



Bureau International des Poids et Mesures



BIPM Report I
AFRIMETS 7th General Assembly
July 2013

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BIPM Mission

The BIPM is an intergovernmental organization established by the Metre Convention, through which Member States act together on matters related to measurement science and measurement standards.

The mission of the BIPM is to ensure and promote the global comparability of measurements, including providing a coherent international system of units for:

- Scientific discovery and innovation,
- Industrial manufacturing and international trade,
- Sustaining the quality of life and the global environment.



BIPM Mission

The unique role of the BIPM is based on its international and impartial character enabling it:

- ❑ To coordinate the realization and improvement of the world-wide measurement system to ensure it delivers accurate and comparable measurement results.
- ❑ To undertake selected scientific and technical activities that are more efficiently carried out in its own laboratories on behalf of Member States.
- ❑ To promote the importance of metrology to science, industry and society, in particular through collaboration with other intergovernmental organizations and international bodies and in international forums.

Brief history of the Metre Convention and SI

The Metre Convention and the SI

- ✦ **20 May 1875** - The Metre Convention established the BIPM as a permanent international organisation.

The BIPM is an intergovernmental organisation of 55 Member States and 37 Associate States and economies covering some 95% of world GDP

The role of the BIPM is uniformity of measurement worldwide

- ✦ **1960** - the metre, kilogram, second, kelvin and candela were defined as base units.
- ✦ **1975** - the unit system is named as the **International System of Units (SI)**
- ✦ **1971** - the mole is added as the unit for amount of substance, bringing the total number of base units to seven.



Today's growing demands for better measurements



Industry

Environment



Science

Communications



Doctors

Healthcare



Regulators

It is estimated that in Europe today we measure and weigh at a cost equivalent to 2%-7% of GDP.

Food



Health & safety

You and I



Transport

Metrology influences, drives and underpins much of what we do and experience in our everyday lives, though often unseen. Industry, trade, regulation, legislation, quality of life, science and innovation all rely on metrology to some extent.

Change in BIPM Director

Dr. Martin Milton has joined the BIPM on 1 October 2012 as Deputy Director/Director Designate and has taken over the directorship of the BIPM from Prof. Michael Kühne on 1 January 2013





Changes in the CIPM

Following the retirements of **Dr Bennett**, **Prof. Issaev** and **Dr Tanaka** from the International Committee of Weights and Measures (CIPM), three new members have been provisionally elected (July 2012):

- **Dr Brian Bowsher** (Managing Director, NPL, United Kingdom),
- **Dr Vladimir Krutikov** (Rosstandart, Russian Federation)
- **Dr Takashi Usuda** (Director of the Metrology Management Center, NMIJ/AIST, Japan).

Following the retirements of **Prof. Göbel**, **Dr Hengstberger** and **Dr Schwitz** from the International Committee of Weights and Measures (CIPM), three new members have been provisionally elected (April 2013):

- **Prof. Humberto Brandi** (Director for Scientific and Industrial Metrology, INMETRO, Brazil),
- **Dr Wynand Louw** (Director of Research and Technology Development, NMISA, South Africa)
- **Prof. Joachim Ullrich** (President, PTB, Germany)

Membership

June 2013 - 55 Member States of the BIPM, and 37 Associate States and Economies of the General Conference:

→ Member States

- [Argentina](#)
- [Australia](#)
- [Austria](#)
- [Belgium](#)
- [Brazil](#)
- [Bulgaria](#)
- [Canada](#)
- [Chile](#)
- [China](#)
- [Colombia](#)
- [Croatia](#)
- [Czech Republic](#)
- [Denmark](#)
- [Dominican Republic](#)
- [Egypt](#)
- [Finland](#)
- [France](#)
- [Germany](#)
- [Greece](#)

→ Associates of the CGPM

- [Albania](#)
- [Bangladesh](#)
- [Belarus](#)
- [Bolivia \(Plurinational State of\)](#)
- [Bosnia and Herzegovina](#)
- [Botswana](#)
- [CARICOM](#)
- [Chinese Taipei](#)
- [Costa Rica](#)
- [Cuba](#)
- [Ecuador](#)
- [Estonia](#)
- [Former Yugoslav Republic of Macedonia](#)

