

Position: Research Data

Key Messages

- BASF already uses and shares data with partners from industry and academia in research today. It can be assumed that this data exchange and the demand for data will increase in the future.
- For the political debate, a clear definition of the legal term "research data" is required.
- In order to promote sharing and use of data, pragmatic and uniform standards must be established at an early stage.
- There must be legal certainty that data sharing does not restrict IP rights.

Background

The German government is planning a Research Data Law. The aim is to facilitate access to data for research and to promote scientific cooperation. To help facilitate the exchange of data between different research institutions, companies and the public sector, thereby improving the efficiency and quality of research. In some political circles, the introduction of a so-called data sharing obligation is also being discussed.

What does BASF offer?

Data forms the basis for our R&D activities. Today, data is already being exchanged in research collaborations between industry and academia, and available research data is being used. This data exchange and the demand for data will increase in the future significantly.

Examples for the use of data include statistical methods and models for designing experiments and scientific simulation methods on supercomputers. They enable the design of molecules, materials and processes as well as the prediction of process and product properties. With their help, we make predictions about the behavior of complex systems. We also use data for multi-criteria optimization and to develop new, digital and data-driven business models by linking our data with customer data.

We assume that applications for data will increase significantly in the coming years and that the demand for data will therefore also grow strongly for specific domains. To the same extent, BASF as a company must ensure that data that are important for the economic exploitation of research results and the associated intangible assets (ideas, inventions, know-how) are protected accordingly. Since 2020 we have been active as an industry partner in the German National Research Data Infrastructure initiative (NFDI) and share data and algorithms with partners. However, this industry participation is an exception as the NFDI consortia almost exclusively include science.

Our Position

1. A clear definition of the legal term "research data" is required, which should be developed by involving industry and science.
2. To facilitate data sharing and data use in the future, uniform standards as well as technical and content descriptions of application programming interfaces (APIs) must be defined at an early stage.
3. There must be legal certainty that data sharing does not restrict IP rights. Data sovereignty and data security have to be guaranteed for companies. Linking individual data could potentially reveal confidential information about operating processes or other sensitive information, which must not become available for competitors due to a data sharing obligation. Similarly, a data sharing obligation must not result in the protectability of inventions being threatened. The opportunity for industry to generate economic added value from its data must not be threatened by a data sharing obligation.

4. Instead of an obligation to share data, data that is already available today should be used (especially data from public administration) and data sharing should be incentivized through specific publicly funded initiatives. This is important to gain experience in this area.
5. Publicly available data should be provided in digital form via standardized interfaces and with a defined statement on usage permission or licensing.
6. The data institute being planned by the German Federal Ministry for Economic Affairs and Climate Action and the Federal Ministry of the Interior and Community should initiate pilot projects in which various scenarios are simulated and the need for regulatory action is determined. This could also include practice-oriented topics such as data architectures, database structures, access rights or data standards.
7. The economic sector must be more involved in the publicly funded German National Research Data Infrastructure (NFDI).