

BIPM update to the regular meeting of the WTO TBT Committee, November 2025

October 2025

Introduction

The objective of this report is to provide key annual updates (relevant to the trade community) from the International Bureau of Weights and Measures (BIPM) to the regular meeting of the WTO TBT Committee scheduled for 12-14 November 2025.

Liaison with the WTO

The BIPM plays a fundamental role in the global scientific and economic framework by ensuring consistent and accurate measurements across countries. Having recently celebrated its 150th anniversary, the BIPM continues to make a significant impact across diverse fields, including science, industry, trade, and everyday life.

The BIPM maintains and develops the International System of Units (SI), which underpins reliable measurements worldwide — essential for fair trade, regulatory compliance, and product quality. The metrological traceability is the backbone that ensures confidence in measurements results. It links measurements at the workplace to the SI or other international accepted references. There are various ways to demonstrate that internationally recognized paths have been followed and the <u>CIPM MRA</u> being one of the key mechanisms for ensuring traceability to the SI.

The CIPM MRA - Mutual Recognition Arrangement adopted by the International Committee for Weights and Measures (CIPM), the BIPM's executive organ, is a critical technical framework for ensuring the reliability, consistency, and acceptance of measurement standards worldwide. It plays an essential role in facilitating international trade by providing a universally recognized mechanism to ensure that measurement results (such as weight, length, volume, and other physical quantities) are consistent across borders. The CIPM MRA supports WTO TBT Agreement, Article 6 (Recognition of Conformity Assessment Procedures).

The BIPM and the WTO have been cooperating since 2013 (the BIPM holds *ad hoc* observer status in the WTO TBT Committee) to ensure effective dissemination of information on the importance of quality infrastructure (QI) and in particular metrology as one of its key elements among trade regulators and international/intergovernmental organizations with *ad hoc* observer status in the WTO TBT Committee.

Activities by the BIPM contribute directly to the WTO TBT Agreement's objectives by promoting internationally recognized measurement standards, supporting regulatory alignment, enabling mutual recognition of conformity assessments, and facilitating inclusive participation in international trade, particularly for developing economies.

Both the BIPM and the WTO are members of the International Network on Quality Infrastructure (INetQI) promoting cooperation across metrology, accreditation, standardization, and conformity assessment.

The BIPM welcomes the organization of a <u>thematic session on Technical Assistance – Role of Metrology in facilitating Trade</u> in November 2025 to explore the role of metrology in facilitating trade and supporting the effective implementation of the TBT Agreement. In this context, WTO Members will discuss, among others, barriers that hinder participation of developing and least-developed country Members in the international metrology system, and explore practices to overcome such barriers, including showcasing current and upcoming initiatives.

Further information on the links between BIPM and the WTO is available at https://www.bipm.org/en/liaison-partners/wto-tbt.

Below are some BIPM activities of potential interest to the WTO TBT Committee.

The 150th Anniversary of the Metre Convention and the creation of the BIPM

The year 2025 marked a historic milestone: 150 years since the signing of the Metre Convention and the creation of the BIPM. To commemorate this anniversary, the BIPM organised a series of online campaigns and in-person events in partnership with UNESCO and the wider metrology community.

On 20 May, a joint BIPM—UNESCO Symposium was held at UNESCO Headquarters in Paris, attended by more than 600 participants in person and followed online by over 3,000 viewers via livestreams. High-level speakers joined government representatives, leaders of international organisations and scientific experts in reflecting on the enduring importance of the Metre Convention and the continued relevance of metrology in addressing today's challenges. The Symposium also featured the premiere of a new anniversary film and three topical video presentations, enabling NMIs, RMOs and DIs worldwide to engage meaningfully in the celebrations even if not present in Paris.