AFRIMETS
4 Member States
 Kenya
 Egypt
 South Africa
 Tunisia

7 Associates
 Botswana
 Ghana
 Mauritius
 Namibia
 Seychelles
 Zambia
 Zimbabwe

Since 6 February 2013 Member state

Since 30 May 2012, Botswana is an Associate of the CGPM

Since 10 August 2012, Namibia is an Associate of the CGPM

Since 8 May 2012, Oman is an Associate of the CGPM

Tunisia has been an Associate of the CGPM since October 2007. Since 1 February 2012 Member State

Since 31 May 2012, Syria is an Associate of the CGPM

Member States (continued):

- [Hungary](#)
- [India](#)
- [Indonesia](#)
- [Iran \(Islamic Republic of\)](#)
- [Ireland](#)
- [Israel](#)
- [Italy](#)
- [Japan](#)
- [Kazakhstan](#)
- [Kenya](#)
- [Malaysia](#)
- [Mexico](#)
- [Netherlands](#)
- [New Zealand](#)
- [Norway](#)
- [Pakistan](#)
- [Poland](#)
- [Portugal](#)
- [Republic of Korea](#)

Member States (continued):

- [Romania](#)
- [Russian Federation](#)
- [Saudi Arabia](#)
- [Serbia](#)
- [Singapore](#)
- [Slovakia](#)
- [South Africa](#)
- [Spain](#)
- [Sweden](#)
- [Switzerland](#)
- [Thailand](#)
- [Tunisia](#)
- [Turkey](#)
- [United Kingdom of Great Britain and Northern Ireland](#)
- [United States of America](#)
- [Uruquay](#)
- [Venezuela \(Bolivarian Republic of\)](#)

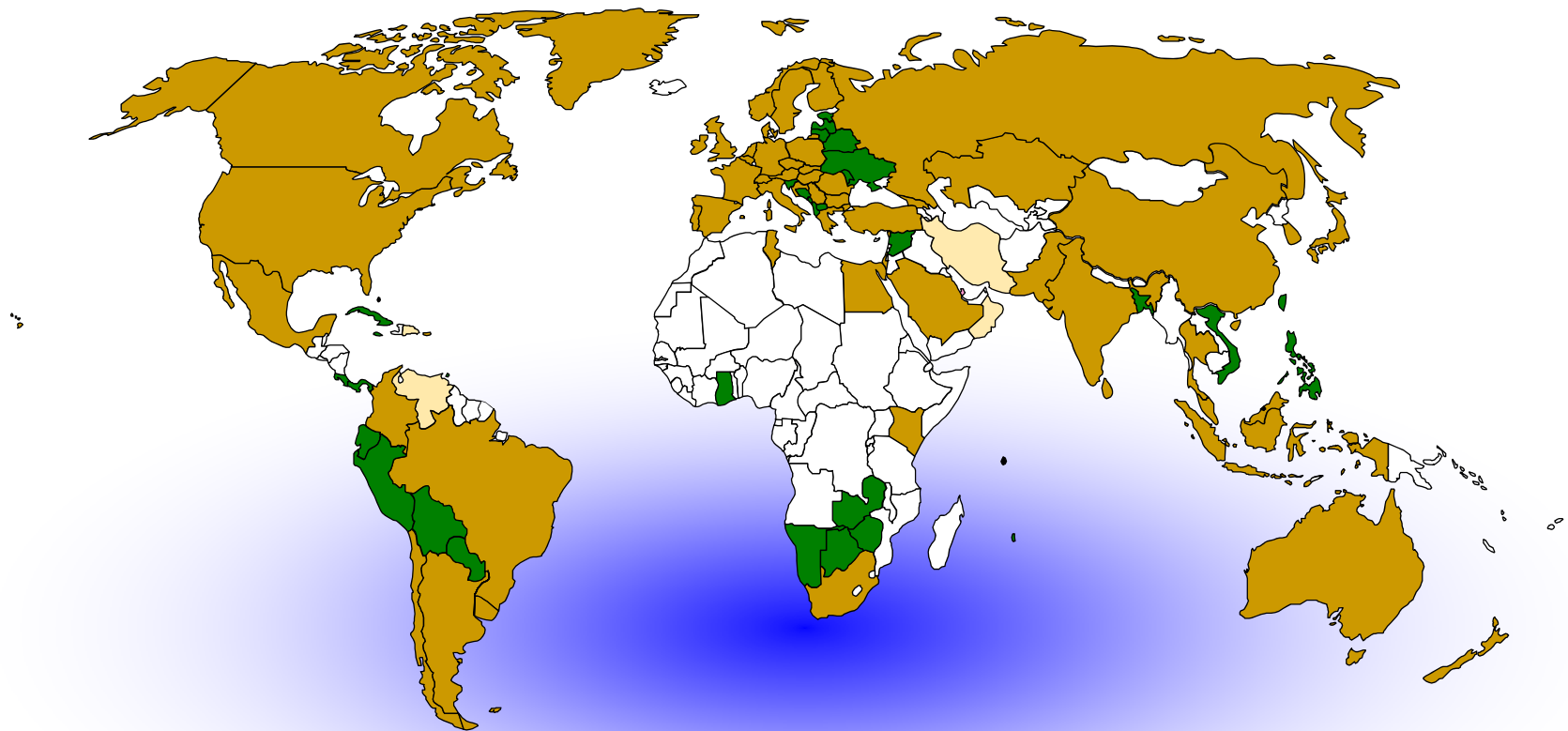
Associates of the CGPM (continued):

