shared data.

> Mobilty & Transport 000 **GAIA-X4 Future Mobility**

> > Health **HEALTH-X dataLOFT**

> > > **TEAM-X**

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GAIA-X4 Future Mobility: A project family located in the mobility domain of the German Gaia-X Hub.

The focus of the 6 projects is on the Gaia-X-based implementation of future mobility applications. Due to the product proximity of the applications, data-based networking with manufacturers, suppliers, service providers and users is particularly important. Around 80 players from all application, research and topic areas of mobility, especially information and communication technologies, are involved in GAIA-X4 Future Mobility.

HEALTH-X dataLOFT and TEAM-X (Trusted Ecosystem of Applied Medical Data eXchange) both work on solutions for trustworthy and secure health data spaces that give data owners maximum sovereignty over their own data. Both projects have a lot in common and the motivation for HEALTH-X dataLOFT and TEAM-X are similar. Hence, the coordinators of both projects have decided to work closely together and use synergies as much as possible to implement GXFS/XFSC in the healthcare domain and roll out Gaia-X health data spaces where citizens are in charge of sharing their data in a firm commitment to the European Gaia-X values to shape the future of data sharing through Gaia-X.



The Mobility Data Space (MDS) functions as a marketplace facilitating the exchange of mobility & logistics data, catering to both business-to-business (B2B) and business-to-government (B2G) interactions. Furthermore, the MDS also develops sector overarching use cases, interlinking, e.g., the mobility sector with energy, weather, and/or urban planning. The German National Academy of Science and Engineering (acatech) is the founder and majority shareholder of the DRM Datenraum Mobilität GmbH – the operating company of the Mobility Data Space.

An Energy Data Space to boost the European data economy.

This will include federated infrastructure, data marketplace and service marketplace, involving data sharing between different stakeholders and demonstrating its value for concrete energy use cases while guaranteeing scalability and interoperability with other data space initiatives.

**Omega-X** 

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Energy

The project aims to develop and deploy a cloud to edge infrastructure for educations & skills capable of connecting services and data, and to make this data space ecosystem accessible to all. They are currently delivering 6 use cases (1 not within Education & skills) and 21 building blocks ranging from consent management to skills interoperability, decentralised AI training, Crowd-tagging system, etc.

It is an open data lighthouse ecosystem along the lines of Gaia-X that enables data sharing in a manufacturing environment, resulting in fast, safe, secure, and efficient data exchange within the high-tech supply chain. Brainport Industries is one of the leading partners in this project. As part of the project scope, the team will facilitate new application clusters within SCSN and will scale up SCSN – from a content perspective – towards different industries.

Sovereign Cloud Stack (SCS) provides standards and software for the operation and management of sovereign cloud infrastructure, and thus makes a key contribution to enabling digital value chains that are not dependent on individual infrastructure providers.

A lighthouse project for European cloud infrastructure endeavours to enable existing Cloud Service and Infrastructure Providers (CSP) data and infrastructure services to be Gaia-X certifiable. The goal is to create an ecosystem of independent CSPs, orchestrated by a shared layer of federation certification and labelling services based on Distributed Ledger Technology (DLT). The success will be measured through a set of Minimal Viable Products (MVPs), which shall be fully portable and interoperable between different CSPs and certified by Gaia-X or a delegated certification authority.



**Cloud Services** Structura-X



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000 **Sovereign Cloud Stack** 

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The project aims to share health data in a legitimate, open, and federated manner, adhering to Gaia-X standards. It will enable Gaia-X compliant data usage for individual cases within Luxembourg and the broader European Healthcare Industry. By networking health areas and facilitating data exchange across institutions and locations, Dataspace4Health will establish a federated data platform for Luxembourg. This platform supports new economic models based on data sovereignty and the integration of previously separate data areas.

Digital-ter 2050 provides a digital framework compliant with European regulations. It offers open-source specifications and services to streamline procurement, foster collaboration among platform providers, and ensure cloud compliance. Governed by open-source best practices, it promotes transparency and innovation through stakeholder involvement, driving sustainable digital transformation.

The FAIR Data Spaces project creates a common cloud-based data space in which industry and science share research data in a self-determined manner. Among the core results are a common technical foundation and demonstrators on the use of Gaia-X technology for providing and using research data along the FAIR Principles in different fields of science and business sectors. The project is funded by the Federal Ministry of Education and Research (BMBF).

RegenAg-X: is an innovative Agri-Food Data Space created to transform regenerative agriculture by facilitating secure data sharing and fostering collaboration among diverse stakeholders. As a key initiative under the Tech4RegenAg project funded by EIT Food, RegenAg-X empowers producers, researchers, and organizations to optimize agricultural practices. The platform aligns with EU's sustainability and resilience goals, ensuring that data becomes a valuable resource for shaping the future of farming.

RegenAg-X serves as a Lighthouse for the regenerative agriculture sector, showcasing best practices in data sharing, security, and interoperability. This reference implementation provides stakeholders with practical insights into leveraging data for precision farming, sustainability, and innovation.

