

Report from the BIPM

Dr Martin J.T Milton

Director, BIPM 26th June 2025

EURAMET

Berlin



Member States and Associates (May 2025)



- -64 Member States and
- -37 Associates of the CGPM (States and Economies)

NEW MEMBER STATES:

- **Morocco** (May 2019)
- Ecuador (August 2019)
- Belarus (January 2020)
- Estonia (January 2021)
- Costa Rica (September 2022)

NEW ASSOCIATES:

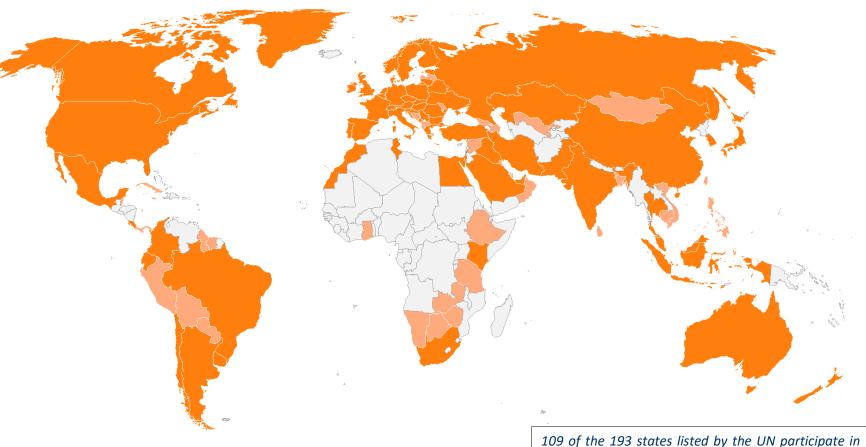
- Cambodia (January 2021)
- Zimbabwe (February 2022 reinstatement; excluded in Jan 2021)
- Cuba (October 2024 reinstatement; excluded in Jan 2022)

EXCLUDED ASSOCIATES:

- Sudan (January 2022)

WITHDRAWN ASSOCIATE:

- Seychelles (January 2022)



109 of the 193 states listed by the UN participate in the BIPM's activities, covering around 98 % of the world's GDP according to 2023 IMF data.

CIPM MRA Participation (May 2025)



258 institutes participating in the CIPM MRA

The CIPM MRA has been signed by:

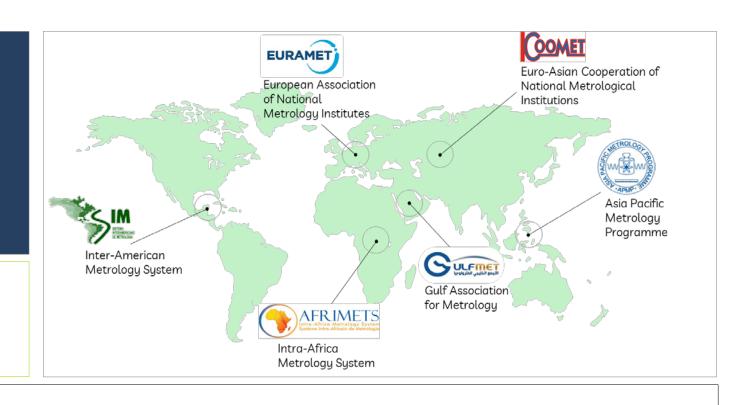
- representatives of 101 institutes
 - 64 Member States
 - 37 Associates of the CGPM
- 4 international organizations (ESA, IAEA, JRC, WMO) and covers a further 157 designated institutes.

26 135 CMCs

regionally and internationally peer-reviewed CMC declarations

1 956 comparisons

1224 key, 732 supplementary comparisons



6 RMOs

Playing an important role to support mutual confidence in the validity of calibration and measurement certificates issued by participating institutes.

Appointment of the Director Designate of the BIPM





We are delighted to announce that the CIPM has appointed Dr Annette Koo as Director Designate of the BIPM.

Dr Koo is currently the Director and Chief Metrologist at MSL, New Zealand.

