

# BIPM-GULFMET-2022

ILAC-CIPM Joint  
Communication on  
accreditation of NMI calibration  
services

**B**ureau  
International des  
**P**oids et  
**M**esures

7 June 2022  
**Andy HENSON**  
**BIPM**



**Duplication** of the NMI accreditation  
process and the CIPM MRA process  
**should be avoided**

# Joint ILAC – CIPM communication

*Joint ILAC – CIPM Communication regarding the  
Accreditation of Calibration and Measurement Services  
of National Metrology Institutes*

*This document was originally prepared  
7<sup>th</sup> March 2012, then*

*updated and reaffirmed  
7<sup>th</sup> October 2020*

**Authorship**

This document was prepared by the International Laboratory Accreditation Cooperation (ILAC) Accreditation Committee (AIC) and the BIPM.

This document provides guidance on the accreditation process of NMIs for their measurement services in order for the NMI to optimise the benefits from being accredited:

- when it is, or is in the process of becoming, a signatory to the CIPM MRA, and
- to generally facilitate the process for Accreditation Bodies when accrediting NMI measurement services.

# Guidelines

The following items need specific attention by the AB when accrediting NMIs who participate in the CIPM MRA:

1. Assessors
2. Scope of accreditation
3. Inter laboratory comparisons
4. Supplementary criteria set by the RMO
5. Assessment report
6. Decision-making and granting accreditation

# Assessors

- The accreditation body should, wherever practical, use peer reviewers who can also be accepted as peer reviewers by the RMO.
- It is best if the AB specifically asks the NMI beforehand whether they need peer reviewers to comply with these RMO requirements, and to confirm a common understanding of the requirements.

# Scope of accreditation

- The accreditation body shall during assessment take into account approved entries in the KCDB and/or available documentation related to their approval in RMOs.
- It is the obligation of the NMI at any time to inform the accreditation body of changes which affect the scope of accreditation.
- Although entries in the scope and the KCDB are not exactly the same they can represent the same information.
- The AB should encourage the NMI to align as far as is practical the scope of accreditation and the services provided under the CIPM MRA.

# Inter laboratory comparisons

- Results from participation in comparisons, such as the comparisons registered in the KCDB should be taken into account.
- In the case where the NMI provides services only at industrial levels of calibration where no KCDB comparisons exist, further participation may be needed.

# Supplementary criteria set by the RMO

- If the RMO has set supplementary criteria that needs to be fulfilled outside criteria included in ISO/IEC 17025, ISO 17034 and ISO/IEC 17011, this should be taken into account by the accreditation body.
- **Regional accreditation bodies should co-operate with the RMO** to ensure a consistent and harmonized approach in order for the individual NMI to benefit from being accredited.



# Assessment report

- If the status of accreditation is to be used to support the CIPM MRA process it is extremely helpful for the NMI if the assessment report is provided in the language used in the RMO review process.
- **The AB and NMI should collaborate and agree on the reporting.**
- ABs need to make it clear that they have no objection to the Assessment Report being submitted by the NMI to the RMO as part of the CIPM MRA process, including the identity of technical assessors and technical experts.

