



Agenda Item 14.1.1:
Publication approval: Revision of OIML D 5:1982
*Principles for the establishment of hierarchy schemes
for measuring instruments*

Information

FINAL DRAFT
DOCUMENT

57th CIML Meeting

2022

SUBMITTED
FOR CIML
APPROVAL

Revision of D 5:

Principles for the establishment of hierarchy schemes
for measuring instruments

(Information)



ORGANISATION INTERNATIONALE
DE MÉTROLOGIE LÉGALE

INTERNATIONAL ORGANIZATION
OF LEGAL METROLOGY

Result of CIML online voting

Type: CIML Preliminary online ballot

Title: Revision of D 5: Principles for the establishment of hierarchy schemes for measuring instruments -

Deadline: 2022-03-21

Status: Closed

Result:

Voted **Yes**: 25

Voted **No**: 1

Abstain: 0

Country	Vote	Comments
AUSTRALIA	Voted Yes on 2022-02-21 21:51:36	
BELARUS	Voted Yes on 2021-12-21 01:02:03	
CANADA	Voted Yes on 2022-03-21 15:10:07	
CUBA	Voted Yes on 2021-12-27 01:02:03	
FINLAND	Voted Yes on 2022-03-17 10:23:33	
FRANCE	Voted Yes on 2022-03-15 10:36:06	Yes
GERMANY	Voted No on 2022-03-08 10:22:33	Yes
HUNGARY	Voted Yes on 2022-02-08 10:07:17	
INDIA	Voted Yes on 2022-02-18 14:14:42	
IRAN	Voted Yes on 2022-03-17 15:14:18	
ITALY	Voted Yes on 2022-03-21 10:08:32	

Country	Vote	Comments
JAPAN	Voted Yes on 2022-02-22 05:51:43	
KOREA (R.)	Voted Yes on 2022-03-10 06:55:43	
MONACO	Voted Yes on 2021-12-20 01:02:03	
NETHERLANDS	Voted Yes on 2022-02-08 10:45:10	
NEW ZEALAND	Voted Yes on 2022-01-26 00:02:16	
NORWAY	Voted Yes on 2022-03-18 12:11:53	
P.R. CHINA	Voted Yes on 2022-03-07 03:30:13	
POLAND	Voted Yes on 2022-03-09 12:09:52	
ROMANIA	Voted Yes on 2022-01-10 13:15:26	
SAUDI ARABIA	Voted Yes on 2022-03-15 07:54:19	
SERBIA	Voted Yes on 2022-01-20 11:09:32	
SLOVAKIA	Voted Yes on 2022-03-21 10:57:43	
SWITZERLAND	Voted Yes on 2022-02-14 09:32:26	
UNITED KINGDOM	Voted Yes on 2022-03-09 13:38:54	Yes
UNITED STATES	Voted Yes on 2022-03-19 19:35:15	

Template for comments and convener's observations

Date:2022-04-04	Document:	Project:
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Country Code ¹	Part	Clause/ Subclause	Paragraph/ Figure/Table	Type of comment ²	Comments	Proposed change	Convener's responses	PG comment to Convener's response
0013 DE		4.3	c)	te	We do not agree with the change in this paragraph, which was not of editorial nature. The activities of a laboratory (especially if it is not an NMI) is not always directly covered by the CIPM MRA (cf. ILAC P10 No. 2 and Annex A).	Change "shall be accredited or peer assessed <u>and</u> covered by the Mutual Recognition Arrangement" back to "shall be accredited or peer assessed <u>and/or</u> their services are covered by the Mutual Recognition Arrangement"	Accepted After reconsideration the sentence is corrected backward according to 4 CD. ILAC P10 No. 2 and Annex A allows the consideration when metrological traceability is not established through the CIPM MRA and ILAC Arrangement.	Agree with Convener's response.
0015 DE		4.3	Figure 1	Ed/Te	We do not see the reason for limiting the actions of the legal metrology laboratories to "in-house" calibrations. We do not see a technical or organisational necessity of this limitation. (see also our comment on figure 2 in 5.6).	Replace "in-house calibration of working measurement standards" by "calibration of working measurement standards"	Not accepted The explanation of the "In-house calibration" is given in the 5.5.1 " <u>In-house calibration means regular calibration of own working measurement standards or measuring instruments which is performed by the metrology laboratory, the accredited calibration laboratory or the company itself</u> against its own reference measurement standard with metrological traceability." According to 5.5.1 there is no limitation for legal metrology laboratories.	Agree with Convener's response.
0016 DE		4.4	Last sentence	te	This is a technical change of a topic that has been discussed in previous drafts of OIML D5. The result of the discussion was the sentence of the 4 th CD. We do not agree to accept reports as proof of traceability which refer to mpes without information on measurement uncertainty.	Change "the MPE of the measuring instrument <u>is recommended to be</u> accompanied with information on the measurement uncertainty related to that MPE" back to	Accepted. After reconsideration the sentence is corrected backward according to 4 CD. The previous intention was to not use such a strong word. But we agree that the MPE shall be accompanied with information on the measurement uncertainty.	Agree with Convener's response.

