# Update on the CCM Guidelines for approval and publication of comparison reports

METPA

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Bureau
International des
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## CCM Guidelines for approval of comparison reports

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#### CCM Guidelines for approval and publication of the final reports of key and supplementary comparisons

With Appendix on Pilot Studies

- first approved document in 2013
- major revision in June 2016
  - clarification on reporting comparison results
  - report accompanied with a note indicating the impact of the comparison results on the CMC claims
  - appendix on the declaration of the impact of a comparison on the CMC claims
- development of two templates in 2017



resolution JCRB resolution 34/1 clarifying the policy on reporting of comparisons that involve participants who are nonsignatories to the CIPM MRA

<u>CIPM MRA-D-05</u> (version 1.6, March 2016)

8. Publication of comparisons in the KCDB

Measurement comparison reports should be written to reflect the experiment that was actually performed, including summary results from all participants. These reports should be accessible from the online Key Comparison Database, but the graphs and tables of equivalence explicitly shown should include results only from signatory NMIs and DIs. The results for non-signatory participants should be considered as evidence of metrological competence for any future CMC submissions in the event that the laboratory becomes a signatory to the CIPM MRA. Note that this would not apply to laboratories participating in a measurement comparison under less stringent rules than the signatory laboratories (e.g. as a 'pilot study' participant for a measurement comparison in chemistry).

## Appendix on the impact on CMC claims

- The participating laboratories should send a declaration to the pilot laboratory that they checked their results against their CMC claims. If not, they describe the measures to be taken to remove this inconsistency.
- The declaration is to be included in a separate executive report, and is not part of the comparison report.
- The pilot laboratory is responsible for the collection of the information and for including a note with the comparison report saying if there is any impact on the CMCs of any of the participants.
- The rules are given in <u>CIPM-MRA-</u> <u>D-05</u> in case there is an impact on the participants' CMCs.

Person who declares on behalf of the participating laboratory	
Name:	
Tel:	
e-mail:	

The declarer affirms that the comparison results of his/her NMI have been checked

against their CMC claims and states (please add rows as needed in the following table):

	measurand	our CMC claims	our comparison results	Yes or No, our claims are supported by our comparison results
-				

If case of inconsistencies, please describe the steps that will be taken so that the CMC and comparison results will be consistent (some examples: modify CMC, withdraw CMC, carry out a follow-up comparison in hopes of maintaining present CMC).

Template and reference of best practice for data analysis of key comparison

Chair of WGPV: Dr Karl Jousten (PTB)



- A review of all CCM comparison was conducted:
  - o survey of 33 CCM KCs
  - o maximum of 19 participants, mean of 9 participants
  - o methods most used to calculate KCRV: median and weighted mean
  - o uncertainty of transfer standard is a problem
  - guidance needed: appropriate KCRV calculation methods, flow chart or software template for KCRV calculations, how to handle unstable transfer standard effects, and how to assess results for multiple set points
  - « NIST consensus builder » being tested in CCM WGs

### Key Comparison Report Template

- Chair of WGFF: Dr John Wright (NIST)
- Report template
  - o template for comparison reports is available

#### **CCM publications and bibliography**



template being tried in the CCM WGs



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