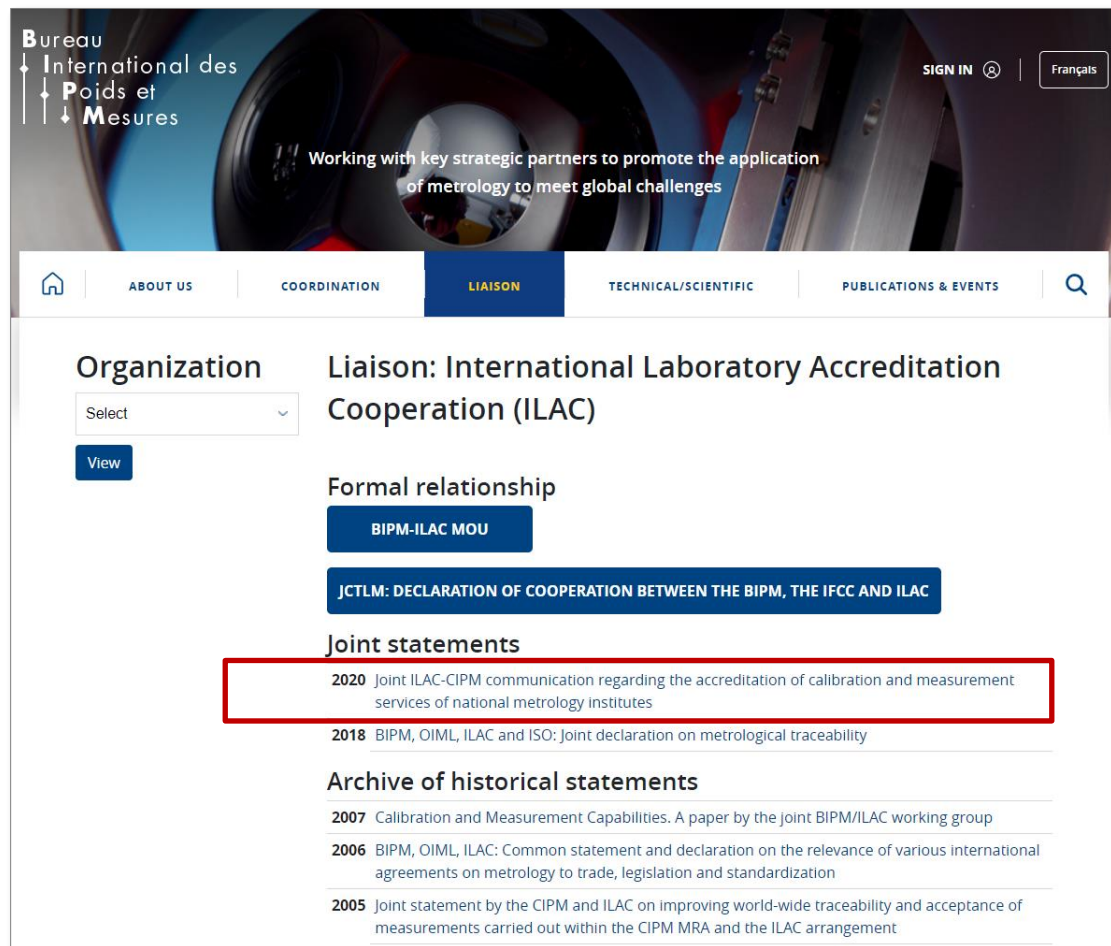
# Decision-making and granting accreditation

- Generally, the scope and the uncertainty of an NMIs accredited calibration and measurement services should neither be smaller nor larger than that for the CMC represented in the KCDB.
- However, this may not always be the case as differences in timing, processes and the sequence in which approvals are sought and granted can result in either the accredited CMC or the CIPM MRA CMC being published first.
- As there has been no alignment between the way information is presented between scopes of accreditation and the KCDB it should not be expected that the format of the scope of accreditation and the entries in the KCDB be identical

# Where to find

## BIPM website

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



The screenshot shows the BIPM website's 'Liaison' page. The header includes the BIPM logo, a navigation menu with 'ABOUT US', 'COORDINATION', 'LIAISON' (highlighted), 'TECHNICAL/SCIENTIFIC', and 'PUBLICATIONS & EVENTS', and a search icon. The main content area is titled 'Liaison: International Laboratory Accreditation Cooperation (ILAC)'. It features a 'Formal relationship' section with buttons for 'BIPM-ILAC MOU' and 'JCTLM: DECLARATION OF COOPERATION BETWEEN THE BIPM, THE IFCC AND ILAC'. Below this is a 'Joint statements' section, which is highlighted with a red rectangle. It lists two statements: a 2020 joint ILAC-CIPM communication and a 2018 joint declaration by BIPM, OIML, ILAC, and ISO. An 'Archive of historical statements' section follows, listing statements from 2007 to 2005.

