



**Agenda Item 15.1**

**Report by the OIML-CS Management Committee Chairperson**



## **OIML Certification System (OIML-CS)**

### **Annual report to the CIML by the OIML-CS Management Committee Chairperson 2022**

#### **Contents**

Report by the OIML-CS Management Committee Chairperson

#### **Annexes**

- Annex A: Measuring instrument categories
- Annex B: OIML-CS certificates registered with the BIML
- Annex C: Summary of OIML Issuing Authorities and their scopes
- Annex D: Summary of Test Laboratories and their scopes
- Annex E: Summary of Utilizers and Associates
- Annex F: Summary of Management System Experts
- Annex G: Summary of Legal Metrology Experts

# Report by the OIML Certification System (OIML-CS) Management Committee Chairperson

## 1 Activities of the OIML-CS Management Committee, Review Committee and Working Groups

### 1.1 Management Committee Membership

The following countries are voting members of the OIML-CS Management Committee:

Australia	Belgium	Cambodia	Canada
Colombia	Cuba	Czech Republic	Denmark
France	Germany	India	Japan
Korea (R.)	Netherlands	New Zealand	P.R. China
Russian Federation	Slovakia	South Africa	Switzerland
United Kingdom	United States		

### 1.2 Meetings and Working Groups

Online meetings of the Review Committee and Maintenance Group were held on 23 February 2022 and 2 March 2022 respectively. These meetings preceded the Seventh OIML-CS Management Committee Meeting which was held on 22-23 March 2022. This replicated the approach taken in 2021, and enabled the Review Committee and Maintenance Group to discuss key issues and to develop proposals for consideration and decision at the Management Committee meeting.

The Seventh Management Committee Meeting was chaired by the Management Committee Chairperson, Mr Mannie Panesar, and 18 of the 22 Management Committee Members from OIML Member States were present or represented. In addition, there was a representative from a potential new participant in the OIML-CS, and there were representatives from the following liaison organisations: CECIP, CECOD, ILAC/IAF, and ISO CASCO.

Some of the key items that were addressed at the Seventh Management Committee Meeting were:

- feedback and experiences of participants in the OIML-CS;
- report on the Review Committee meeting;
- report on the Maintenance Group meeting, including the revision of the OIML-CS documentation to implement CIML Resolution CIML/2021/31 (see 1.3 for further detail);
- update on the re-approval of Legal Metrology Experts and Management System Experts;
- review of OIML Issuing Authority Annual Reports for 2021 and the re-approval of the OIML Issuing Authorities and Test Laboratories (see 4.4 for further detail);
- high priority publications and periodic reviews;
- modular approvals;
- remote assessments; and
- update on the OIML Digitalisation Task Group.

## **1.3 Changes to OIML-CS Documentation**

### **1.3.1 OIML B 18 *Framework for the OIML Certification System (OIML-CS)***

In accordance with CIML resolution no. 2021/31, OIML B 18 has been revised to allow OIML Issuing Authorities to use ISO/IEC 17020 (with additional requirements) as an alternative to ISO/IEC 17065 to demonstrate competence. The opportunity has also been taken to implement the relevant clarifications and interpretations relating to OIML B 18 arising from Management Committee decisions included in CID-01 Edition 3, along with some other improvements based on practical experience of using OIML B 18. CIML approval of the Final Draft revision of OIML B 18 will be considered under agenda item 15.2 of the 57th CIML Meeting.

### **1.3.2 Operational Documents (OD-01 and OD-02)**

Operational Document OD-01 has been revised to:

- implement CIML resolution no. 2021/31;
- implement the relevant clarifications and interpretations relating to OD-01 from CID-01; and
- make other improvements based on practical experience of using OD-01.

The new edition of OD-01 will be published when the revised B 18 is published.

### **1.3.3 Procedural Documents (PD-01 to PD-08)**

Procedural Documents PD-02, PD-03, PD-04 and PD-05 have been revised to:

- implement CIML resolution no. 2021/31;
- implement the relevant clarifications and interpretations relating to the Procedural Documents from CID-01; and
- make other improvements based on practical experience of using the Procedural Documents.

The new editions will be published when the revised B 18 is published.

### **1.3.4 Clarifications and Interpretations Document (CID-01)**

CID-01 collates decisions taken at Management Committee meetings relating to clarifications and interpretations of the text in OIML-CS documents. It will be amended to remove the clarifications and interpretations that have been included in the revised documents (see above) and the new edition will be published when the revised B 18, OD-01 and Procedural Documents have been published.

## **2 Categories of measuring instruments and respective Scheme**

The categories of measuring instruments and the respective OIML Recommendations included in the OIML-CS under Scheme A or Scheme B are shown in Annex A.

## **3 Functioning of the OIML-CS**

### **3.1 Number of registered OIML-CS certificates**

Information on the OIML-CS certificates registered with the BIML is shown at Annex B.

