

Update and discussion of activities in ILAC related to the NMIs

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Bureau
♦ **I**nternational des
♦ **P**oids et
♦ **M**esures



**ADOPTED BY THE 22nd GENERAL CONFERENCE
ON WEIGHTS AND MEASURES**

(2003)

List of the Resolutions:

- 1 Links with other organizations
- 2 Metrology and trade
- 3 On the coordination of the initiatives to support the implementation of metrology, accreditation, and standardization in developing countries and economies
- 4 Value and benefits of the Metre Convention for Member States and for Associates of the General Conference
- 5 Report on evolving needs for metrology in trade, industry and society, and the role of the International Bureau of Weights and Measures
- 6 On the importance of the CIPM Mutual Recognition Arrangement
- 7 Involvement of national metrology institutes in the complete range of work of the Metre Convention
- 8 Revision of the *mise en pratique* of the definition of the metre
- 9 Requirements for cross-border transport of measurement standards, metrological equipment and reference materials
- 10 Symbol for the decimal marker
- 11 Relationship between National Metrology Institutes and nationally recognized accreditation bodies
- 12 Dotation of the BIPM for the years 2005 to 2008

TERMS OF REFERENCE

JOINT CIPM/ILAC WORKING GROUP

The following terms of reference were agreed in March 2018 at the annual meeting of the Joint CIPM/ILAC Working Group:

- intensify the information flow between the two organizations;
- share information related to global quality infrastructure developments;
- review the BIPM-ILAC MoU when necessary;
- review issues concerning the degree of equivalence and appropriate mutual strengthening of the CIPM MRA and the ILAC Arrangement;
- review the Joint Declarations and Statements etc. agreed between the BIPM and ILAC (and other partners) in order to keep these up to date;
- review the metrological traceability and dissemination process between NMIs and accredited laboratories and give appropriate feedback to both memberships for appropriate further action;
- review the impact of ISO Standards on metrology and related matters.

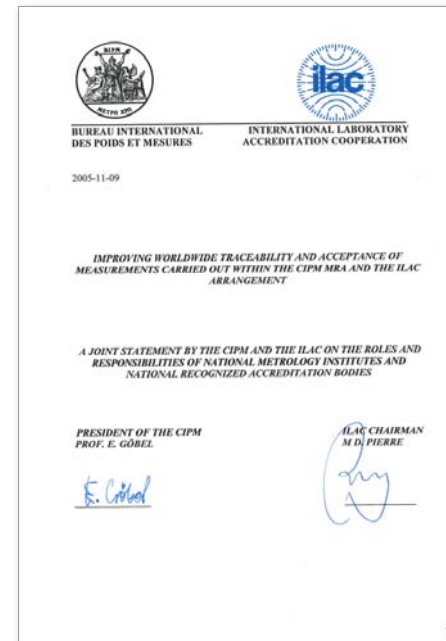
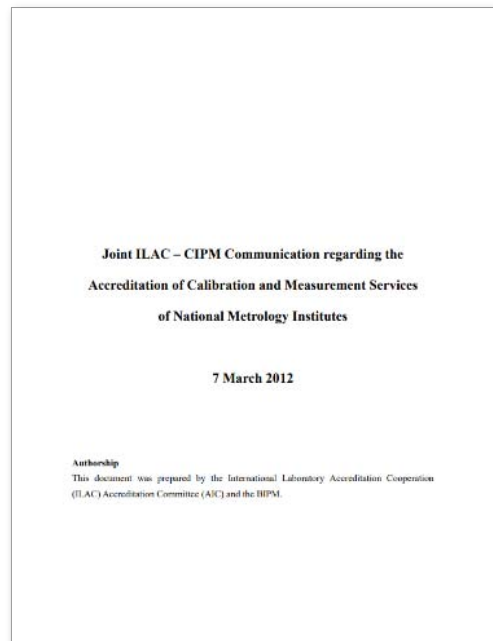
5th March 2018

Joint CIPM/ILAC Working Group

Published:

- for ILAC - <https://ilac.org/about-ilac/partnerships/international-partners/bipm/>
- for BIPM - <https://www.bipm.org/en/world-wide-metrology/liaisons/ilac.html>

BIPM, OIML, ILAC and ISO



BIPM, OIML, ILAC and ISO meet annually at senior level in a 'Quadripartite'

Current Status of Joint Documents



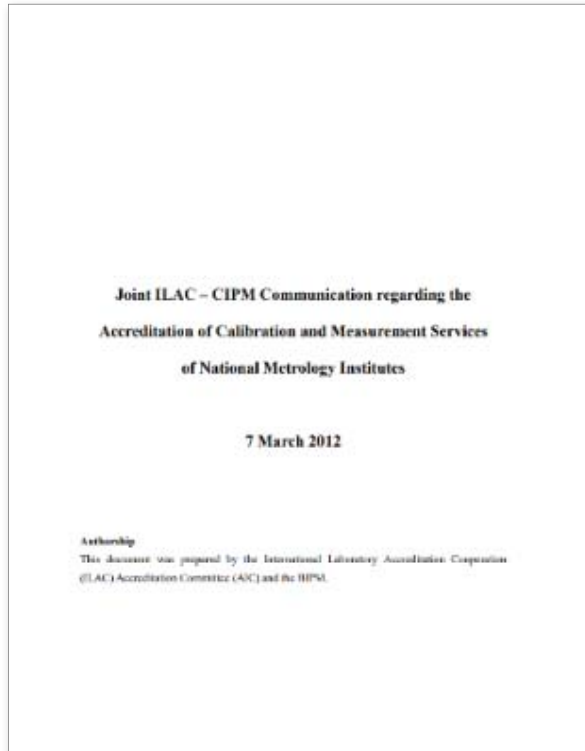
Joint BIPM, OIML, ILAC and ISO declaration on metrological traceability