Bureau International des Poids et Mesures

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Working with key strategic partners to promote the application of metrology to meet global challenges

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### Organization

Select

### Liaison: International Laboratory Accreditation Cooperation (ILAC)

#### Formal relationship

**BIPM-ILAC MOU**

**JCTLM: DECLARATION OF COOPERATION BETWEEN THE BIPM, THE IFCC AND ILAC**

#### Joint statements

**2020** Joint ILAC-CIPM communication regarding the accreditation of calibration and measurement services of national metrology institutes

**2018** BIPM, OIML, ILAC and ISO: Joint declaration on metrological traceability

#### Archive of historical statements

**2007** Calibration and Measurement Capabilities. A paper by the joint BIPM/ILAC working group

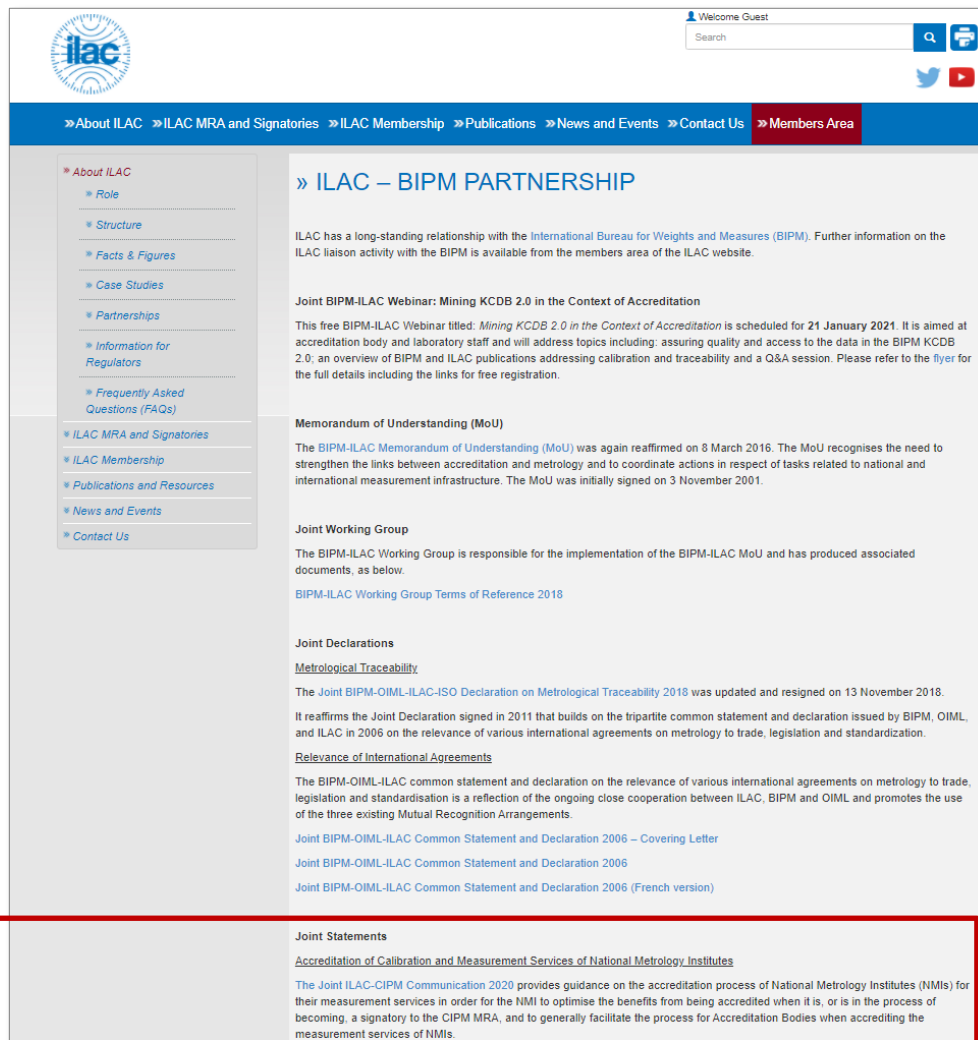
**2006** BIPM, OIML, ILAC: Common statement and declaration on the relevance of various international agreements on metrology to trade, legislation and standardization

**2005** Joint statement by the CIPM and ILAC on improving world-wide traceability and acceptance of measurements carried out within the CIPM MRA and the ILAC arrangement

# Where to find

## ILAC website

<https://ilac.org/about-ilac/partnerships/international-partners/bipm/>



**ILAC – BIPM PARTNERSHIP**

ILAC has a long-standing relationship with the [International Bureau for Weights and Measures \(BIPM\)](#). Further information on the ILAC liaison activity with the BIPM is available from the members area of the ILAC website.

