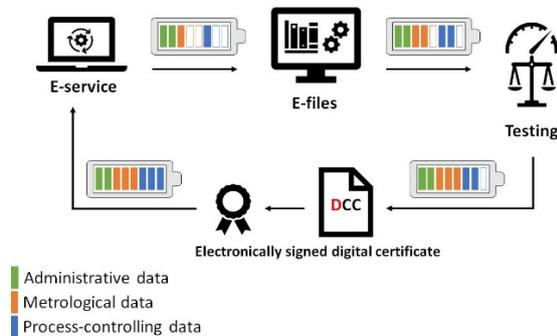


Digital workflow for metrological services

Your digital calibration certificate in the metrology cloud via our customer portal
Hannovermesse (12.-16. April 2021): Exhibition booth of PTB



The Idea

The Physikalisch-Technische Bundesanstalt (PTB) offers numerous metrological services for its customers. To provide better service and be able to work more efficiently, PTB has taken on the challenge of transforming its complex internal processes into an interoperable digital workflow. This interoperability can be guaranteed only by consistently using metadata during all processing steps. In this way, the digital interlocking creates synergies as well as new momentum. In the future, consistently digital and interoperable work processes will create greater efficiency and transparency.

The innovation

Everything began with the development of a machine-readable digital calibration certificate that would transmit information without changing between different media. This approach is currently being applied to other documents such as declarations of conformity and test reports. Some of the data required is taken directly from the customer portal (E-Services), from where it is placed in the document management system – the “e-file” (German: *E-Akte*). In order to achieve interoperability in digital communication, it is essential that the unit of measurement be realized in an unambiguous way. PTB is developing an efficient data model for this purpose. In order to harmonize the information used, a thesaurus is also being worked on at PTB to allow keywords, metadata and technical terms on digital platforms to be treated consistently throughout PTB.

The application

To integrate its services into an interoperable digital quality infrastructure, PTB is developing the European Metrology Cloud. This forms the cornerstone of offering digital services to PTB's various stakeholders and interconnecting its various infrastructures. Here, the stakeholders decide which data is replaced while maintaining their data sovereignty. This means that the initiative also supports the GAIA-X project of the German Federal Government.

Contact:

Dr. Anke Keidel
Physikalisch-Technische Bundesanstalt
Presidential Board, Digitalization Coordination
Abbestr. 2-12, 10587 Berlin
Phone: +49 30 3481 7793
E-mail: anke.keidel@ptb.de