DIGITAL TRANSFORMATION AT THE BIPM

The Metre Convention has been the global anchor of trust for measurements for over 150 years. In a modern digital world, maintaining that trust requires the **International System of Units (SI)** to be **represented in a form that machines can understand** and use without ambiguity.
Resolution 2 of the 27th CGPM (2022) mandated the BIPM to extend the Metre Convention's role into the digital era, which is leading into the development and implementation of the **SI Digital Framework (SIDF)**.

IMPACT

The SIDF enables institutions world-wide to reference SI concepts unambiguously in digital systems, databases and automated processes, ensuring that measurement information carries the same meaning across every digital environment, everywhere and at any moment in time.

KEY ACHIEVEMENTS SINCE 2022

Involving the global quality infrastructure

A Joint Statement of Intent was signed among eleven major international organizations committing to make metrological data machine-actionable across all fields of science, industry, and international trade. The signatories have established a roundtable to work on solutions that are **interoperable by design**.

Credit: Logos of BIPM, CODATA, ISO, OIML, GLOBAL ACI, IMEKO, CIE, IEC, IUPAC, ISC and NCSLI

The first stable version of the SI Reference Point

The SI Reference Point is a **machine-actionable knowledge model of the SI**. Its release marks an important milestone in the digital transformation of the international metrology system. It provides central digital resources that all systems can reference to anchor their own representations of measurement units, serving as the **anchor of trust in the digital era**.

Credit: BIPM

Supporting the Forum on Metrology and Digitalization

The FORUM-MD gathers international experts whose guidance ensures that the SI Digital Framework meets the needs of NMIs and DIs world-wide. The **joint work of the BIPM and the FORUM-MD** working groups continues to advance the SI Digital Framework, **supporting the modernization of metrology**.