## 3.2 Reasons for non-acceptance

The OIML-CS Executive Secretary has not been made aware of any specific instances (with evidence) of non-acceptance of OIML-CS certificates.

## 4 OIML Issuing Authorities and Test Laboratories

### 4.1 Approvals

Since the previous report for the 56th CIML Meeting, the following changes have taken place regarding OIML Issuing Authorities and their associated Test Laboratories approved under the OIML-CS (*status at 2022-07-06*):

OIML Issuing Authority	Change	Date
CMI (Czech Republic)	Addition of R 85:2008, R 134:2006 and R 139:2018 under Scheme A	25 March 2022
FORCE (Denmark)	No changes	-
LNE (France)	Addition of Precia Molen MTL for R 76:2006 under Scheme A	25 March 2022
METAS (Switzerland)	Addition of R 106:2011 and R 134:2006 under Scheme A	06 June 2022
NIM (P.R. China)	No changes	-
NMi (Netherlands)	Addition of R 106:2011 under Scheme A	04 February 2022
NMIA (Australia)	Addition of R 50:2014 under Scheme A	16 July 2021
NMIJ/AIST (Japan)	No changes	-
OPSS (United Kingdom)	Name changed from NMO to Office for Product Safety and Standards (OPSS)	01 May 2022
PTB (Germany)	No changes	-
RISE (Sweden)	No changes	-
SLM (Slovakia)	No changes	-

A summary of the OIML Issuing Authorities and their scopes can be found at Annex C and a summary of the Test Laboratories and their scopes can be found at Annex D.

This information is also provided on the OIML website at:

<https://www.oiml.org/en/oiml-cs/docs/oiml-ia-summary-table.pdf>

<https://www.oiml.org/en/oiml-cs/docs/tl-summary-table.pdf>

### 4.2 Rejections

The Management Committee has not rejected any applications to be an OIML Issuing Authority or Test Laboratory.

### 4.3 Suspensions

The Management Committee has not suspended any OIML Issuing Authorities or Test Laboratories.

### 4.4 Continuing compliance of OIML Issuing Authorities and their Test Laboratories

In accordance with PD-03, OIML Issuing Authorities (and their Test Laboratories) need to demonstrate continued compliance with the requirements for participation in the OIML-CS. As the OIML-CS has been in operation since 1 January 2018, the formal four-year re-approval of the OIML Issuing Authorities and their associated Test Laboratories was conducted at the Management Committee meeting in March 2022.

Each of the OIML Issuing Authorities submitted an annual report relating to their activities in 2021 and, in order to comply with the requirements detailed in PD-03, they also submitted evidence of the relevant accreditation or peer assessment status. This included assessment reports and accreditation certificates (where relevant) covering the full scope of each OIML Issuing Authority and Test Laboratory.

The 2021 annual reports and the supporting evidence were reviewed by the Review Committee which made positive recommendations to re-approve all of the OIML Issuing Authorities and their associated Test Laboratories for their existing scopes. The Management Committee subsequently re-approved all of the OIML Issuing Authorities and their associated Test Laboratories.

## 5 Utilizers and Associates

There are currently 33 Utilizers and Associates participating in the OIML-CS. Since the previous report for the 56th CIML Meeting, the following changes have taken place regarding Utilizers and Associates participating in the OIML-CS (*status at 2022-07-06*):

Utilizer	Change	Date
FORCE (Denmark)	Addition of R 139:2014 and R 139:2018 (Scheme A)	23 July 2021
OPSS (United Kingdom)	Name changed from NMO to Office for Product Safety and Standards (OPSS)	01 May 2022

A summary of the Utilizers and Associates and their scopes can be found at Annex E.

Some Utilizers and Associates have specified Additional National Requirements. Information on the Additional National Requirement for these organisations is available on the OIML website at:

[https://www.oiml.org/en/oiml-cs/oimlcsutiassocsearch\\_view](https://www.oiml.org/en/oiml-cs/oimlcsutiassocsearch_view)

## 6 Legal Metrology Experts and Management System Experts

### 6.1 Appointment of experts

Since the 56th CIML Meeting, the Review Committee has reviewed and made positive recommendations on the approval of new applications for Management System Experts and Legal Metrology Experts. The applications have been approved by the Management Committee through a combination of electronic ballots and voting during the Management Committee meeting. Applications

continue to be received and these will be reviewed by the Review Committee and approved by the Management Committee on a continual basis.

## **6.2 Status and scope of experts**

A summary of the Management System Experts and Legal Metrology Experts that have been approved by the Management Committee is shown at Annex F and Annex G respectively. The lists of experts are published as ILAC/IAF/OIML experts.

