



BIPM update to the ISO CASCO Plenary, April 2026

February 2026

Introduction

The objective of this report is to provide key annual updates (relevant to the standardization community) from the International Bureau of Weights and Measures/Bureau international des poids et mesures (BIPM) to the ISO CASCO Plenary meeting scheduled for 14-16 April 2026.

Liaison with ISO

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 [CIPM MRA](#) 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 has been signed by the national metrology institutes (NMIs) of Member States and Associates, and international organizations invited by the CIPM. As of today, the NMIs from more than 100 countries, representing approximately 98% of the world's GDP (and 85% of world population), participate in the CIPM MRA.

ISO develops and publishes voluntary International Standards, which give state-of-the-art specifications for products, services and good practice, helping to make industry more efficient and effective. Developed through global consensus, ISO standards help to break down barriers to international trade. The BIPM and ISO cooperate to ensure appropriate and consistent use of SI units, and the correct treatment of other metrological aspects, in ISO standards. ISO/IEC 17025 is pivotal to the metrology community, and the BIPM cooperates with ISO (and with the Global Accreditation Cooperation Incorporated (formerly ILAC) and with the Regional Metrology Organizations (RMOs)) regarding this standard. In its implementation, the CIPM MRA relies on quality and competence standards, notably ISO/IEC 17025 for the competence of testing and calibration laboratories and ISO 17034 for the competence of reference material producers, which underpin the technical credibility of calibration and measurement capabilities (CMCs) and the production of certified reference materials by the institutes participating in the CIPM MRA.

The BIPM has Liaison A status (*Organizations that make an effective contribution to the work of the technical committee or subcommittee for questions dealt with by this technical committee or subcommittee*) with the ISO Committees in relevant areas where the BIPM is active.

There are following documents jointly developed by the BIPM and ISO and other organizations:

1. 2022 Joint Statement of Intent on the digital transformation in the international scientific and quality infrastructure, signed by ISO in 2022.
2. BIPM, OIML, ILAC and ISO: Joint declaration on metrological traceability – originally signed in 2011, updated and reaffirmed in 2018.

Further information on the links between BIPM and ISO is available at

<https://www.bipm.org/en/liaison-partners/iso>.

Below are some BIPM activities of potential interest to the ISO CASCO Plenary.

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 (United Nations Educational, Scientific and Cultural Organization) 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 designated institutes/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 (findable, accessible, interoperable, reusable) 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 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, has also been rolled out, attracting more than 50,000 views.

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, 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 [150th Anniversary Pages](#) and [the BIPM150 Anniversary Playlist](#).

The 2025 World Metrology Day theme, "Measurements for all times, for all people," highlighted the enduring and universal importance of accurate measurements in science, industry and daily life. Together with the BIML/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.

World Metrology Day 2026

The metrology community has selected the topic "Metrology: Building Trust in Policy Making" for World Metrology Day, which will be celebrated together with UNESCO as a webinar on 20 May 2026. The design of the poster is currently developed by the regional metrology organization in Asia-Pacific (APMP) and will be available soon at the BIPM-OIML World Metrology Day Resource website <https://www.worldmetrologyday.org/>.

Liaison with other international organizations

In the light of the 150th Anniversary of the signing of the Metre Convention and the creation of the BIPM, the [thematic session on Technical Assistance – Role of Metrology in facilitating Trade](#) was organized in November 2025 at the **WTO** (World Trade Organization) to explore the role of metrology in facilitating trade and supporting the effective implementation of the Agreement on Technical Barriers to Trade (TBT Agreement). In this context, WTO Members discussed, among others, barriers that hinder participation of developing and least-developed country Members in the international metrology system, and explored practices to overcome such barriers, including showcasing current and upcoming initiatives.

To promote the importance of metrology to regulatory community, the BIPM closely cooperates with the **OECD** (Organisation for Economic Co-operation and Development). The BIPM has recently contributed to a new report of the OECD: [“Reinforcing Regulatory Frameworks through Standards, Measurement and Assurance”](#). This report provides useful and practical insights into how components of quality infrastructure/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. On 22 January 2026, the OECD, in partnership with the BIPM, Physikalisch-Technische Bundesanstalt (PTB) and the British Standards Institution (BSI), hosted a joint public webinar titled: *“Building Trust in Regulation: The Role of Standards, Measurement, and Assurance.”* The webinar was well attended by all members of the international QI, regulatory and policy communities.

The BIPM formalized its liaison with **UNESCO** by signing a Memorandum of Understanding in December aimed at increasing cooperation to ensure effective dissemination of information on the importance of QI and metrology, a mission in harmony with UNESCO's goal of building a better world through science and education.

Following the creation of **Global Accreditation Cooperation Incorporated** as a single international accreditation organization in January 2026, the BIPM is in the process of negotiating a new memorandum of understanding for cooperation between the two organizations on matters of common interest.

Digital transformation

The BIPM is reinforcing its role as the digital anchor of trust for the metrological community, leading the digital transformation of metrology in a symbiotic fashion: Metrology benefits from digitalizing established metrological workflows, while the worldwide digital transformation improves in trustworthiness and transparency by applying metrological principles to the data and processes.

The BIPM is one of the ten signatories of the [Joint Statement of Intent on the digital transformation in international scientific and quality infrastructure](#), reassuring its commitment to developing and promoting a fully digital ecosystem for measurement information at the service of humankind: The SI Digital Framework. The BIPM is currently surveying its stakeholders to assess their status of digital transformation in metrology and their level of interaction with the emerging BIPM digital services.

The Forum on Metrology and Digitalization is an organizational structure focused on the broader implications of global digital transformation for QI and metrology. The next forum plenary meeting will be held in March 2026, at the BIPM headquarters.

Capacity building and knowledge transfer activities

The BIPM Capacity Building and Knowledge Transfer ([CBKT](#)) 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 and the Countries and Economies with Emerging Metrology Systems (CEEMS) initiative of the International Organization of Legal Metrology (OIML) organized a follow-up seminar for the Asia-Pacific region focused on the joint BIPM–OIML publication: *National Metrology Systems Developing the institutional and legislative framework* (OIML D 1:2020), which outlines the development of national metrology systems. The seminar facilitated the exchange of national experiences and challenges, promoted a shared regional understanding of effective implementation, especially in light of digitalization and the green transition, and explored the development of a best-practice guide to support countries in applying OIML D 1 recommendations.

The CBKT Programme supported the participation of young metrologists in various technical training activities organized at the BIPM headquarters and at partner NMIs, enabling them to gain in-depth knowledge and experience through research activities.

The BIPM Time Department, with support from the CBKT project of the Consultative Committee for Time and Frequency and secondees from NMIs, significantly expanded its CBKT training activities.

Six courses are now available on the BIPM CBKT e-learning platform, and two international summer schools were organized in 2025: one in May at the NMI of Mexico and another in September at the BIPM.

As of January 2026, the BIPM has 64 Member States and 36 Associates. Necessary steps are underway to expand the categories for participation in BIPM activities, and the CBKT Programme will support the implementation of this initiative.