

## 58th CIML Meeting - Working Document

#### 58 CIML Addendum 12.1

2023-07-17

## Agenda Item 12.1

**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 2023

#### **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 OIML Member States 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

The following Corresponding Members are represented on the OIML-CS Management Committee:

Latvia Namibia Philippines United Arab Emirates

The following Organisations in Liaison are represented on the OIML-CS Management Committee:

COOMET	<b>GULFMET</b>	SIM	WELMEC
AQUA	CECIP	CECOD	FARECOGAZ
IAF	IEC	ILAC	ISO

#### 1.2 Meetings and Working Groups

The Eighth OIML-CS Management Committee Meeting was held at METAS, Bern-Wabern, Switzerland on 16–17 March 2023. This was the first time that the Management Committee had met in-person since March 2019, and it provided an excellent opportunity for Management Committee members to reacquaint themselves and to also meet new members in-person for the first time.

As in recent years, online meetings of the Review Committee and Maintenance Group were held on 3 February and 15 February respectively. However, in association with the Management Committee meeting, 'informal' meetings of the Review Committee and Maintenance Group were held at METAS on 15 March. In addition, meetings of the Assessment Requirements Working Group and the Promotion and Awareness Raising Working Group were also held on 15 March. Having in-person meetings of these groups led to very productive discussions and complemented the online Review Committee and Maintenance Group meetings held the previous month. These 'informal' meetings enabled all interested participants to attend as the meetings were not limited to the nominated participants in the Working Groups.

The Eighth Management Committee Meeting was chaired by the Management Committee Chairperson, Mr Mannie Panesar, with 19 of the 22 Management Committee members from OIML Member States either present or represented. In addition, there were representatives from the following liaison organisations: GULFMET, CECIP, and ILAC/IAF.

At the meeting Mr Panesar confirmed that he wished to continue as Management Committee Chairperson for a second three-year term. The Management Committee agreed to make a recommendation to the CIML to re-appoint Mr Panesar as Management Committee Chairperson for a second three-year term (see *Note* below).

Mr Bill Loizides, the current Management Committee Deputy Chairperson, will complete his second three-year term at the end of 2023 so, in accordance with the rules of the OIML-CS, the Management Committee agreed to undertake a process to select a candidate for appointment as Management Committee Deputy Chairperson. The Management Committee took the opportunity to thank Mr Loizides for his efforts and hard work supporting the OIML-CS as the Management Committee Deputy Chairperson, most notably when he deputised as Management Committee Chairperson in 2020.

Some of the other key items that were discussed and considered during the meeting were:

- feedback and experiences of participants in the OIML-CS;
- updates from the Review Committee, Maintenance Group and various Working Groups;
- high priority publications and periodic reviews, including a decision to include OIML R 111:2004 Weights of classes  $E_1$ ,  $E_2$ ,  $F_1$ ,  $F_2$ ,  $M_1$ ,  $M_{1-2}$ ,  $M_2$ ,  $M_{2-3}$  and  $M_3$  in the OIML-CS;
- applicability of the COVID contingencies that were put in place in 2020 to ensure the continued effective operation of the OIML-CS throughout the pandemic;
- establishment of a Working Group to consider the approach to modular approvals;
- use of the OIML-CS logo on test reports; and
- working with the OIML Digitalisation Task Group to consider what implications digitalisation has for the OIML-CS.

*Note:* Further information on the OIML-CS Management Committee recommendations to the CIML, including a change to the situation regarding the re-appointment of Mr Panesar and the nomination of a candidate for the position of Management Committee Deputy Chairperson, is provided in Addendum 12.2.

In addition to the Maintenance Group, there are a number of active Working Groups as follows:

- **ISO/IEC 17065 Working Group** exploring the possibility of including Conformity to Type (CTT) in the OIML-CS;
- Assessment Requirements Working Group developing proposals for improving the requirements for the assessment of OIML Issuing Authorities and Test Laboratories;
- **Promotion and Awareness Raising Working Group** responsible for the promotion and raising awareness of the OIML-CS;
- **Periodic Reviews Working Group** responsible for developing proposals for the revision/update/reconfirmation/withdrawal of OIML publications (of relevance to the OIML-CS);
- **OIML-CS logo on test reports Working Group** developing proposals regarding the use of the OIML-CS logo on test reports issued under the OIML-CS;
- **Modular approach Working Group** developing proposal regarding the approach to modular approvals under the OIML-CS.