## **6.3 Ongoing competence and suitability of experts**

The OIML-CS requires that the ongoing competence and suitability of experts is reviewed up to every four years (at the Seventh Management Committee Meeting a decision was taken to extend the review period from three years to up to four years.)

The experts originally approved in 2018 (and 2017) were re-approved in 2021. The process to review and re-approve the experts that were originally approved in 2019 has been implemented.

## **7 Appeals**

There have been no appeals against decisions of the Management Committee.

The constitution of the Board of Appeal is as follows.

Board of Appeal Chairperson: Roman Schwartz

Board of Appeal Members: Mairead Buckley  
Himba Cheelo  
Sergey Golubev  
Toshiyuki Takatsuji

## **8 Promotional activities**

### **8.1 Seminars, workshops and awareness raising activities**

The Promotion and Awareness Raising Working Group has conducted a survey amongst countries in the Americas regarding membership of the OIML, their use of OIML certificates, and potential participation in the OIML-CS. The Working Group will use this information to determine suitable promotion and awareness raising activities, and will also consider how best to conduct similar surveys in the other regions.

### **8.2 OIML-CS webpages**

The OIML-CS pages on the OIML website can be found at: <https://www.oiml.org/en/oiml-cs/oiml-cs-home>.

The pages provide stakeholders with access to all of the relevant information regarding the OIML-CS. As part of the refresh and update of the OIML website launched in January 2022, the OIML-CS pages have undergone a significant update to improve the access to, and presentation of information. They are monitored and updated on an ongoing basis to ensure their accuracy and relevance.

## **9 Finances of the OIML-CS**

Information on the income from OIML certificate registration fees and the expenditure associated with the operation of the OIML-CS during 2021 is provided under agenda item 10.1 of the 57th CIML Meeting.

## **10 Liaison activities**

As ILAC is the international organisation for accreditation bodies operating in accordance with ISO/IEC 17011 and involved in the accreditation of inspection bodies (using ISO/IEC 17020), the Executive Secretary consulted with ILAC on the development of the new OIML Document D xx *Guide for the application of ISO/IEC 17020 to the assessment of OIML Issuing Authorities under the OIML-CS*. ILAC provided comments on the new Document, and a reference to ILAC participation in the development of the new Document is included in the text.

Regarding the Joint OIML-IECEX Working Group, the ad-hoc working group developing a comparison document between the OIML-CS and the IECEX systems is continuing its work. It is anticipated that a draft will be shared with IECEX later this year.

