# Hannover Fair 2023: Dataspace liftoff with Catena-X and connectivity products

By Chris Schlueter Langdon, 2023-03-02

### Hannover Fair: Where leadership meets innovation

Hannover Fair is one of the world's leading trade shows for industrial technology. It is held annually in Hannover, Germany, and attracts exhibitors and visitors from around the globe. The fair is significant, because it provides a platform for companies to showcase their latest technologies and products in the fields of automation, robotics, energy, industrial software, and other related industries. Within each area, exhibitors showcase their latest products and services, including new machinery, equipment, software, and other innovative solutions for industrial processes. Because the trade show attracts business leaders as well as key decision makers from politics, like the German Chancellor, and Federal German ministers, like Dr. Habeck (with blue tie in the center of Figure 1), it also provides a premier forum for networking and exchanging ideas with other industry professionals.



Figure 1: German Federal Minister of Economic Affairs and Climate Action, Dr. Habeck, with Catena-X association board members (courtesy of <u>Catena-X</u>)

#### Dataspace liftoff with launch of Catena-X

Hannover Fair is known as a major platform for showcasing innovative technologies and key initiatives. This trade show has been the launching pad of major economic and industry initiatives. One example is Industry 4.0 in 2011, which accelerates the digitization of the manufacturing industry. In 2023 Hannover Fair continues with launch of dataspaces:

- A dataspace is unique for its data sharing with data sovereignty protection giving you the power to control the rights to your data (Lauf et al. 2022). Data sovereignty is accomplished using trust mechanisms, such as self-description requirements (in other words, who is requesting your data, see Gaia-X 2022), access controls (who can see your data offer), usage policies (how can your data be used duration, purpose, etc.), as well as legal and technical enforcement (Otto et al. 2019).
- German chancellor Olaf Scholz is doubling down on dataspaces as "top megatrend" (Scholz 2022) following his predecessor's quest to "build a first automotive dataspace" (Angela Merkel during auto summit in Oct 2020, Delhaes 2020).
- See Figure 1 for Catena-X launching "the first open and collaborative data ecosystem" with the Cofinity-X operating company based on dataspace technology developed by a consortium of 28 partners funded by the German Federal Ministry for Economic Affairs and Climate Action's (BMWK) as part of the funding program "Future Investments in the Automotive Industry" (www.kopa35c.de). Figure 1 from left to right: Catena-X board members Frank Goeller (Volkswagen), Claus Cremers (Siemens), Hagen Heubach (SAP), Siegfried Russwurm (BDI), Minister Habeck (BMWK), man?, Juergen Sturm (ZF), lady?, Boris Otto (Fraunhofer), Steve Schindler-Le Huray (Bosch), Rouven Rüdenauer (Mercedes-Benz), and Oliver Ganser (BMW).



Figure 2: Telekom Data Intelligence Hub team with premiere of dataspace products and first users

#### Our products at Catena-X, Gaia-X 4 Future Mobility, IDSA and Google

The Telekom Data Intelligence Hub (DIH) team celebrated the launch of our first dataspace products that allow even small and medium-sized companies without dedicated IT departments to get connected quickly and efficiently to focus on data provisioning and participation in use cases. Figure 2:

- Our DIH tribe and chapter lead Sven Loeffler points out how Umati is using our **Living Lab** product, a sandbox software development environment, which allows users to focus on use cases and prototyping of apps powered by dataspace capabilities, such as data sovereignty protection, without all the dataspace complexities.
- Our senior data scientist Dr. Dandan Wang and Sven discussing our **Digitial.ID**clearing house service offering with Francesco Bonfiglio, CEO of Gaia-X European
  Association for Data and Cloud AISBL.
- Maximilian Staebler, Prof. Dr. Frank Koester (both German Aerospace Center or DLR), Dr. Dandan Wang, and Prof. Dr. Chris Schlueter Langdon (both Telekom DIH) at the both of the Gaia-X 4 Future Mobility family of five projects: Frank is overseeing the entire family of projects (Frank is founding Director of the DLR Institute for AI Safety and Security); Chris is heading Gaia-X 4 Advanced Mobility Services (GX4AMS), and together with Dandan heads the dataspace part of the project family Gaia-X 4 Artificial Intelligence (GX4AI). And just in time for the Hannover Fair, our DIH team installed a minimum viable Gaia-X dataspace for GX4AI and the project family.
- At the International Data Spaces Association (IDSA) roundtable, we proudly announce successful completion of a certification milestone for a next generation connector in our Connect product offerings: Ulrich Ahle (CEO Fiware Foundation), Prof. Dr. Chris Schlueter Langdon (Telekom DIH, Director Peter Drucker Customer Lab, Peter Drucker School), Prof. Dr. Boris Otto (Head of Fraunhofer ISST, TU Dortmund), Dr. Dandan Wang (Telekom DIH), Lars Nagel (CEO IDSA), Niels Syassen (IDSA board member, CTO Sick).
- Launch of Catena-X data ecosystem with Alexander Schleicher (CEO Cofinity-X) and Oliver Ganser (Program Head Data Driven Value Chain @ BMW Group, Head of "Catena-X Automotive Network" Industry Consortia, Chairman of the Board Catena-X e.V.) on the HMI stage of Industrie 4.0 (link). The data ecosystem is only possible with our team's open-source software development contributions to the Eclipse Tractus-X repository, which provides the underpinnings of the Catena-X data ecosystem. Cofinity-X is the first dataspace operating company sanctioned by Catena-X.
- Our DIH team is part of the T-Systems stand on the Google booth. Here, we premier our Connect product with a Sovereign Plus option running in the Sovereign cloud, a joint venture of T-Systems and Google. Sovereign Plus data sovereignty protection doesn't stop at the exchange of data in a dataspace, but extends to cloud storage.

## Learn more about our pioneering dataspace projects

- What is it: For a C-level 1-pager, link, and a Dataspace Top 10 overview, link
- How to get started: Check out our Digital.ID and dataspace connectivity solutions, link
- First use cases such as Umati (link) and intermodal mobility (link)

#### References

Delhaes, D. 2020. Merkel drängt Autokonzerne: BMW, Daimler und VW sollen Datenschatz teilen. Handelsblatt (2020-10-28), <u>link</u>

Gaia-X. 2022. Gaia-X Trust Framework - 22.04 Release. Gaia-X European Association for Data and Cloud AISBL, Bruxelles, Belgium, <u>link</u>

Otto, B., S. Steinbuss, A. Teuscher, and S. Lohmann. 2019. Reference Architecture Model Version 3.0 (April). International Data Spaces Association, Berlin, <u>link</u>

Lauf, F., S. Scheider, J. Bartsch, P. Herrmann, M. Radic, M. Rebbert, A. T. Nemat, C. Schlueter Langdon, R. Konrad, A. Sunyaev, and S. Meister. 2022. Linking Data Sovereignty and Data Economy: Arising Areas of Tension. Best Paper Award at the 17th International Conference on Wirtschaftsinformatik (WI22), <a href="https://link.new.org/link.ne

Scholz, O. 2022. Rede von Bundeskanzler Olaf Scholz zur Festveranstaltung der Deutschen Akademie der Technikwissenschaften am 18. Oktober 2022 in Berlin. Bulletin der Bundesregierung Nr. 134-1 (21. Oktober), <u>link</u>