¹ Country code (enter the ISO 3166 two-letter country code, e.g. CN for China)

² Type of comment: ge = general te = technical ed = editorial

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Project:

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						“the MPE of the measuring instrument <u>shall be</u> accompanied with information on the measurement uncertainty that relates to that MPE”		
0024 DE		5.3.3		te	<p>We agree that it is the task of the customer to ensure that the correct measurement uncertainty is achieved by the laboratory.</p> <p>However, we do not agree with the new wording that makes a proper consideration of the measurement uncertainty optional.</p>	<p>Change “the customer <u>should ensure</u> that the measurement uncertainty achieved in the accredited calibration laboratory is suitable and sufficient for the intended use of the measuring instrument”</p> <p>to “the customer <u>has to ensure</u> that the measurement uncertainty achieved in the accredited laboratory is suitable and sufficient for the intended use of the measuring instrument”</p>	<p>Accepted</p> <p>After reconsideration the sentence is corrected backward according to 4 CD.</p> <p>The previous intention was to not use such a strong word. We agree that the customer has to ensure that the measurement uncertainty. It is his duty.</p>	Agree with Convener's response.
0025 DE		5.4.1		te	<p>We do not agree with the new wording as it says the standards “should” be calibrated by an NMI or accredited calibration laboratory. We do not see an option to this therefore this needs to be changed back to the sense of the 4th CD of OIML D5. To make it more clear we propose to use the term “shall”.</p>	<p>Change “Their reference measurement standards <u>should be</u> calibrated by an NMI with suitable calibration and measurement capabilities or by an accredited calibration laboratory”</p> <p>to</p>	<p>Not accepted</p> <p>The reference to NMI and to accredited calibration laboratory in this clause is intended to be only the recommendation as the most suitable solution. The reason is that the metrological traceability need not be always through the CIPM MRA or ILAC Arrangement. There is possibility that the calibration service supplier is not accredited (cf. ILAC P10 No. 2 and Annex A).</p> <p>See also your comment 0013 DE.</p>	Agree with Convener's response.

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						"Their reference measurement standards <u>shall be</u> calibrated by an NMI with suitable calibration and measurement capabilities or by an accredited calibration laboratory"		
0028 DE		5.6	Figure 2	Ed / te	Row "Working measurement standards", column "Tasks...": We do not see the necessity of adding the term "in-house calibration". We prefer to reduce it to the general term "calibration". See also our comment on figure 1 in 4.3	Delete "in-house calibration"	Not accepted The explanation of the "In-house calibration" is given in the 5.5.1 "In-house calibration means regular calibration of own working measurement standards or measuring instruments which is performed by the metrology laboratory, the accredited calibration laboratory or the company itself <u>against its own reference measurement standard</u> with metrological traceability." We propose to keep it as it is in order to be more specific regarding the use of working standards. The reference to in-house calibration of the measuring instruments is suitable to be mentioned in this cell.	Agree with Convener's response.
0029 DE		5.6	Figure 2	te	Row "Working measurement standards", column "Basis for the tasks": We do not agree to delete the legal metrology laboratories. The legal metrology laboratories are not explicitly mentioned in ILAC P10 but this does not mean they do not fulfil the requirements of ILAC P10 (cf. ILAC P10 Section 3b in connection with Annex A). In addition, we feel this would be in contradiction with section 4.3 / Figure 1.	Re-insert "legal metrology laboratories"	Accepted After reconsideration we agree to re-insert the "legal metrology laboratories". The term "legal metrology laboratory" is mentioned in this document as well as in the cells of the Figure 1 and 2, including its definition (see 3.33). Therefore, the reference to the legal metrology laboratory in this cell is suitable to be consistent with the document.	Agree with Convener's response.

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0031 DE		6.1.5		te	We do not agree to make the application of OIML D 8 optional for other OIML Documents.	Change "is determined by the appropriate level of their metrological and technical characteristics. The specifications stated in OIML D 8 [5] <u>may be applied</u> in this process." Back to "is determined by the appropriate level of their metrological and technical characteristics <u>in accordance with</u> the specification stated in OIML D 8 [5]."	Accepted After reconsideration the sentence is corrected backward. The choice of measuring instruments for fulfilling the role of reference and working measurement standards shall be determined according to OIML D 8. After the correction of the text, the meaning of this clause is clearer.	Agree with Convener's response.
0032 DE		7.2.1	c)	Ed / te	We appreciate the intention to make the document easier to read. However, in this clause the reduction to "rated operating conditions" leaves open when and why these need to be content of the hierarchy scheme. The rated operating conditions should be described somewhere else in the documentation of the laboratory. This would also prevent the hierarchy schemes to be overloaded with information. We propose to leave the old text of 7.2.1 c) slightly changed, reorganised and amended by "if applicable".	Change the measurement ranges and rated operating conditions of all the measurement standards and measuring instruments indicated in the hierarchy scheme" to "the range of measurements of all the measurement standards and measuring instruments indicated in the hierarchy scheme and, if applicable, ranges of the most important conditions of measurements which define the procedure for the dissemination of the units.	Accepted	Australia agrees with the need to improve the wording to consider the most important conditions of measurements as well as cases where conditions may fall outside of rated operating conditions. However, the proposed generic wording may cause confusion. We believe that retaining the widely recognised and understood term "rated operating conditions" and including the text proposed will improve clarity.

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								We propose the changed text should read “the measurement ranges and the rated operating conditions of all the measurement standards and measuring instruments indicated in the hierarchy scheme and, if applicable, the ranges of the most important conditions of measurements which define the procedure for the dissemination of units”

C:\Users\luis_\Documents\comments\494-FRANCE-p2-D5_POB_2021-12_Comments_FR (1).docx: Collation successful

C:\Users\luis_\Documents\comments\494-GERMANY-p2-D5_POB_2021-12_Comments_DE_PSt2_2022-03-07.docx: Collation successful

C:\Users\luis_\Documents\comments\494-UNITED KINGDOM-p2-D5_POB_2021-12_Comments_templateUK.docx: Collation successful

Collation of files was successful. Number of collated files: 3

SELECTED (number of files): 3

PASSED TEST (number of files): 3

FAILED TEST (number of files): 0

CCT - Version 4.0/2015

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