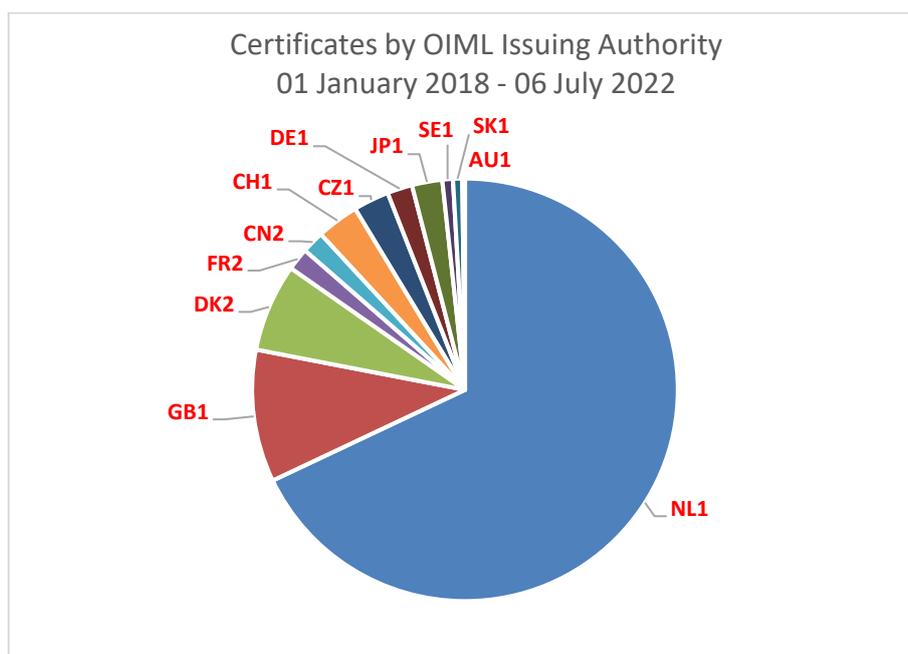
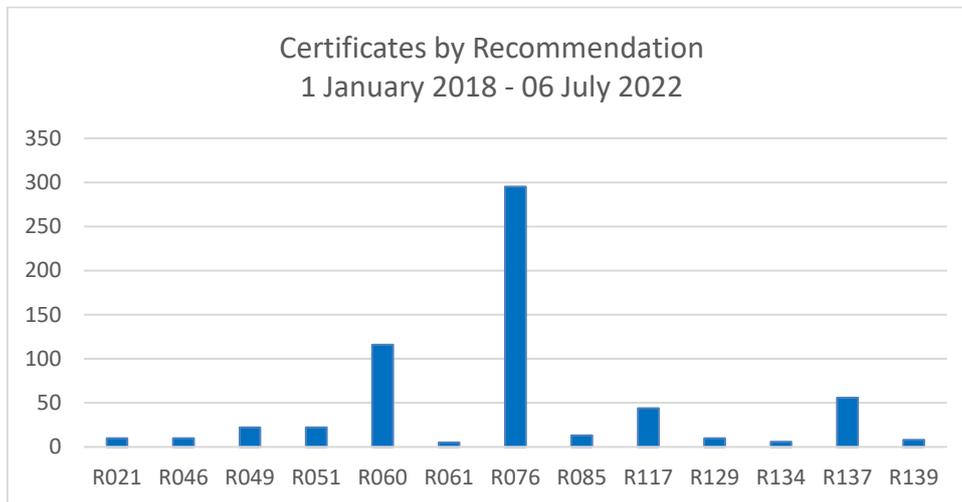
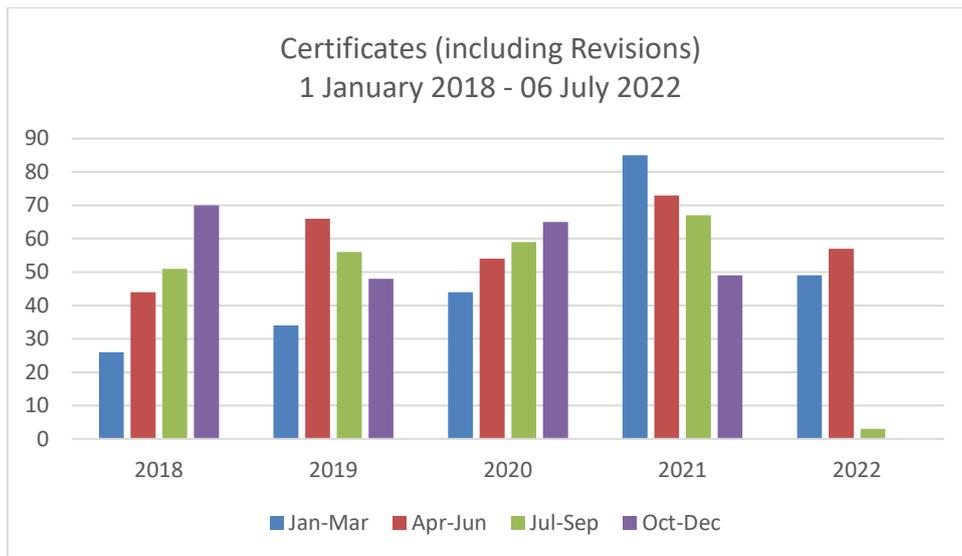
## Annexes

### Annex A: Measuring instrument categories

Measuring Instrument Category		Scheme
R 21:2007	Taximeters	A
R 35:2007	Material measures of length	A
R 46:2012	Active electrical energy meters	A
R 49:2006	Water meters	A
R 49:2013		A
R 50:2014	Continuous totalizers	A
R 51:2006	Automatic catchweighers	A
R 58:1998	Sound level meters	A
R 59:2016	Moisture meters for cereal grains and oilseeds	A
R 60:2000	Load cells	A
R 60:2017		A
R 61:2004	Automatic gravimetric filling instruments	A
R 61:2017		A
R 75:2002	Heat meters	A
R 76:1992	Non-automatic weighing instruments	A
R 76:2006		A
R 81:1998	Cryogenic liquids	A
R 85:2008	Level gauges for stationary storage tanks	A
R 88:1998	Integrating-averaging sound level meters	A
R 93:1993	Focimeters	A
R 99:2008	Vehicle exhaust emissions	A
R 102:1992	Sound calibrators	A
R 104:1993	Pure-tone audiometers	A
R 106:2011	Automatic rail-weighbridges	A
R 107:2007	Discontinuous totalizers	A
R 110:1994	Pressure balances	A
R 117:1995	Liquids other than water	A
R 117:2007		A
R 117:2019		A
R 122:1996	Speech audiometry	A
R 126:2012	Evidential breath analysers	A
R 128:2000	Ergometers for foot crank work	A
R 129:2000	Multi-dimensional measuring instruments	A
R 129:2020		A
R 133:2002	Liquid-in-glass thermometers	A
R 134:2006	Weighing road vehicles in motion	A
R 136:2004	Areas of leather	A
R 137:2012	Gas meters	A
R 139:2014	Compressed gaseous fuel systems for vehicles	A
R 139:2018		A
R 143:2009	Continuous measurement of SO <sub>2</sub> in stationary source emissions	A
R 144:2013	Continuous measurement of CO, NO <sub>x</sub> in stationary source emissions	A
R 145:2015	Ophthalmic instruments - Impression and applanation tonometers	A
R 146:2016	Protein measuring instruments for cereal grains and oilseeds	A
R 148:2020	Non-invasive non-automated sphygmomanometers	A
R 149:2020	Non-invasive automated sphygmomanometers	A
R 150:2020	Continuous totalizing automatic weighing instruments of the arched chute type	B <sup>1</sup>