#### 1.3 Changes to OIML-CS Documentation

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

Following approval of the Final Draft revision of OIML B 18 at the 57th CIML Meeting OIML B 18:2022 Framework for the OIML Certification System (OIML-CS) was published on 21 October 2022.

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

As reported at the 57th CIML Meeting, Operational Document OD-01 was 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 was published following the publication of B 18:2022.

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

As reported at the 57th CIML Meeting, Procedural Documents PD-02, PD-03, PD-04 and PD-05 were 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 were published following the publication of B 18:2022.

#### **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 has been amended to remove the clarifications and interpretations that were included in the revised documents (see above) and the new edition was published following publication of the new editions of B 18, OD-01 and the Procedural Documents.

#### 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 was made aware of two instances where one Utilizer and one Associate apparently did not accept an OIML-CS certificate/type evaluation report. The Executive Secretary will be contacting the relevant organisations to clarify the actual situation, to identify the reasons for non-acceptance, and to develop solutions as appropriate.

#### 4 OIML Issuing Authorities and Test Laboratories

#### 4.1 Approvals

Since the previous report for the 57th CIML Meeting, the following changes have taken place regarding OIML Issuing Authorities and their associated Test Laboratories approved under the OIML-CS (*status at 2023-07-17*):

OIML Issuing Authority	Change	Date
CMI (Czech Republic)	No changes	-
FORCE (Denmark)	No changes	-
LNE (France)	OIML IA and TL - addition of R 126:2021 under Scheme A	2022-08-29
METAS (Switzerland)	No changes	-
NIM (P.R. China)	No changes	-
NMi (Netherlands)	OIML IA and TL - addition of R 99:2008 and R 126:2021 under Scheme A	2022-07-20
NMIA (Australia)	No changes	-
NMIJ/AIST (Japan)	OIML IA and TL - addition of R 60:2021 under Scheme A	2023-07-10
OPSS (United Kingdom)	No changes	-
PTB (Germany)	Removal of the Bizerba MTL (at the request of PTB) from the PTB scope	2023-06-05
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 need to demonstrate continued compliance with the requirements for participation in the OIML-CS. Consequently, each of the OIML Issuing Authorities submitted an annual report on their activities in 2022. The 2022 annual reports have been reviewed by the Management Committee, and the Management Committee Members have agreed that each of the OIML Issuing Authorities and their associated Test Laboratories continue to fulfil the requirements for continued participation.

#### **5** Utilizers and Associates

There are currently 35 Utilizers and Associates participating in the OIML-CS. Since the previous report for the 57th CIML Meeting, the following changes have taken place regarding Utilizers and Associates participating in the OIML-CS (*status at 2023-07-17*):

Utilizer	Change	Date
CMI (Czech Republic)	Addition of R 85:2008, R 134:2006 and R 139:2018, plus amended Additional National Requirements	2022-07-21
National Metrology Laboratory (Philippines)	New Associate	2023-01-18
Ministry of Industry & Advanced Technology (MoIAT) (United Arab Emirates)	New Associate	2023-04-19

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

The OIML-CS Executive Secretary was made aware of a few instances where Utilizers appeared to have Additional National Requirements which were not listed on the OIML website. The Executive Secretary is in contact with the relevant organisations to identify if there are Additional National Requirements in these instances and, if so, to detail them OIML website as appropriate.

### 6 Legal Metrology Experts and Management System Experts

#### **6.1** Appointment of experts

Since the 57th 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 On-going competence and suitability of experts

The OIML-CS requires that the on-going competence and suitability of experts is reviewed up to every four years.

The experts originally approved in 2019 were re-approved in 2022. The process to review and re-approve the experts that were originally approved in 2020 has been implemented and, at the time of writing this report, is on-going.

#### 7 Appeals

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

The constitution of the Board of Appeal is currently as follows.

Board of Appeal Chairperson: Roman Schwartz (CIML President)\*

Board of Appeal Members: Mairead Buckley (CIML Member, Ireland)

Renée Hansson (CIML Member, Sweden)

Stephen O'Brien (CIML Member, New Zealand) Toshiyuki Takatsuji (CIML Member, Japan)

#### 8 Promotional activities

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

The Chair of the Working Group has stepped-down so the Working Group is currently in the process of identifying a new Chair. However, as mentioned in 1.2 above, the Promotion and Awareness Raising Working Group met on 15 March 2023. At the meeting the following items were discussed:

- the survey conducted in the Americas regarding OIML and the OIML-CS;
- a case study developed by Colombia regarding their use of the OIML-CS as a Utilizer;
- overview of promotion and awareness raising activities;
- suggestions for future events; and
- a video developed by P.R. China which introduces the OIML-CS.