- ◆ *“We assert that international consistency and comparability of measurements are required if the missions of our Organizations are to be achieved. In particular, measurement comparability is an essential characteristic of an international system within which measurement results can be universally accepted. This international consistency and comparability can only be guaranteed if measurement results are metrologically traceable to internationally recognized references.”*
- ◆ Emphasizes the importance of the VIM, GUM, and CIPM-MRA.
- ◆ The refreshed version was approved by the CIPM in October 2018, having been first reviewed by the four parties and text agreed at the Quadripartite meeting of March 2018, and then approved by the CIPM.
- ◆ The Joint declaration was re-signed in November 2018, at the 26th CGPM.

[https://www.bipm.org/utils/common/pdf/BIPM-OIML-ILAC-ISO joint declaration 2018.pdf](https://www.bipm.org/utils/common/pdf/BIPM-OIML-ILAC-ISO_joint_declaration_2018.pdf)

www.bipm.org

Current Status of Joint Documents



https://www.bipm.org/Utils/common/pdf/ilac-cipm_joint_communication.pdf

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Joint ILAC-CIPM communication regarding the accreditation of calibration and measurement services of national metrology institutes

- ◆ A guideline for how accreditation bodies can assess NMIs to best meet the requirements of the quality system review required by the CIPM-MRA.
- ◆ The 2012 Joint Communication is currently undergoing review, as an action from the 2018 and 2017 BIPM-ILAC Bilateral meetings. The agreement is that there will be no substantive changes:
 - Update references with the publication of ISO/IEC 17025:2017 and ISO 17034:2016 (replacing ISO Guide 34)
 - Addition of GULFMET
 - Generalize the descriptions of the organizations in as much as data that changes frequently would not be explicitly quoted (e. g the exact number of members of the originations)

Approved by CIPM, awaiting ILAC approval

Current Status of Joint Documents -- **Need input**



https://www.bipm.org/util/s/common/pdf/cipm-ilac_joint_statement.pdf

Joint statement by the CIPM and ILAC on improving worldwide traceability and acceptance of measurements carried out within the CIPM MRA and the ILAC arrangement

- ◆ A comprehensive document that explains the roles of the various international metrology institutions and how the CIPM-MRA was designed to benefit international metrology
- ◆ The document is still a very useful summary, but perhaps a bit dated considering the maturity of the CIPM-MRA
- ◆ The 2005 Joint Statement is currently under review following the 2018 and 2017 BIPM-ILAC Bilateral meetings.
- ◆ Both ILAC and BIPM recognize that a “light touch” revision is not possible
- ◆ Still a useful document for NMIs considering joining the MRA
- ◆ A decision of whether to perform a more substantive update or to “retire” the document will be made at the 2020 meeting

Current Status of Joint Documents – *Still useful or mission accomplished?*



https://www.bipm.org/util/s/common/pdf/bipm-oiml-ilac_joint_declaration.pdf

www.bipm.org

Common statement and declaration by the BIPM, OIML and ILAC on the relevance of various international agreements on metrology to trade, legislation and standardization (2006)

- *“The statement specifically invites Governments and other Authorities to endorse and commit themselves to use the appropriate Arrangements whenever possible.”*

Arising from:

- *The CIPM MRA: “thereby to provide governments and other parties with a secure technical foundation for wider agreements related to international trade, commerce and regulatory affairs.”*
- *The 22nd meeting of the CGPM (2003): “to prepare a declaration on the importance and application of the CIPM MRA in trade, commerce and regulatory affairs, and to bring it to the attention of the Governments of the Metre Convention with the recommendation that the principles of the CIPM MRA be included in intergovernmental agreements as appropriate.”*
- *ILAC is determining if a “light weight” update (numbers and references) is acceptable*

BIPM input to revision of ILAC documents

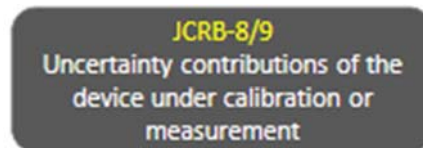
ILAC P10:01/2013 ILAC Policy on Traceability of Measurement Results

- ◆ There are two major concerns arising from the discussions within ILAC AIC WG Metrology and in the first draft:
 - The switch to the term ‘conformity assessment bodies’: ILAC favored generalizing the document replacing ‘laboratories’ with ‘conformity assessment bodies’ (because inspection bodies are not laboratories). For calibration laboratories this would be at odds with the Resolution 11, 22nd CGPM (2003). ILAC agreed to use the term “accredited bodies”.
 - The perceived ‘hierarchy’ in the current version of ILAC P10: Hopefully resolved by the inclusion of the definitions of the terms *shall*, *should*, *may*, and *can*.

BIPM input to revision of ILAC documents

ILAC P14: ILAC Policy for Uncertainty in Calibration

- ◆ DUT issues will be discussed at the next AIC WG meetings (later this month)



<https://www.bipm.org/utils/common/documents/jcrb/uncertainty-contribution-DUT.pdf>

March 2020 liaison meetings

In March each year we (CIPM bureau, ILC Director) meet with the close QI liaison organisations;

Bilateral meetings with:

- ◆ ILAC
- ◆ OIML

Plus

- ◆ Quadripartite meeting (BIPM, OIML, ILAC & ISO)

Are there any issues/topics NMIs would like us to address?

Thanks.

◆ *Questions?*