1 Transition to Scheme A on 1 January 2023

## Annex B: OIML-CS certificates registered with the BIML



## Annex C: Summary of OIML Issuing Authorities and their scope

		R 21:2007	R 46:2012	R 49:2006	R 49:2013	R 50:2014	R 51:2006	R 60:2000	R 60:2017	R 61:2004	R 61:2017	R 75:2002	R 76:1992	R 76:2006	R 85:2008	R 99:2008	R 106:2011	R 107:2007	R 117:1995	R 117:2007	R 117:2019	R 126:1998	R 129:2000	R 134:2006	R 137:2012	R 139:2014	R 139:2018	
AU1	National Measurement Institute Australia (NMIA)					■							■	■														
CH1	Federal Institute of Metrology (METAS)							■						■		■								■				
CN2	National Institute of Metrology, China (NIM)						■	■	■	■	■		■	■														
CZ1	Czech Metrology Institute (CMI)				■		■				■			■	■					■	■				■	■		■
DE1	Physikalisch-Technische Bundesanstalt (PTB)				■		■	■	■	■		■		■														
DK2	FORCE Certification A/S				■	■	■	■	■	■	■			■			■	■					■	■	■	■	■	■
FR2	Laboratoire National de Métrologie et d'Essais (LNE)			■	■		■	■	■					■								■						
GB1	Office for Product Safety and Standards (OPSS) (formerly NMO)				■		■	■	■				■	■						■	■							
JP1	NMIJ/AIST							■	■				■	■					■	■	■							
NL1	NMl Certin B.V.	■	■	■	■	■	■	■	■	■	■		■	■	■		■	■	■	■	■		■	■	■	■	■	■
SE1	Research Institutes of Sweden (RISE)						■	■	■	■	■			■	■				■	■	■							
SK1	Slovak Legal Metrology (SLM)			■	■									■														

Status at 2022-07-06

## Annex D: Summary of Test Laboratories and their scope

OIML IA	Test Laboratory	R 21:2007	R 46:2012	R 49:2006	R 49:2013	R 50:2014	R 51:2006	R 60:2000	R 60:2017	R 61:2004	R 61:2017	R 75:2002	R 76:1992	R 76:2006	R 85:2008	R 99:2008	R 106:2011	R 107:2007	R 117:1995	R 117:2007	R 117:2019	R 126:1998	R 129:2000	R 134:2006	R 137:2012	R 139:2014	R 139:2018
AU1	National Measurement Institute Australia (NMI)					■							■	■													
CH1	Federal Institute of Metrology (METAS)							■						■			■							■			
	Mettler Toledo													■													
	Sartorius													■													
CN2	National Institute of Metrology, China (NIM)						■	■	■	■	■		■	■													
	Beijing Institute of Metrology (BJIM)																										
	Shanghai Institute of Measurement and Testing Technology (SIMT)																										
	Zhejiang Province Institute of Metrology (ZJIM)																										
CZ1	CMI Testing Laboratory				■		■				■		■	■						■	■			■	■		■
DE1	Physikalisch-Technische Bundesanstalt (PTB)						■	■	■	■		■		■													
	Bizerba													■													
	Endress + Hauser Flowtec AG				■																						
	Mettler Toledo													■													
	Sartorius													■													

Status at 2022-07-06

OIML IA	Test Laboratory	R 21:2007	R 46:2012	R 49:2006	R 49:2013	R 50:2014	R 51:2006	R 60:2000	R 60:2017	R 61:2004	R 61:2017	R 75:2002	R 76:1992	R 76:2006	R 85:2008	R 99:2008	R 106:2011	R 107:2007	R 117:1995	R 117:2007	R 117:2019	R 126:1998	R 129:2000	R 134:2006	R 137:2012	R 139:2014	R 139:2018	
DK2	FORCE (Brøndby)				■																							
	FORCE (Horsholm)				■	■	■	■	■	■	■			■			■	■					■	■	■	■	■	■
	FORCE (Vejen)																								■	■	■	
	ESIT							■	■																			
FR2	Laboratoire National de Métrologie et d'Essais (LNE)						■	■	■					■								■						
	Contazara S.A.			■	■																							
	Precia Molen SA													■														
GB1	Office for Product Safety and Standards (OPSS) (formerly NMO)				■		■	■	■				■	■						■	■							
	AWTX							■																				
	Mey Marom				■																							
	Sartorius													■														
JP1	NMIJ/AIST						■	■				■	■					■	■	■								
NL1	NMi Certin B.V.	■	■	■	■	■	■	■	■	■	■	■	■	■		■	■	■	■	■	■		■	■	■	■	■	
SE1	RISE						■	■	■	■	■			■	■			■	■	■								
SK1	Slovak Legal Metrology (SLM)			■	■									■														
	EVPU													■														