**Joint BIPM-ILAC Webinar: Mining KCDB 2.0 in the Context of Accreditation**

This free BIPM-ILAC Webinar titled: *Mining KCDB 2.0 in the Context of Accreditation* is scheduled for **21 January 2021**. It is aimed at accreditation body and laboratory staff and will address topics including: assuring quality and access to the data in the BIPM KCDB 2.0, an overview of BIPM and ILAC publications addressing calibration and traceability and a Q&A session. Please refer to the [flyer](#) for the full details including the links for free registration.

**Memorandum of Understanding (MoU)**

The [BIPM-ILAC Memorandum of Understanding \(MoU\)](#) was again reaffirmed on 8 March 2016. The MoU recognises the need to strengthen the links between accreditation and metrology and to coordinate actions in respect of tasks related to national and international measurement infrastructure. The MoU was initially signed on 3 November 2001.

**Joint Working Group**

The BIPM-ILAC Working Group is responsible for the implementation of the BIPM-ILAC MoU and has produced associated documents, as below:

[BIPM-ILAC Working Group Terms of Reference 2018](#)

**Joint Declarations**

[Metrological Traceability](#)

The [Joint BIPM-OIML-ILAC-ISO Declaration on Metrological Traceability 2018](#) was updated and resigned on 13 November 2018. It reaffirms the Joint Declaration signed in 2011 that builds on the tripartite common statement and declaration issued by BIPM, OIML, and ILAC in 2006 on the relevance of various international agreements on metrology to trade, legislation and standardization.

[Relevance of International Agreements](#)

The BIPM-OIML-ILAC common statement and declaration on the relevance of various international agreements on metrology to trade, legislation and standardisation is a reflection of the ongoing close cooperation between ILAC, BIPM and OIML and promotes the use of the three existing Mutual Recognition Arrangements.

[Joint BIPM-OIML-ILAC Common Statement and Declaration 2006 – Covering Letter](#)

[Joint BIPM-OIML-ILAC Common Statement and Declaration 2006](#)

[Joint BIPM-OIML-ILAC Common Statement and Declaration 2006 \(French version\)](#)

**Joint Statements**

[Accreditation of Calibration and Measurement Services of National Metrology Institutes](#)

The [Joint ILAC-CIPM Communication 2020](#) provides guidance on the accreditation process of National Metrology Institutes (NMIs) for their measurement services in order for the NMI to optimise the benefits from being accredited when it is, or is in the process of becoming, a signatory to the CIPM MRA, and to generally facilitate the process for Accreditation Bodies when accrediting the measurement services of NMIs.

# At the regional level, for example

From the text...

*“Regional  
accreditation bodies  
should co-operate  
with the RMO...”*

For details please contact  
the AFRAC Secretariat:  
[nonhlanhlah@sanas.co.za](mailto:nonhlanhlah@sanas.co.za)



# At the national level, for example

From the text...

*“The AB and NMI  
should collaborate  
and agree on the  
reporting...”*

For details please  
contact DANAK:  
[danak@danak.dk](mailto:danak@danak.dk)

## AKKREDITERINGSMEDDELELSE for laboratorier



### Accreditation of a Danish Metrology Institute (MI)

Nr.	:	AML K 03
Dato	:	2016.12.21
Side	:	1/3

#### 1. Objective/Purpose

The objective of this AML is to clarify how the Danish metrology institutes (MIs) can benefit from the accreditation system and how DANAK can support the participation of the MI in the CIPM MRA (The Mutual recognition arrangement of the International Committee for Weights and Measures). The Metrology Institutes (MI's) consist of the Danish *National Metrology Institute* and the *Designated Institutes* that have signed the CIPM MRA. This AML was written by a joint working group with members from Daniamet and DANAK.

#### 2. Background

The Co-operation between BIPM (The International Bureau of Weights and Measures) and ILAC (the International Laboratory Accreditation Cooperation) has during the past years increased the mutual understanding of the processes within the MRA of CIPM and within accreditation. In 2007 BIPM and ILAC published "CALIBRATION AND MEASUREMENT CAPABILITIES", A paper by the joint BIPM/ILAC working group" in which it is made clear that BMC (the best measurement capability) and CMC (the calibration and measurement capability) are identical. This document is today an informative annex to ILAC P14 ILAC Policy for uncertainty in Calibration.

# Thank you