- [Georgia](#)
- [Ghana](#)
- [Hong Kong \(China\)](#)
- [Jamaica](#)
- [Latvia](#)
- [Lithuania](#)
- [Malta](#)
- [Mauritius](#)
- [Montenegro](#)
- [Namibia](#)
- [Oman](#)
- [Panama](#)
- [Paraguay](#)

Associates of the CGPM (continued):

- [Peru](#)
- [Philippines](#)
- [Republic of Moldova](#)
- [Seychelles](#)
- [Slovenia](#)
- [Sri Lanka](#)
- [Syrian Arab Republic](#)
- [Ukraine](#)
- [Viet Nam](#)
- [Zambia](#)
- [Zimbabwe](#)

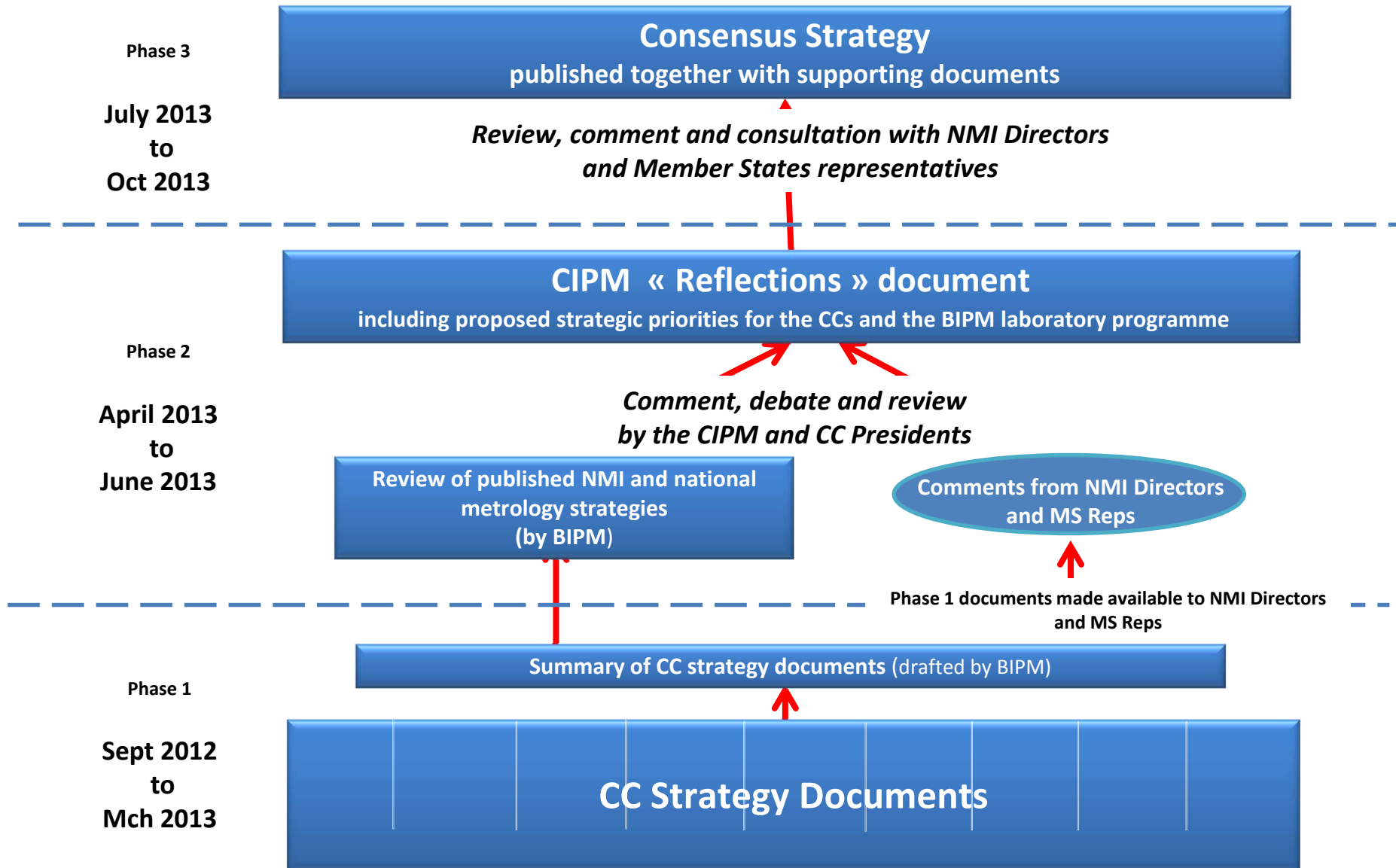
CIPM MRA Participation



The CIPM MRA has now been signed by the representatives of 92 institutes – from 52 Member States, 36 Associates of the CGPM, and 4 international organizations – and covers a further 147 institutes designated by the signatory bodies.

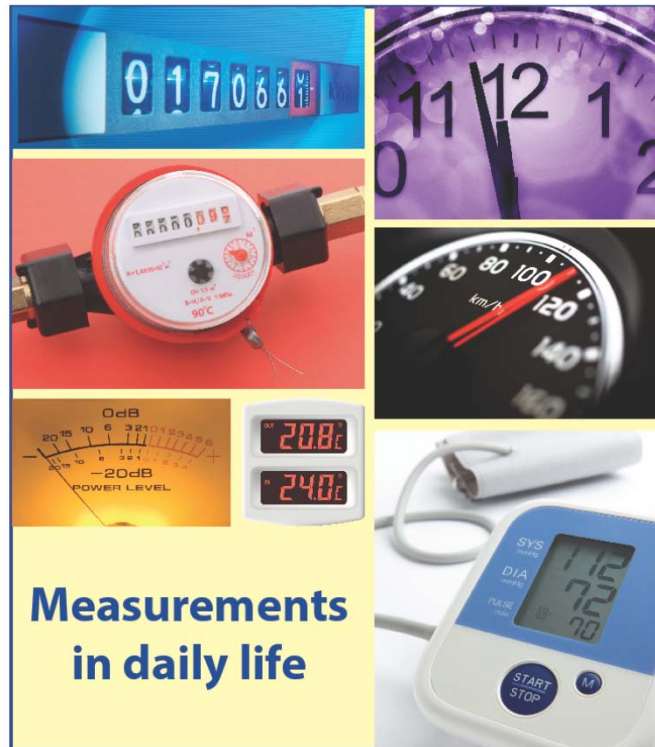
- Member participating in the CIPM MRA
- Associate participating in the CIPM MRA
- Members/Associates not yet signed the CIPM MRA

Timeline for Strategy Development



World Metrology Day 2013

Metrology



Measurements
in daily life



World Metrology Day
20 May
www.worldmetrologyday.org



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- The theme of World Metrology Day in 2013 is “**Measurements in Daily Life**” - joint BIPM-OIML WMD initiative - poster designed in cooperation with TÜBİTAK UME
www.worldmetrology.org
- Posters in 17 languages
- Events in 29 countries
- Many thousands of posters produced and distributed
- Highest hit and download ever
 - 171 000 hits in May 2013 c.f. 80 000 in May 2012

For the future the RMOs are asked in turn to work with their regional legal metrology organizations to take responsibility for the developments of the poster (in conjunction with BIPM and OIML). RMOs free to decide which particular member takes on the task.