Status at 2022-07-06

## Annex E: Summary of Utilizers and Associates

		R 21:2007	R 35:2007	R 46:2012	R 49:2006	R 49:2013	R 50:2014	R 51:2006	R 58:1998	R 59:2016	R 60:2000	R 60:2017	R 61:2004	R 61:2017	R 75:2002	R 76:1992	R 76:2006	R 81:1998	R 85:2008	R 88:1998	R 93:1999	R 99:2008	R 102:1992	R 104:1993	R 106:2011
AU	National Measurement Institute, Australia (NMI)				1	1					1					1	1								
BE	Federal Public Service Economy	3		3		3	3	3			1		3		3		1		3			3			3
CA	Measurement Canada										2	1			1		2								
CH	Federal Institute of Metrology (METAS)			1	2	2	1	1			2		1		1		2								1
CN	State Administration for Market Regulation (SAMR)							1			2	1	1	1		2	2								
CO	Superintendencia de Industria y Comercio (SIC)	3		3	4	4	3	3			2		3		3	2	2		3			3			3
CU	Oficina Nacional de Normalizacion (NC)	3	3	1		1	3	1	3	3	1	1	3	3	3		1	3	3	3	3	3	3	3	3
CZ	Czech Metrology Institute (CMI)					1		1						1			1								
DE	Physikalisch-Technische Bundesanstalt (PTB)	5		3	3	4	3	3			2		3		3		2					5			1
DK	FORCE Certification A/S				2	2	1	1			2	1	1	1			2								1
FR	Laboratoire National de Métrologie et d'Essais (LNE)	1		1	1	1	1	1			1		1		1	1	1		1			1			1
GB	Office for Product Safety and Standards (OPSS) (formerly NMO)	3				4	3	3			2	1	3			1	1		3						3
IN	Legal Metrology Division, Department of Consumer Affairs	3		3		4	3	3			2		3		3		2		3						1
IR	Iran National Standards Organization (INSO)				4	4					2	1				2	2								
JP	NMIJ/AIST										2	1				2	2								
KE	Weights and Measures Department		3	3	4	4		3			4	4	3	3		4	4		3						3
KH	National Metrology Centre (NMC)	3		3	3	3	3	3			1		3		3	1	1		3			3			3
KI	Ministry of Commerce, Industry and Cooperatives	5	5	5	1	1	5	1		5	1	1	5	5	5	1	1	5	5						5
KR	Korea Testing Certification (KTC)															2	2								
LV	LNMC Ltd. Metrology Bureau																								
NA	Namibian Standards Institution			3	4	4	3	3			2		3			2	2		3						3
NL	NMI Certin B.V.	3		3	3	4	3	3			2	1	3	3	3	1	2		3			3			3
NZ	Trading Standards (Ministry of Business, Innovation and Employment) (MBIE)				4	4	3	3			2					2	2		3						3
RU	VNIIMS																								
RW	Rwanda Standards Board	3	3	3	3	3		3	3	3	1	1	3	3		1	1					3	3	3	3
SA	SASO (Saudi Standards, Metrology and Quality Organization)			3		1							1				1								
SE	RISE Research Institutes of Sweden AB							3			2	1	3				2		3						
SK	Slovak Legal Metrology (SLM)				2	2											2								
TN	National Agency of Metrology (ANM)	3		3	2	2	3	3			2		3				2		3			3			3
UG	Uganda National Bureau of Standards (UNBS)			3	1	3					1	1				1	1								
US	National Conference on Weights and Measures (NCWM)										2														
ZA	NRCS: Legal Metrology				3	3		3			1					1	1		3						3
ZM	Zambia Metrology Agency	3		3	3	3	3	3			1		3		3	1	1		3			3			3

Status at 2022-07-06

1 = Scheme A only      5 = Scheme B only  
 2 = Scheme A and MAA  
 3 = Scheme A and B  
 4 = Scheme A, B and MAA