A number of in-person and online events have been undertaken to promote and raise awareness of the OIML-CS. Examples include

• a one-day workshop on the OIML-CS for GULFMET in Dubai (in conjunction with a workshop on OIML D 1);

<sup>\*</sup> A new Board of Appeal Chairperson will need to be appointed when Roman Schwartz completes his term as CIML President.

- online meetings with an organisation in an OIML Member State to outline the requirements and the process to become a Utilizer; and
- updates provided at the Regional Legal Metrology Organisation Round Table meetings.

#### 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, and the information is regularly reviewed and updated as required.

#### 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 2022 is provided under agenda item 10.1 of the 58th CIML Meeting.

#### 10 Liaison activities

A representative from ILAC/IAF attended the OIML-CS Management Committee meeting in March 2023, and the OIML-CS Executive Secretary attended the ILAC and IAF mid-term meetings in May 2023 to provide updates on the OIML and the OIML-CS in particular.

The ILAC Inspection Committee was consulted on the development of the new OIML Document D 37 *Guide for the application of ISO/IEC 17020 to the assessment of OIML Issuing Authorities under the OIML-CS*, and ILAC will be circulating a call for Management System Experts to lead peer assessments of OIML Issuing Authorities according to ISO/IEC 17020 and OIML D 37. A Joint ILAC-OIML Assessment Procedure according to ISO/IEC 17020 will not be developed for the time being, but the possibility of developing such a procedure (to mirror those for ISO/IEC 17025 and ISO/IEC 17065) will be kept under review. The Executive Secretary is also currently working with the IAF on the possible 'endorsement' of the OIML-CS scheme as a scope extension of the IAF MLA.

The OIML-CS Executive Secretary met with the IECEx Executive Secretary to discuss topics of interest relating to the two schemes, including the Joint OIML-IECEx Working Group. It was agreed that the OIML-CS Executive Secretary would attend the IECEx Management Committee meeting in September 2023 to provide an update on the OIML-CS and to reinvigorate the activities of the Joint OIML-IECEx Working Group.

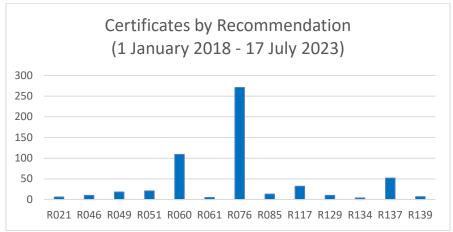
### Annexes

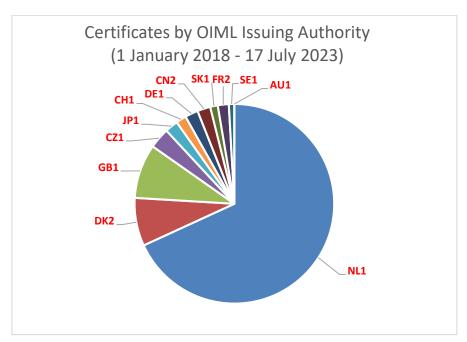
## **Annex A:** Measuring instrument categories

	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	W	A
R 49:2013	Water meters	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		A
R 60:2017	Load cells	A
R 60:2021		A
R 61:2004	A	A
R 61:2017	Automatic gravimetric filling instruments	A
R 75:2002	Heat meters	A
R 76:1992	Non-anto-matical incident and	A
R 76:2006	Non-automatic weighing instruments	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	Α
R 107:2007	Discontinuous totalizers	A
R 110:1994	Pressure balances	A
R 117:1995		A
R 117:2007	Liquids other than water	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	With differential measuring first differents	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 SO2 in stationary source emissions	A
R 144:2013	Continuous measurement of CO, NOx 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	A

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 60:2021	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 126:2021	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	NMi Certin B.V.	•	•	•	•	•		•	•		•	•		•	•	•	•	•	•	•	•	•		•	•	•	•	•	•
SE1	Research Institutes of Sweden (RISE)						•	•	•		•	•			•					•	•								
SK1	Slovak Legal Metrology (SLM)			•	•										•														