Highlights of the CIPM

State Reps and NMI Directors meeting 16-17 October 2012

Reflections on the *ad hoc* Working Group Recommendations

- Development of a statement on the BIPM mission, role and objectives supported
- Development and regular updating of mid- and long-term strategic plan, including financial analysis and proposed BIPM PoW and budget, with input from CCs, and active interest by NMI Directors and State Reps.
- RMO chairs invited to attend the NMI Directors meeting, and RMO TC Chairs invited to attend CC Strategy WGs
- Improvement of communication and published documents: more compact, easily readable, clear summary and list of decisions and actions

State Reps and NMI Directors meeting 16-17 October 2012

Reflections on the *ad hoc* Working Group Recommendations

- Regular yearly meetings of NMI Directors and State Representatives
- More transparent election process of CIPM members; CIPM members scrutinized against listed criteria; appointment for fixed term of 4 years, renewable
- CC Presidents appointed on the basis of being the “best person”; criteria to be formulated; appointment for fixed term of 4 years, renewable
- CGPM meetings every 4 years, deciding on the BIPM budget for a 4 year period ; intermediate CGPM meetings not favoured
- Duration of CGPM meetings to become reduced to 2 or 3 days
- Review of content and management of BIPM Pension Fund

102st CIPM meeting, June 2013

□ Issues discussed and approved

- Planning for a three day CGPM in 2014 (with a 1 day pre meeting by the CGPM WG on the Dotation of the BIPM)
- Results of studies on BIPM Pensions & Health to be presented at the October meeting of NMI Directors and State Reps
- Results of studies on BIPM Conditions of employment to be presented at the October meeting of NMI Directors and State Reps
- Albania (an Associate of the CGPM) meets criteria will be encouraged to become a MS
- Updated list of frequencies recommended by CCT adopted

BIPM – CIPM – ILAC – ISO – OIML meetings in March 2013

- Tuning of policy with respect to the JCGM and its governance
- Tuning of policy and activities with respect to the DCMAS Network support to developing Economies
- ILAC Arrangement will include Inspection Bodies and in the near future PT Providers and CRM Producers
- ISO Guide 34 will be used as a stand alone document for the accreditation of CRM Producers
- ILAC P10 (Traceability) and P14 (Uncertainty) approved by ILAC (January 2013)
- Proposed review of ISO/IEC 17025
- Ways to demonstrate capability, competence, traceability for accredited non-NMIs/DIs having primary standards
- Future of the Metrologyinfo.org website
- World Metrology Day, future poster development

BIPM – CIPM – ILAC – ISO – OIML meetings in March 2013

- Review of how metrology, accreditation and standards development can mutually reinforce the values of the services provided to customers
- Agree on actions that will assist the BIPM, OIML, ILAC and ISO to demonstrate these values to their stakeholders
- Possibility and utility of organizing a big stakeholder meeting (BIPM, ILAC, ISO, OIML, Codex A., WMO, WHO, IEC, ITU, a.o.)
- First priority: joint symposium on “Climate Change Assessment”, including measurable, reportable and verifiable carbon inventories (emissions and mitigation/sequestration strategies)
- Role and activities of ISO Technical Interface Group (part of ISO CASCO)
- Re-instatement of ISO TAG 4 (investigating needs of ISO TCs on GUM and VIM issues)

Upcoming Meetings and Events

From 19 to 20 September 2013

ITU/BIPM Workshop on "Future of the International Time Scale"

From 20 to 21 October 2013

Meeting of the bureau of the CIPM

22 October 2013

102nd meeting of the CIPM (Session II)

From 23 to 24 October 2013

Meeting of representatives of State Parties to the Metre Convention and of Directors of National Metrology Institutes

25 October 2013

102nd meeting of the CIPM (Session II)

From 28 to 31 October 2013

9th meeting of the CCAUV and associated meetings of the CCAUV-WGs

From 2 to 3 December 2013

JCGM Working Group 2: VIM

3 December 2013

Meeting of JCTLM Review Teams

4 December 2013

Meeting of the JCGM

From 4 to 5 December 2013

Meeting of JCTLM Stakeholders and Members

5 December 2013

JCGM Working Group 2: VIM

6 December 2013

Meeting of the JCTLM Executive Committee



Bureau International des Poids et Mesures

Thank you for your attention

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AFRIMETS EXCOM,
Lusaka, July 2013