The celebrations continued 21–22 May with a two-day scientific conference in Versailles, "From Units to the Universe – Future Revolutions in Metrology," which brought together more than 400 participants. Sessions addressed topics ranging from the redefinition of the second and lunar timekeeping, to the FAIR digital revolution, environmental measurements, and metrology in the quantum era. Contributions included keynote addresses, round-table discussions, and poster sessions, alongside video messages from former BIPM Directors and CIPM members sharing their memories of their time working within our community. Although not livestreamed, all sessions were recorded and made available on the BIPM YouTube channel, where they have since attracted wide viewership.

Beyond these centralized efforts, NMIs and cities around the world celebrated this milestone by engaging online, hosting their own events, TV specials, and sending messages of support. A continued anniversary campaign, including over 23 BIPM feature videos (so far), has also been rolled out, and attracted more than 50,000 views to date.

In parallel, the BIPM ran a series of online campaigns focused on education and engagement, while also upgrading its website to include a dedicated anniversary hub with new tabs for communications tools, event information and shared resources. Together with the OIML, the BIPM also refreshed and enhanced the joint World Metrology Day website, coordinating content to improve visibility and accessibility. This included a multilingual poster (available in more than 20 languages), directors' and video messages, a press release, and an open facility for institutes to showcase their own posters and events.

Together, these events and campaigns have highlighted the transformative impact of metrology over the past 150 years and opened dialogue on the next century of measurement science.

For more information and access to anniversary resources, see the joint the <u>150th Anniversary Pages</u> and the BIPM150 Anniversary Playlist.

Liaison with other international organizations

To promote the importance of metrology to the regulatory community, the BIPM closely collaborates with the OECD (Organisation for Economic Co-operation and Development). The BIPM has recently contributed to a new report of the OECD on <u>"Reinforcing Regulatory Frameworks through Standards, Measurement and Assurance"</u>.

This report provides useful and practical insights into how components of QI, including *metrology*, can be better used in policymaking. The report reflects *measurements* as the foundation of QI — the invisible thread that makes standards reliable, certification systems trusted and regulatory frameworks effective across borders.

The launch webinar of the report is planned for November 2025.

The BIPM collaborates with other international organizations such as the OIML (International Organization of Legal Metrology), and UNIDO (United Nations Industrial Development Organization) to build metrology capacity in developing economies through training, knowledge transfer, and regional cooperation.

Digital transformation

The BIPM plays a leading role in the digital transformation of metrology, including projects such as the development of digital calibration certificates and machine-readable SI data.

The BIPM, alongside nine other international organizations, has signed a Joint Statement of Intent on the digital transformation in international scientific and quality infrastructure. This statement provides a platform for signatories to indicate their commitment to establishing a world-wide *uniform and secure* data exchange format based on the SI.

The Forum on Metrology and Digitalization has been established to advise the <u>International Committee for Weights and Measures (CIPM)</u> on the SI Digital Framework and the broader implications of global digital transformation for metrology and international Quality Infrastructure (QI). The forum held its second meeting in February 2025.

Capacity building and knowledge transfer activities

The BIPM Capacity Building and Knowledge Transfer (<u>CBKT</u>) Programme aims to increase the effectiveness with which Member States and Associates engage in the world-wide coordinated metrological system.

The programme has a highly appreciated portfolio that continues to expand. The CBKT initiatives are delivered through various activities such as workshops, laboratory placements and remote-learning activities, including the BIPM e-learning platform, which also hosts knowledge transfer material from RMOs.

The CBKT programme together with the OIML's CEEMS initiative have published an <u>e-learning course</u> based on the BIPM and OIML joint publication: *National Metrology Systems Developing the institutional and legislative framework* (OIML D 1:2020). The aim of the course is to assist countries and economies with emerging metrology systems, that are still in the process of developing or reshaping their national metrology systems, in preparation for effective participation in the international measurement system. This self-study course contains five e-learning modules. It provides information to national authorities, NMIs and other interested parties on the issues to be considered when developing policies regarding their national metrology systems, when setting up or re-shaping their institutions and when drawing up national laws related to metrology.

As of October 2025, the BIPM has 64 Member States and 37 Associates. Necessary steps are underway to expand the number of countries participating in BIPM activities, supported by the CBKT Programme.