## 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 60:2021	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 126:2021	R 129:2000	R 134:2006	R 137:2012	R 139:2014	R 139:2018
AU1	National Measurement Institute Australia (NMIA)					•								•	•														
	Federal Institute of Metrology (METAS)							•										•											
CH1	Mettler Toledo																												
	Sartorius																												
	National Institute of Metrology, China (NIM)						•	•				•		•															
	Beijing Institute of Metrology (BJIM)																												
CN2	Shanghai Institute of Measurement and Testing Technology (SIMT)																												
	Zhejiang Province Institute of Metrology (ZJIM)																												
CZ1	CMI Testing Laboratory																												
	Physikalisch-Technische Bundesanstalt (PTB)						•	•	•		•		•		•														
	Endress + Hauser Flowtec AG				•																								
DE1	Mettler Toledo																												
	Sartorius																												
	Sensus GmbH				•																								

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 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 126:2021	R 129:2000	R 134:2006	R 137:2012	R 139:2014	R 139:2018
	FORCE (Brondby)																												
DK2	FORCE (Horsholm)																	•									•	•	
DKZ	FORCE (Vejen)																												
	ESIT																												
	Laboratoire National de Métrologie et d'Essais (LNE)						•	•	-						•								•	•					
FR2	Contazara S.A.				•																								
	Precia Molen SA																												
	Diehl Metering SAS				•																								
	Office for Product Safety and Standards (OPSS)				•		•	•	•					•	•						•	•							
GB1	(formerly NMO)																											$\rightarrow$	
GBT	AWTX																												
	Mey Marom																												
	Sartorius																												
JP1	NMIJ/AIST							•						•							•	•							
NL1	NMi Certin B.V.	•	•	•	•	•	•	•	•		•	•		•	•	•	•	•	•	•	•	•		•	•	•	•	•	•
SE1	RISE							•			•										•								
SK1	Slovak Legal Metrology (SLM)																												
5N1	EVPU																												

## **Annex E:** Summary of Utilizers and Associates

2 = Sch 3 = Sch	eme A only 5 = Scheme B only eme A and MAA eme A and B eme A, B and MAA	R 21:2007	R35:2007	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 60:2021	R61:2004	R61:2017	R 75:2002	R76:1992	R 76:2006	R81:1998	R 85:2008	R88:1998	R 93:1999	R 99:2008	R102:1992	R104:1993
AE	Ministry of Industry and Advanced Technology (MoIAT)	1	1	1	1	1	1	1	1		1	1	1			1	1	1					1	$\Box$	$\Box$
AU	National Measurement Institute, Australia (NMIA)				1	1	1				1						1	1							
BE	Federal Public Service Economy	3		3		3	3	3			1			3		3		1		3			3		
CA	Measurement Canada										2	1				1		2							
СН	Federal Institute of Metrology (METAS)			1	2	2	1	1			2			1		1		2							
CN	State Administration for Market Regulation (SAMR)							1			2	1		1	1		2	2							
со	Superintendencia de Industria y Comercio (SIC)	3		3	4	4	3	3			2			3		3	2	2		3			3		$\Box$
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
CZ	Czech Metrology Institute (CMI)					1		1							1			1		1					
DE	Physikalisch-Technische Bundesanstalt (PTB)	5		3	3	4	3	3			2			3		3		2					5		
DK	FORCE Certification A/S				2	2	1	1			2	1		1	1			2						$\Box$	
FR	Laboratoire National de Métrologie et d'Essais (LNE)	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					$\Box$
IN	Legal Metrology Division, Department of Consumer Affairs	3		3		4	3	3			2			3		3		2		3					
IR	Iran National Standards Organization (INSO)				4	4					2	1					2	2						$\Box$	$\Box$
JP	NMIJ/AIST										2	1					2	2							
KE	Weights and Measures Department		3	3	4	4		3			4	4		3	3		4	4		3					$\Box$
КН	National Metrology Centre (NMC)	3		3	3	3	3	3			1			3		3	1	1		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				$\Box$	$\Box$
KR	Korea Testing Certification (KTC)																2	2							
LV	LNMC Ltd. Metrology Bureau																							$\Box$	$\Box$
NA	Namibian Standards Institution			3	4	4	3	3			2			3			2	2		3					
NL	NMi Certin B.V.	3		3	3	4	3	3			2	1		3	3	3	1	2		3			3		
NZ	Trading Standards (Ministry of Business, Innovation and Employment) (MBIE)				4	4	3	3			2						2	2		3					
PH	National Metrology Laboratory	3	3	3		3				3								3		3			3		$\Box$
RU	VNIIMS																								
RW	Rwanda Standards Board	3	3	3	3	3		3	3	3	1	1		3	3		1	1					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	Siovak Legal Metrology (SLM)				2	2												2							
TN	National Agency of Metrology (ANM)	3		3	2	2	3	3			2			3				2		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					
ZM	Zambia Metrology Agency	3		3	3	3	3	3			1			3		3	1	1		3			3		