		R 107:2007	R 110:1994	R 117:1995	R 117:2007	R 117:2019	R 122:1996	R 126:1998	R 128:2000	R 129:2000	R 129:2020	R 133:2002	R 134:2006	R 136:2004	R 137:2012	R 139:2014	R 139:2018	R 143:2009	R 144:2013	R 145:2015	R 146:2016	R 148:2020	R 149:2020	R 150:2020
AU	National Measurement Institute, Australia (NMI)																							
BE	Federal Public Service Economy	3			3					3					3	3								
CA	Measurement Canada																							
CH	Federal Institute of Metrology (METAS)	1					1		1			1		1										
CN	State Administration for Market Regulation (SAMR)																							
CO	Superintendencia de Industria y Comercio (SIC)	3		3	3		3		3				3		3	3								
CU	Oficina Nacional de Normalizacion (NC)	3	3		3		3	3	3			3	3	3	3	3	3	3	3	3	3			
CZ	Czech Metrology Institute (CMI)				1	1									1									
DE	Physikalisch-Technische Bundesanstalt (PTB)	3			3	1				3			1	5	3									
DK	FORCE Certification A/S	1			1	1				1	1		3		1	1	1							
FR	Laboratoire National de Métrologie et d'Essais (LNE)	1			1			1		1			1		1	1								
GB	Office for Product Safety and Standards (OPSS) (formerly NMO)	3		3	3	3				3			3											
IN	Legal Metrology Division, Department of Consumer Affairs	3			3					3			1		3	3								
IR	Iran National Standards Organization (INSO)																							
JP	NMI/JAIST				1	1	1																	
KE	Weights and Measures Department				3	3		3					3	3	3	3	3							
KH	National Metrology Centre (NMC)	3			3	3		3		3			3		3	3								
KI	Ministry of Commerce, Industry and Cooperatives		5	1	1							5	5		5	5	5							
KR	Korea Testing Certification (KTC)																							
LV	LNMC Ltd. Metrology Bureau							3					3											
NA	Namibian Standards Institution	3			3	3		3		3			3											
NL	NMI Certin B.V.	3			3	3	1	3		3			3		3	3	3							
NZ	Trading Standards (Ministry of Business, Innovation and Employment) (MBIE)	3			3	3				3			3											
RU	VNIIMS				3	3																		
RW	Rwanda Standards Board				3	3	3		3	3		3	3		3			3	3		3			
SA	SASO (Saudi Standards, Metrology and Quality Organization)				3																			
SE	RISE Research Institutes of Sweden AB				3	3																		
SK	Slovak Legal Metrology (SLM)																							
TN	National Agency of Metrology (ANM)	3			3	3		3		3			3		3	3								
UG	Uganda National Bureau of Standards				1	1	1						3		3									
US	National Conference on Weights and Measures (NCWM)																							
ZA	NRCS: Legal Metrology	3			3	3		3		3			3		3	3								
ZM	Zambia Metrology Agency	3			3	3		3		3			3		3	3								

Status at 2022-07-06

## Annex F: Summary of Management System Experts

### 1. Team Leaders validated by the OIML-CS Management Committee to lead Peer Assessments under the OIML-CS

Team Leader	Country	Peer Assessment Activity	
		Test Laboratory ISO/IEC 17025	OIML Issuing Authority ISO/IEC 17065
COUVREUR, Gulian	CH	✓	✓
STOLZ, Harry	DE	✓	✓
JENSEN, Hans Dalsgaard	DK	✓	
AGARWAL, Ashutosh	IN	✓	
BAREL, André	NL	✓	
VERKUIL, Dick	NL	✓	✓
PREMUŠ, Aleksander	SI	✓	✓
KÄLLGREN, Håkan	SE	✓	✓
KRAL, Stefan	SK	✓	✓
GLAS, Grégory	UK		✓
INCE, Ahmet	UK	✓	
AVILA, Luis Font	VE	✓	

### 2. Team Leaders nominated by ILAC/IAF Full Member Accreditation Bodies to lead Peer Assessments under the OIML-CS

Team Leader	Organisation	Peer Assessment Activity	
		Test Laboratory ISO/IEC 17025	OIML Issuing Authority ISO/IEC 17065
ALEXANDER, Helga	IAS	✓	
REZK, Mohamed Adel Ahmed	EGAC	✓	
AN, Ping	CNAS	✓	
DEL PILAR QUIJANO, Rocio	ONAC	✓	

Status at 2022-07-06

## Annex G: Summary of Legal Metrology Experts

Expert Name	Country	OIML Recommendation																				Assessment Experience		
		R 16	R 21	R 46	R 49	R 50	R 51	R 60	R 61	R 75	R 76	R 85	R 99	R 106	R 107	R 117	R 126	R 129	R 134	R 137	R 139	ISO/IEC 17025	ISO/IEC 17065	
CHEN, Yi	AU					✓	✓	✓			✓			✓	✓								✓	
ZAMORA, Mario	AU															✓								
BILS, Dirk	BE															✓						✓	✓	
MATEUS SANCHEZ, Juan Carlos <sup>1</sup>	BR	✓	✓	✓							✓		✓		✓	✓						✓		
FARUOLO, Luciano Bruno	BR										✓								✓			✓		
COUVREUR, Gulian	CH					✓	✓	✓		✓				✓	✓				✓			✓	✓	
NIEDERHAUSER, Bernhard	CH																✓					✓		
HU, Manhong	CN					✓	✓		✓	✓					✓					✓				
JIANG, Jile	CN							✓																
SHI, Leibing	CN			✓																				
WANG, Jian	CN					✓				✓												✓		
YANG, Jing	CN															✓								
YANG, Youtao	CN																				✓			
ZHONG, Ruilin	CN					✓	✓		✓	✓					✓					✓				
ZHOU, Shaoyuan	CN			✓																				