She will join the BIPM as Director Designate on **29 September 2025**, and will succeed Dr Martin Milton as the Director of the BIPM when he retire.

new JCRB Executive Secretary





The BIPM has appointed Dr Kazuaki Yamazawa from the National Metrology Institute of Japan (NMIJ, AIST) as the new Executive Secretary of the JCRB, bringing over 25 years of experience in measurement science, quality systems and international cooperation.

The JCGM and Metrologia

JCGM – towards the fourth edition of the "VIM"

Text in 3rd edition of the VIM

2.26 (3.9)

measurement uncertainty

uncertainty of measurement uncertainty

non-negative parameter characterizing the dispersion of the **quantity values** being attributed to a **measurand**, based on the information used

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Look out for a JCGM webinar on 2nd July.

Text under discussion

measurement uncertainty

uncertainty of measurement

doubt about the value of the measurand that remains after making a measurement

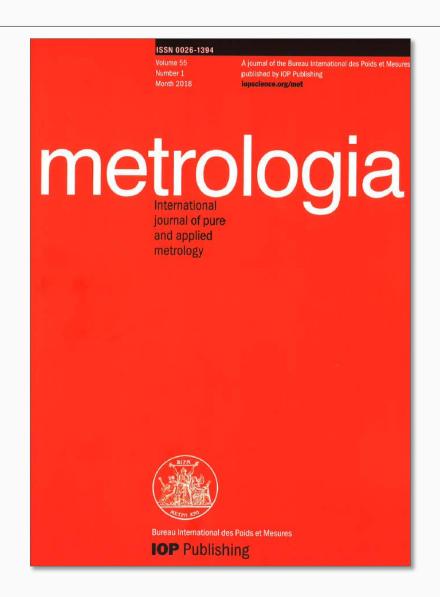
Note 1 For the purpose of this definition, the term 'true value of the measurand' is not used because the word 'true' is viewed as redundant

NOTE 2 Measurement uncertainty can be described fully and quantitatively by a probability distribution on the set of possible values of the measurand.

NOTE 3 For scalar measurands, measurement uncertainty can be summarised by, for example, the standard uncertainty, a coverage interval with specified coverage probability, or by selected quantiles of the probability distribution in Note 1. For multivariate measurands, measurement uncertainty can be described, for example, by the covariance matrix or by a coverage region, with specified coverage probability.

Metrologia

- Founded in 1965 by the CIPM.
- Leading international journal in pure and applied metrology
- Editorial Board of NMI experts
- Six volumes per year since 2024 electronic publication only
- Owned by BIPM and published by Institute of Physics Publishing (IOPP)

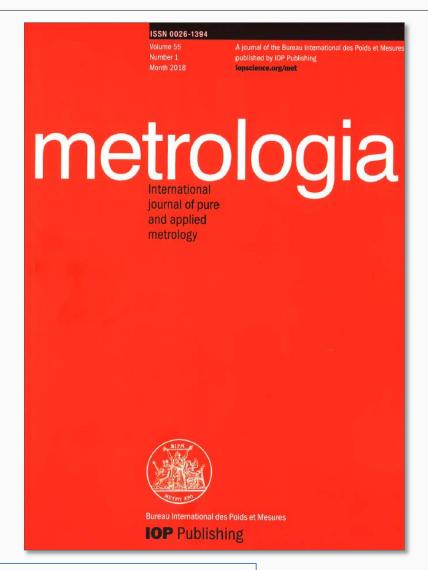


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NEWS

- Comparison reports will be published on-line by BIPM.
- Metrologia will become fully OPEN ACCESS -Planned for 1st Jan. 2026.





Anniversary events at UNESCO and Versailles









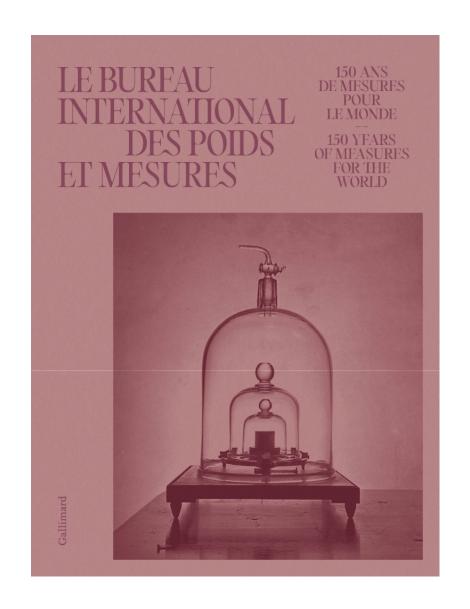






Anniversary book





Many gifts and letters of thanks







Vases delivered to:

- Japan
- Germany
- Sweden
- Norway
- Spain
- France
- United Kingdom
- Türkiye
- Republic of Korea



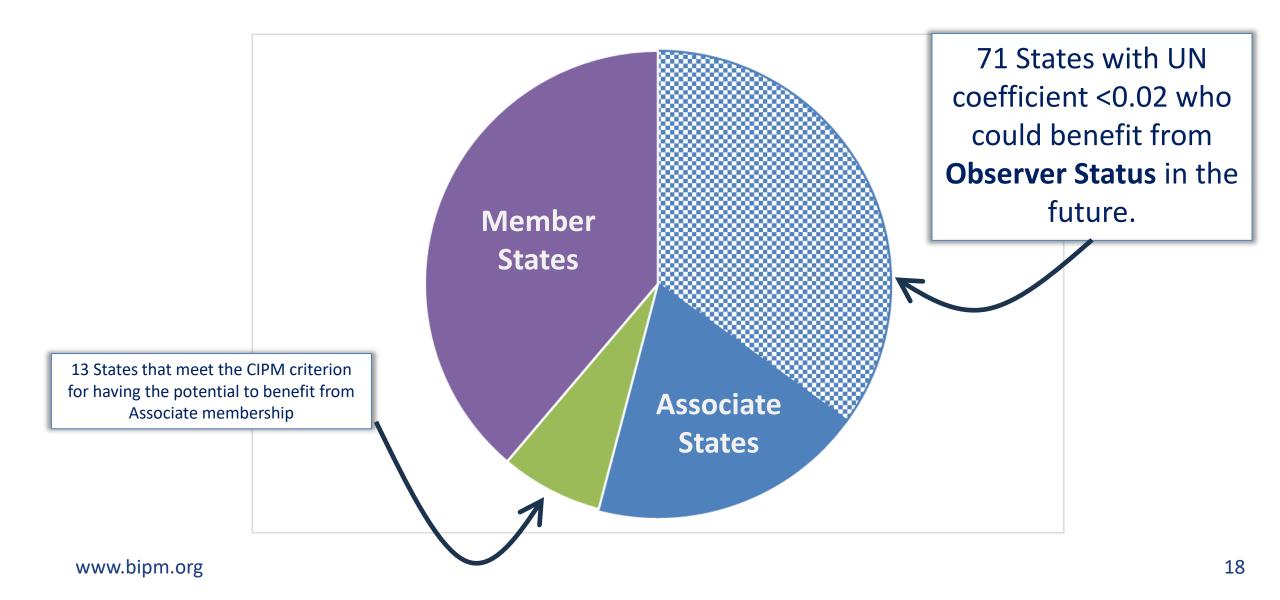
Some highlights

- Henry Rotich interviewed on France 24
- Full page feature in *Le Figaro* on LNE
- Illumination of La Mole, in Torino by INRiM
- education outreach.



- the new "Observer" status

- In 1875 the 17 states that signed the Metre Convention "desired to ensure the international unification and the perfection of the Metric System", and, as such, they embraced the ambition of universal participation.
- Currently, 84 UN states do not participate in the work of the BIPM but we can be very sure that they do use the SI and the UTC!
 - 13 of these states have a UN coefficient >0.02 and would benefit from participation as Associate or Member States (according to the criterion set by the CIPM).
- How do we engage with the remaining 71 UN states with UN coefficient <0.02?



How do we engage with the remaining 71 UN states with UN coefficient <0.02?