	me A only 5 = Scheme B only	_	_		10	_	_	"		_				~			~	-	_	_						
	me A and MAA	R 106:2011	R 107:2007	R 110:1994	R 117:1995	R 117:2007	R 117:2019	R 122:1996	R 126:1998	R 126:2021	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	149:2020	R 150:2020
	me A and B	106:	107:	110:	117:	117:	117:	122:	126:	126:	128:	129:	129:	133:	8	136:	137:	33:	139:	143:	144:	145:	146:	84	149:	150:
4 = Scher	me A, B and MAA	œ	œ	œ	œ	œ	œ	œ	œ	œ	œ	œ	œ	œ	œ	œ	œ	œ	œ	œ	œ	œ	œ	œ	œ	œ
AE	Ministry of Industry and Advanced Technology (MoIAT)	1	1		1	1	1							1	1		1			1	1			1	1	1
AU	National Measurement Institute, Australia (NMIA)																									
BE	Federal Public Service Economy	3	3			3						3					3	3								
CA	Measurement Canada																									
СН	Federal Institute of Metrology (METAS)	1	1						1			1			1		1									
CN	State Administration for Market Regulation (SAMR)																									
со	Superintendencia de Industria y Comercio (SIC)	3	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	3	3			
CZ	Czech Metrology Institute (CMI)					1	1								1		1		1							
DE	Physikalisch-Technische Bundesanstalt (PTB)	1	3			3	1					3			1	5	3									
DK	FORCE Certification A/S	1	1			1	1					1	1		3		1	1	1							П
FR	Laboratoire National de Métrologie et d'Essais (LNE)	1	1			1			1			1			1		1	1								
GB	Office for Product Safety and Standards (OPSS) (formerly NMO)	3	3		3	3	3					3			3											П
IN	Legal Metrology Division, Department of Consumer Affairs	1	3			3						3			1		3	3								
IR	Iran National Standards Organization (INSO)																									$\Box$
JP	NMIJ/AIST				1	1	1																			
KE	Weights and Measures Department	3			3	3			3						3	3	3	3	3							$\Box$
КН	National Metrology Centre (NMC)	3	3		3	3			3			3			3		3	3								
KI	Ministry of Commerce, Industry and Cooperatives	5		5	1	1								5	5		5	5	5							П
KR	Korea Testing Certification (KTC)																									
LV	LNMC Ltd. Metrology Bureau								3						3											$\Box$
NA	Namibian Standards Institution	3	3		3	3			3			3			3											
NL	NMi Certin B.V.	3	3		3	3	1		3			3			3		3	3	3							$\Box$
NZ	Trading Standards (Ministry of Business, Innovation and Employment) (MBIE)	3	3		3	3						3			3											
PH	National Metrology Laboratory	3					3			3					3									3	3	П
RU	VNIIMS				3	3																				
RW	Rwanda Standards Board	3		3	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	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	3								
ZM	Zambia Metrology Agency	3	3		3	3			3			3			3		3	3								

### **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

		Pee	r Assessment Activ	/ity
Team Leader	Country	Test Laboratory	OIML Issuir	ng Authority
		ISO/IEC 17025	ISO/IEC 17020	ISO/IEC 17065
COUVREUR, Gulian	СН	✓		✓
STOLZ, Harry	DE	✓		✓
JENSEN, Hans Dalsgaard	DK	✓		
AGARWAL, Ashutosh	IN	✓		✓
SESTINI, Maria Cristina	IT	✓	✓	✓
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

		Pe	er Assessment Acti	vity
Team Leader	Organisation	Test Laboratory	OIML Issui	ng Authority
		ISO/IEC 17025	ISO/IEC 17020	ISO/IEC 17065
ALEXANDER, Helga	IAS	✓		
REZK, Mohamed Adel Ahmed	EGAC	✓		
AN, Ping	CNAS	✓		
DEL PILAR QUIJANO, Rocio	ONAC	✓		