1 For EMC tests only

*Status at 2022-07-06*

Expert Name	Country	OIML Recommendation																			Assessment Experience		
		R 16	R 21	R 46	R 49	R 50	R 51	R 60	R 61	R 75	R 76	R 85	R 99	R 106	R 107	R 117	R 126	R 129	R 134	R 137	R 139	ISO/IEC 17025	ISO/IEC 17065
BENKOVA, Miroslava	CZ				✓										✓							✓	
KRIZ, Ivan	CZ					✓	✓		✓		✓			✓	✓				✓			✓	
VALENTA, Tomás	CZ																			✓		✓	✓
ROSE, Jürgen	DE									✓												✓	✓
SCHWABE, Timo	DE						✓																
JENSEN, Jens Hovgård	DK					✓	✓		✓		✓				✓			✓	✓				
BRUN, Christophe	FR															✓						✓	
DELETTE, Laetitia	FR																✓					✓	
LOPEZ, Luc <sup>2</sup>	FR		✓				✓			✓	✓	✓				✓							✓
MOREL, Emeric	FR				✓																	✓	
AGARWAL, Ashutosh	IN				✓		✓				✓					✓						✓	
PIROVANO, Miriam	IT																			✓		✓	✓
SESTINI, Maria Cristina	IT																			✓		✓	✓
ZOTTI, Lucio	IT				✓																	✓	✓
AZAMI, Nobuhiko	JP							✓															
ITO, Takeshi	JP															✓						✓	
NAGANO, Tomohiro	JP										✓											✓	
OTANI, Satoshi	JP										✓											✓	
TANAKA, Yoshitada	JP							✓															
BEUMER, Erik	NL				✓					✓		✓				✓						✓	
BOEREBOOM, Hans	NL			✓																			
CLOO, Marcel	NL			✓																		✓	
KOK, Paul	NL		✓			✓	✓		✓		✓		✓		✓		✓	✓	✓			✓	✓
MEIJER, Mathias	NL		✓			✓		✓			✓											✓	✓
ROOIJ, Paul van	NL				✓					✓		✓				✓				✓	✓	✓	
SCHOLTEN, Roy	NL						✓		✓		✓				✓			✓				✓	
SOEKHOE, Satish	NL															✓				✓	✓	✓	

2 Limited to assessments of OIML Issuing Authorities

Status at 2022-07-06

Expert Name	Country	OIML Recommendation																				Assessment Experience	
		R 16	R 21	R 46	R 49	R 50	R 51	R 60	R 61	R 75	R 76	R 85	R 99	R 106	R 107	R 117	R 126	R 129	R 134	R 137	R 139	ISO/IEC 17025	ISO/IEC 17065
TJOA, Aldemar	NL			✓	✓		✓			✓	✓	✓				✓		✓		✓		✓	
VERMEUL, Yvo	NL				✓						✓					✓				✓		✓	
WIJNGAARDEN, Carl van	NL																			✓		✓	
YILMAZ, Baris	NL						✓				✓							✓				✓	✓
BOBBALA, Srinivas	NZ										✓					✓						✓	
HATTINGH, Jaco	NZ				✓						✓											✓	
KÄLLGREN, Hakan	SE					✓	✓	✓	✓		✓			✓	✓							✓	✓
GRUM, Matej	SI					✓	✓		✓		✓			✓	✓							✓	✓
PREMUŠ, Aleksander	SI		✓	✓																		✓	✓
KRAL, Stefan	SK				✓																	✓	✓
MAZÚR, Viliam	SK				✓																	✓	
AYDEMIR, Bülent	TR					✓	✓	✓	✓		✓			✓	✓					✓		✓	
KAÇMAZ, Sevda	TR					✓	✓	✓	✓		✓			✓	✓					✓		✓	
BOKOTA, Marek	UK				✓													✓				✓	✓
GLAS, Gregory	UK		✓			✓	✓		✓		✓			✓	✓					✓		✓	✓
JAMES, Ivor	UK																		✓				
Ji, Wei	UK		✓					✓			✓											✓	✓
MUNTEANU, Christine	UK										✓							✓				✓	

Status at 2022-07-06