

## Breakthrough in SMART Standards

### DIN and DKE successfully complete first pilot projects under the Digital Standards Initiative (IDiS)

**Berlin/Frankfurt a. M., 12. September 2023.** Up to now, the application and use of standards has required many individual manual steps. The information from the corresponding standard has to be captured, extracted and transferred to other systems by humans to the greatest possible extent. The Digital Standards Initiative (IDiS) of DIN and DKE is therefore of crucial importance when it comes to improving the competitiveness of German industry: What if standards content is [digitally](#) prepared and can be read and applied by both humans and machines?

Several times now, it has been possible to demonstrate live in operation how SMART standard content is read and applied independently by a machine. The demonstration is the result of one of the pilot projects within IDiS. In the development of [SMART standards](#), DIN and DKE focus on practical application scenarios. Companies provide the technical expertise for the standards content and are at the same time the users. For this reason, various pilots on specific use cases were created together with industry and partners from science.

#### In search of the ideal format for SMART standards

The "Conformity Testing" pilot project, which was demonstrated at the Hanover Trade Fair and other events, focused on the basis for possible automation and what advantages result from it. It was thus possible to illustrate that manual effort is significantly minimized. As a result, there are also fewer opportunities for transferring errors, and quality and efficiency improve enormously. The other pilot projects addressed further questions: What requirements must the format of a digital standard meet so that SMART standards fit optimally into Industrie 4.0 (I4.0)? And how can the standards that are developed and applied within the companies be reconciled with the digital standard - without disclosing sensitive information, of course? In addition, an AI-supported language model has been developed to facilitate research in the German standards system. This enables users of standards to see at a glance which content and requirements are relevant to them.

DKE Managing Director Michael Teigeler: "We have already achieved many notable milestones with IDiS. This shows us the benefits that arise

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when hardware, software and standard work together on a digital level. We see that the demand in the industry is very high, because SMART Standards improve the competitiveness of companies in one fell swoop. Processes are simplified, it saves time and money. Innovations in the area of sustainability, for example, are easier to implement."

Christoph Winterhalter, CEO of DIN: "The future of standardization is digital. With the IDiS pilot projects, we are taking another important step here. Our goal is for standards to be available to industry in such a way that, ideally, they can be automatically integrated into the control loop of production, for example, and can flow directly into the industry's digital systems, concepts and formats. A clear time advantage with significant cost savings."

#### **Industry 4.0 as an ideal application**

With the pilot projects completed, the preliminary work is on the home stretch. Starting in September, an interdisciplinary team will address a possible harmonized format for digital standards. This is because SMART standards require harmonization both at the level of the standards organizations through standardized formats, processes and interfaces. In addition, however, they must also be harmonized with the users, i.e. the companies. In a further project, the connection to Industry 4.0 will then be deepened. I4.0 is the ideal use case for SMART standards, because the concept is aimed at the intelligent and autonomous networking of assets such as components, machines or plants. SMART standards can help establish interoperability with partners in the value network, which simplifies standards-based processes such as product certification.

DIN and DKE have summarized the findings from the pilot projects in a [Management Summary](#), which can be found at the new [IDiS-Website](#).

#### **About IDiS**

With the establishment of the Digital Standards Initiative (IDiS) - the network group for digital transformation - DIN and DKE are giving German industry, SMEs and standards users the opportunity to actively participate in current international developments on digital standardization. Digital Standard is understood to be not only the product as such, but all processes of standardization along the value chain. Networking and the provision of information have emerged as key aspects of digital standardization, which is why DIN and DKE are working together on solutions for digital transformation. In this sense, the group serves not only to identify relevant activities, but also to make a joint contribution to the digitization of standardization by actively supporting, developing and initiating projects. Digital standards represent a further building block in Industry 4.0 and contribute to strengthening Germany as a business location. For more information, visit the new [IDiS-Website](#).



## PRESS RELEASE

### **About DIN**

DIN, the German Institute for Standardization, is the independent platform for standardization in Germany and worldwide. Together with industry, scientific institutions, public authorities and civil society as a whole, DIN plays a major role in identifying future areas for standardization. By helping to shape the green and digital transformation, DIN makes an important contribution towards solving current challenges and enables new technologies, products and processes to establish themselves on the market and in society. More than 36,500 experts from industry, research, consumer protection and the public sector bring their expertise to work on standardization projects managed by DIN. The results of these efforts are market-oriented standards and specifications that promote global trade, encouraging rationalization, quality assurance and environmental protection as well as improving security and communication.

For more information, go to [www.din.de](http://www.din.de)

### **About DKE**

The DKE German Commission for Electrical, Electronic & Information Technologies (DKE) is the national platform for about 9000 experts from industry, science and public administration to elaborate standards and safety specifications for electrical engineering, electronics and information technology. Standards support global trade and, among other things, the safety, interoperability and functionality of products and systems. As a competence centre for electrotechnical standardization, the DKE represents the interests of German industry in European (CENELEC, ETSI) and international standardization organizations (IEC). In addition, the DKE provides comprehensive services in the field of standardization and VDE specifications.

For more information, visit [www.dke.de](http://www.dke.de)