**Annex G:** Summary of Legal Metrology Experts

Expert Name	r.											OIML	Recom	mend	ation									Assessment Experience	
	Country	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	R 148	R 149	ISO/IEC 17025	ISO/IEC 17065
CHEN, Yi	AU					✓	✓	✓			✓			✓	✓									✓	
ZAMORA, Mario	AU															✓									
MATEUS SANCHEZ, Juan Carlos <sup>1</sup>	BR	<b>✓</b>	<b>✓</b>	<b>✓</b>							✓		✓			<b>✓</b>	✓						<b>✓</b>	✓	
COUVREUR, Gulian	СН						✓	✓	✓		✓			✓	✓				✓					✓	✓
NIEDERHAUSER, Bernhard	СН																✓							✓	
HU, Manhong	CN					✓	1		✓		✓				✓				✓						
JIANG, Jile	CN							✓																	
SHI, Leibing	CN			✓																					
WANG, Jian	CN						✓				✓													✓	
YANG, Jing	CN															✓									
YANG, Youtao	CN																			✓					
ZHONG, Ruilin	CN					✓	1		1		✓				✓				✓						
ZHOU, Shaoyuan	CN			✓																					

<sup>1</sup> For EMC tests only

	,										OIN	1L Rec	omme	ndatio	n										sment rience
Expert Name	Country	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	R 148	R 149	ISO/IEC 17025	ISO/IEC 17065
BENKOVA, Miroslava	CZ				✓											✓								✓	
BÍLEK, Jindřich	CZ											✓				✓								✓	
KRIZ, Ivan	CZ					✓	✓		<b>✓</b>		<b>✓</b>			✓	✓				<b>&gt;</b>					✓	
VALENTA, Tomás	CZ																			<b>✓</b>				✓	✓
KRAMER, Rainer	DE																			<b>~</b>	✓			✓	
ROSE, Jürgen	DE									✓														✓	✓
SCHWABE, Timo	DE						✓																		
JENSEN, Jens Hovgård	DK					✓	✓		✓		✓				✓			✓	✓						
BRUN, Christophe	FR															✓					✓			✓	
DELETTE, Laetitia	FR																✓							✓	
LOPEZ, Luc <sup>2</sup>	FR		1				✓			✓	1	✓				✓									✓
MOREL, Emeric	FR				✓																			✓	
PEREZ, Reuven	IL				✓																			✓	
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			1																				✓	
KOK, Paul	NL		✓			✓	✓		1		<b>✓</b>		1		1		✓	✓	✓					✓	✓
MEIJER, Mathias	NL		✓			✓		✓			✓													✓	✓

<sup>2</sup> Limited to assessments of OIML Issuing Authorities

Expert Name	try											OIML	Recom	mend	ation										sment rience
	Country	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	R 148	R 149	ISO/IEC 17025	ISO/IEC 17065
ROOIJ, Paul van	NL				✓					✓		✓				✓				✓	✓			✓	
SCHOLTEN, Roy	NL						✓		1		1				1			1						✓	
SOEKHOE, Satish	NL															✓				✓	✓			✓	
TJOA, Aldemar	NL			✓	✓		✓			✓	<b>✓</b>	<b>✓</b>				✓		✓		✓				✓	
VERMEUL, Yvo	NL				✓						<b>✓</b>					✓				✓				✓	
WIJNGAARDEN, Carl van	NL																			✓				✓	
YILMAZ, Baris	NL						✓				<b>\</b>							<b>✓</b>						✓	✓
BOBBALA, Srinivas	NZ										✓					✓								✓	
HATTINGH, Jaco	NZ				✓						<b>✓</b>													✓	
KÄLLGREN, Hakan	SE					✓	✓	✓	✓		<b>✓</b>			<b>✓</b>	✓									✓	<b>✓</b>
GRUM, Matej	SI					✓	✓		✓		<b>\</b>			>	✓									✓	✓
PREMUŠ, Aleksander	SI		✓	✓																				✓	✓
KRAL, Stefan	SK				✓																			✓	<b>✓</b>
MAZÚR, Viliam	SK				✓																			✓	
AYDEMIR, Bülent	TR					✓	✓	✓	✓		✓			✓	✓				✓					✓	
KAÇMAZ, Sevda	TR					✓	✓	✓	1		1			✓	✓				✓					✓	
BOKOTA, Marek	UK				✓											✓								✓	✓
GLAS, Gregory	UK		1			✓	✓		✓		<b>✓</b>			<b>\</b>	✓				✓					✓	✓
JAMES, Ivor	UK											<b>✓</b>						✓							
JI, Wei	UK		✓					✓			✓													✓	✓
MUNTEANU, Christine	UK										✓					✓								✓	