

## Resolution 1 of the 27th CGPM (2022)

### On the report prepared by the International Committee for Weights and Measures on the “Evolving Needs in Metrology”

The General Conference on Weights and Measures (CGPM), at its 27th meeting,

#### recalling

- Resolution 2 adopted by the CGPM at its 23rd meeting (2007) that invited the International Committee for Weights and Measures (CIPM) to report to subsequent General Conferences on the evolving needs in metrology and to prepare proposals for initiatives to be taken by the International Bureau of Weights and Measures (BIPM) at the international level,
- Resolution 1 adopted by the CGPM at its 26th meeting (2018) on the revision of the International System of Units (SI) that defined the seven base units in terms of fixed numerical values of the defining constants that introduced new opportunities for the realization of the units,
- Resolution 3 adopted by the CGPM at its 26th meeting (2018) that welcomed the development of a long-term strategic view which, together with a consolidated planning process, underpins the development of the BIPM work programme in consultation with Member States,

#### noting

- the essential role of the International System of Units (SI) in providing confidence in the accuracy and global comparability of measurements needed for international trade, manufacturing, human health and safety, protection of the environment, global climate studies and scientific research,
- the critical role of metrology in addressing global challenges, including climate change and environment, health and life sciences, food safety, energy, advanced manufacturing, digital transformation and countering global pandemics,
- the increasingly multidisciplinary nature of measurement in new or disruptive technologies, and the new requirements for metrology in digital technologies, sensor networks, and big data,

**welcoming** the report of the CIPM on the “Evolving needs in metrology”,

#### encourages the CIPM

- to develop a long-term vision for an international measurement system that will remain relevant and adequately address new metrological challenges,
- to establish inter-disciplinary (“horizontal”) groups that will address these new challenges and will be complementary to the existing quantity-based (“vertical”) structure of its Consultative Committees,
- to mark the 150th anniversary (on 20 May 2025) of the signing of the Metre Convention by outlining a new vision for the BIPM that builds on the CIPM report on the “Evolving Needs in Metrology” and is based on a review of the achievements of the BIPM and the future requirements for its work,
- to consult widely on its proposal for a new vision for the BIPM to be presented at the 28th meeting of the CGPM (2026),

**and invites** Member States and National Metrology Institutes to contribute to the work of the CIPM in addressing the evolving needs for metrology and in developing a new vision for the BIPM.

The reader should note that the official version of this Resolution is the [French text](#)

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Pavillon de Breteuil

F-92312 Sèvres Cedex FRANCE

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