49 States on UN Scale < 0.02

AFRIMETS (34) Angola, Benin, Burkina Faso, Burundi, Cabo Verde, Cameroon*, Central African Republic, Chad, Comoros, Congo Brazzaville, Dem. Rep. of Congo, Equatorial Guinea, Eswatini, Gabon, Gambia, Guinea, Guinea-Bissau, Lesotho, Liberia, Libya, Madagascar, Malawi, Mali, Mauritania, Mozambique, Niger, Rwanda, Senegal, Seychelles*, Sierra Leone, South Sudan, Sudan*, Togo, Uganda

APMP (6) *DPR Korea*, Fiji, Kiribati, Myanmar, Nepal, Papua New Guinea* (inc. 3 Pacific Islands Forum members: Fiji, Kiribati, Papua New Guinea)

SIM (5) Bahamas, El Salvador, Haiti, Honduras, Nicaragua (inc. 2 CARICOM members: Bahamas, Haiti)

COOMET (3) Armenia, Kyrgyzstan, Tajikistan

GULFMET (1) Yemen*

*Excluded Member States and Associate States

22 States on UN Scale < 0.02

African States (4) Djibouti, Eritrea, São Tomé and Príncipe, Somalia

Pacific Islands Forum (9) Marshall Islands, Micronesia, Nauru, Palau, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu

Asian States (5) Afghanistan, Bhutan, Laos, Maldives, Timor-Leste

European microstates (4) Andorra, Liechtenstein, Monaco, San Marino

The CIPM will propose to the CGPM in 2026 to open a new category of OBSERVER STATE

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- To give international visibility to states that use the SI and the UTC nationally.
- To open access to tailor-made capacity-building activities (subject to grant funding).

DRAFT CGPM RESOLUTION

The CGPM

- ...
- ...

decides

- to assume responsibility for providing such States with the means to establish links to the worldwide measurement system by instituting the status of Observer State,
- that Observer States will be invited to observe the decision making at meetings of the CGPM,
- that Observer States shall not be required to pay any fee to the BIPM, and shall thus not be entitled to benefit from technical and scientific services provided by the BIPM,





CBKT: Capacity Building and Knowledge transfer



WORKSHOP-BASED

CB activities



- take place at the BIPM
- in the regions jointly with RMOs

NEW! Forum supporting RMO Secretariats and those who assist the RMO in various interactions with the BIPM



REMOTE-LEARNING

online activities



- online short courses
- technical exchanges
- e-learning

LABORATORY-BASED

CB placements



- placements at the BIPM
- placements at the partner NMI/DI



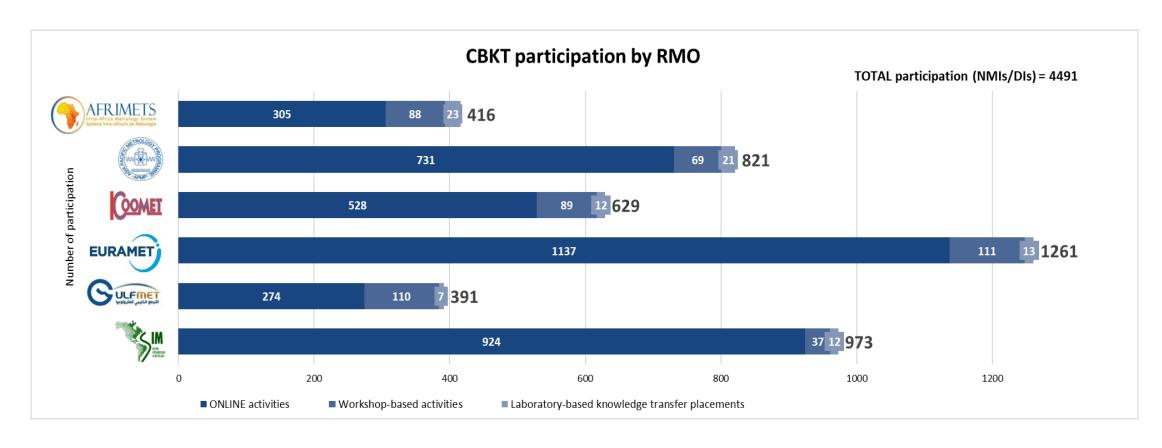


- by VISITING SCIENTISTS from NMIs/DIs
- other KT activities (i.e. hosting workshops etc.)



