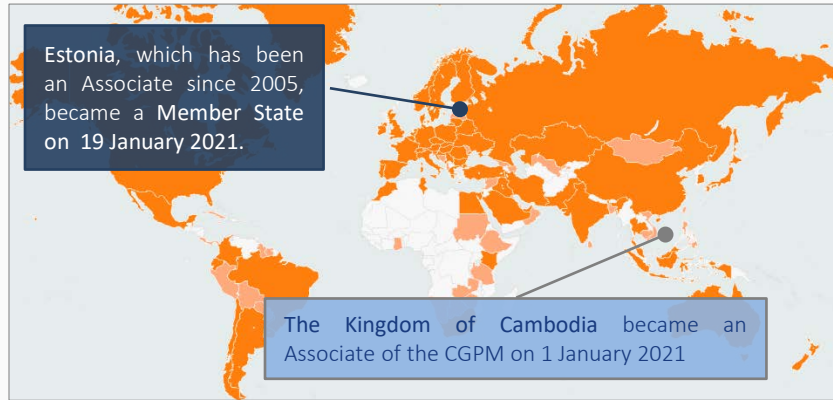


Members and Associates *(September 2021)*



- 63 Member States* and
 - 39 Associates of the CGPM
- (States and Economies)*

** The official term is "States Parties to the Metre Convention"; the term "Member States" is its synonym and used for easy reference.*



259 Institutes participating in the CIPM MRA

- 103 National Metrology Institutes
 - 63 Member States
 - 39 Associates
- 4 International organizations (ESA, IAEA, JRC, WMO)
- plus 152 Designated Institutes (+1, -1 DI)

1 735 comparisons
1097 KCs, 638 SCs

25 887 CMCs
Peer-reviewed declarations



World Metrology Day

- The theme of World Metrology Day in 2021 was *“Measurement for Health”*
- Partner RMO was GULFMET
- *Translations into 33 local poster versions, next to French and English*
- Events listed for 38 different countries/institutions
- Partner RMO for 2022 will be

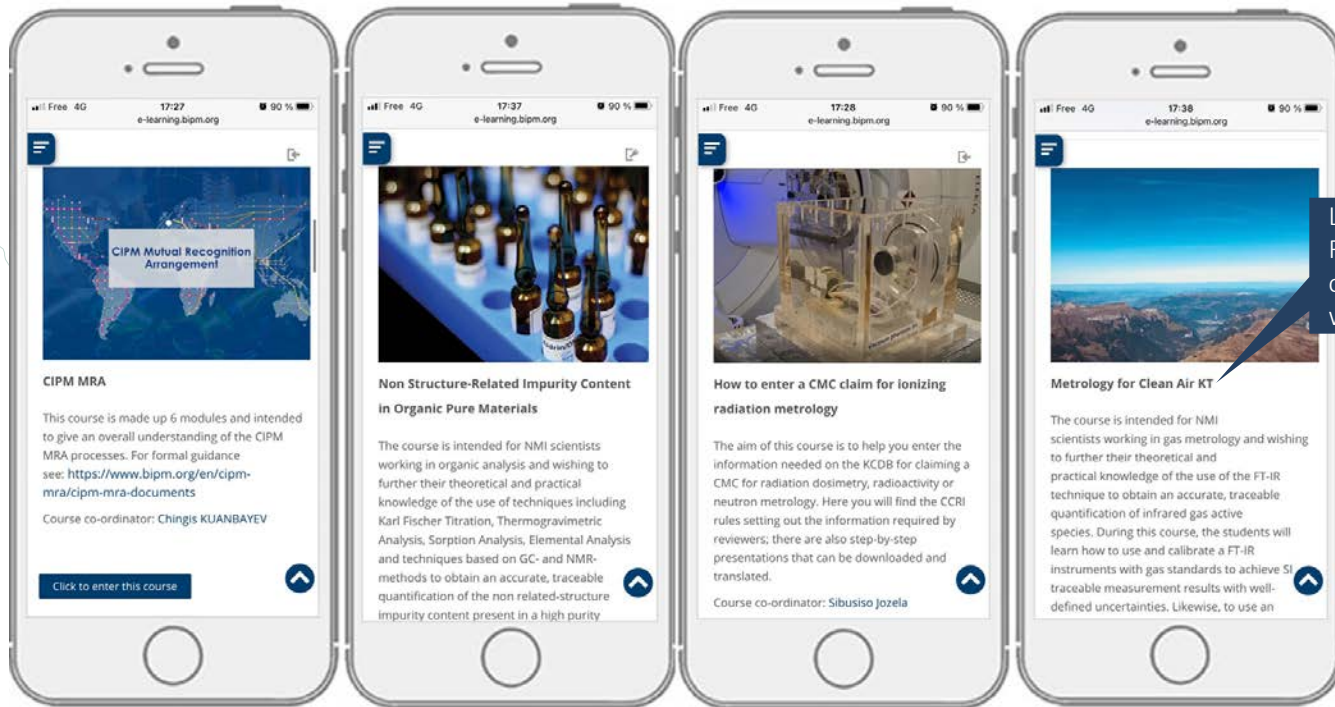


<https://www.worldmetrologyday.org/index.html>

e-Learning

363 users in the platform

*...accessible around the clock
and on any device*



Launched in Sept.
For registration
contact e-learning
website

Capacity Building

Events: Jan 2020-Sept 2021:

- 1 Workshop based course at the BIPM
- 4 short webinars
- 15 technical exchanges (7 of them repeated in the afternoons to cover all time zones)

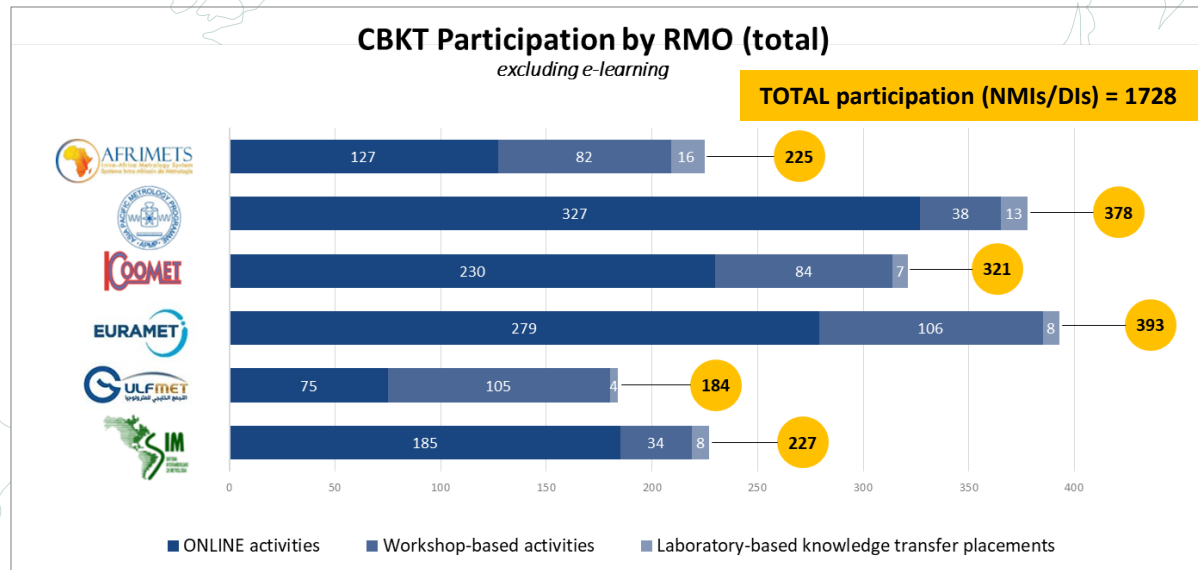
Participation: Jan 2020-Sept 2021:

- 1223 NMI/DI community
- 604 Accreditation community
- + 363 registered participants in e-learning

CBKT Participation by RMO (total)

excluding e-learning

TOTAL participation (NMIs/DIs) = 1728



Feedback collected from every course:

- without exception feedback highly positive
- presented in detail to the CIPM Secretary as part of the QMS review

xml version of SI-brochure complete

For scientists to share the universe of scientific information, the essential foundations are:

- **Persistent identifiers:** mechanisms for naming and locating documents, data and software in a persistent manner;
- **Metadata and ontologies:** mechanisms for discovery of, and access to, documents, data and software in a structured manner;

*Strategic Research and Innovation Agenda (SRIA)
of the European Open Science Cloud (EOSC) -
Version 1.0 15 February 2021*

Technical details

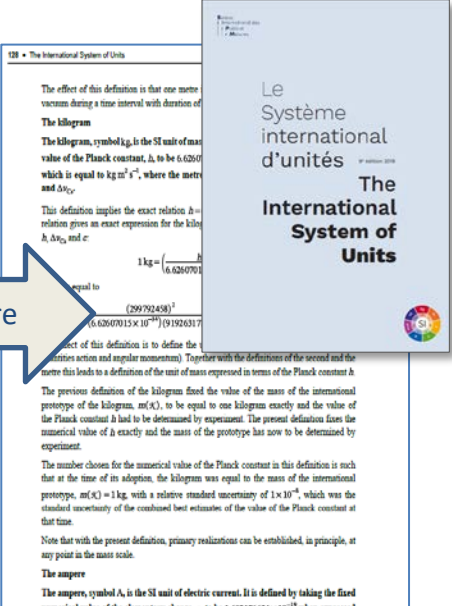
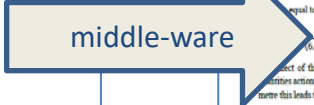
pdf file generated using Metanorma software (presently being checked at BIPM).

Semantic enrichment* using:

- MathML for equations
- UnitsML for units

* Semantic enrichment: adding a layer of metadata for machine-readability

```
<code>
<math>
</math>
</code>
```



XML file

pdf or HTML file

new BIPM APIs

API KCDB

Terms of use

Licence

Guidance

API KCDB

API KCDB GUIDE

<https://www.bipm.org/en/cipm-mra/kcdb-api>

BIPM Time Department Data Base

BIPM Time Department API Web Service

Overview

Custom requests arguments

<https://webtai.bipm.org/api/v0.1/>

... search for www.bipm.org for “API”