CBKT Participation by RMOs





Thanks for support from:

- METAS, Switzerland
- NIM, China
- NIST, USA

- NMISA, South Africa
- NPL, United Kingdom
- PTB, Germany
- SCL, Hong Kong, China
- TÜBITAK UME, Türkiye
- IEEE, USA

Plus

- All the RMOs

Young metrologists' vision for 2050+



The BIPM has proudly concluded its first-ever Young Metrologists' 2050+ Vision programme, a milestone initiative designed to capture and inspire innovative ideas from the next generation of metrology leaders.

More than 380 young metrologists joined and shared their views during the online workshops!

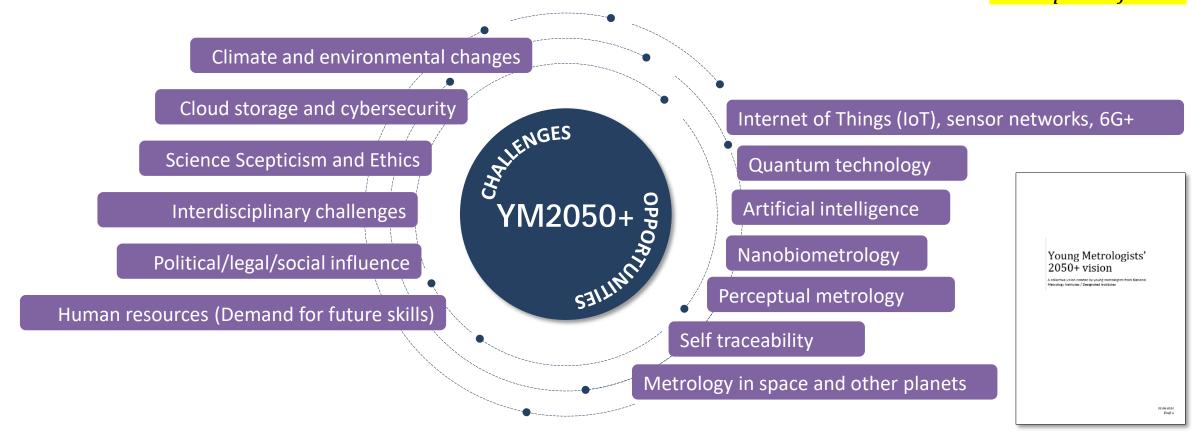
- SIM (Approx. 40 people, November 2023)
- COOMET (Approx. 70 people, February 2024)
- GULFMET (Approx. 60 people, February 2024)
- APMP (Approx. 100 people, February 2024)
- AFRIMETS (Approx. 80 people, March 2024)
- EURAMET (Approx. 40 people, April 2024)



Young metrologists' vision for 2050+



Our vision for global metrology: Metrology, as a cornerstone of natural sciences, must evolve together and drive advances in technology, supporting all stakeholders based on collaborative capacity and capability building to co-shape the future.



Liaison with UNESCO, OECD, IPCC, UNFCCC, WTO, UNIDO, CIE





Negotiating a new agreement with **UNESCO** on cooperation (to replace the 1949/1952 CIPM-UNESCO Agreement)



Obtained **IPCC** observer status in August 2024 and nomination of a BIPM focal point for IPCC



Attended **UNFCCC** COP29/I Week in November 2024 in Baku, Azerbaijan



Thematic session of the **WTO TBT Committee** on Metrology
in 2025 to mark the 150th
anniversary



Coordinated outreach activities by the BIPM and **UNIDO** to make the worldwide measurement system more widely accessible



Negotiating a new agreement with **CIE**

Engage with us on LinkedIn, YouTube and stay updated



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To stay up to date and join conversations related to latest metrology news, stories and insights.





WATCH AND SHARE ON YOUTUBE

Dive into the history, achievements and future of metrology with exclusive webinars, event livestreams and topical explainers on our YouTube channel.





SUBSCRIBE TO OUR E-NEWSLETTER

Never miss an update! Get the latest news, upcoming events and metrologyrelated stories delivered straight to your inbox.





JOIN US IN CELEBRATING 150 YEARS OF THE METRE CONVENTION

Visit our official website to learn more about this historical milestone, initiatives that surround it, upcoming events and how you can participate.

