



IAAC OIML Webinar

Introduction to the OIML Certification System (OIML-CS)

Online, 28 July 2025

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BIML Assistant Director

OIML-CS Executive Secretary

About the OIML

- The OIML is an “**international standard-setting body**” in the sense of the World Trade Organization’s Technical Barriers to Trade Agreement (WTO TBT)
- We are an **intergovernmental treaty organization**, established in 1955, which develops model regulations and related documents for use by legal metrology authorities and industry
- The OIML provides a **mutual recognition system** which **reduces trade barriers and costs** in a global market

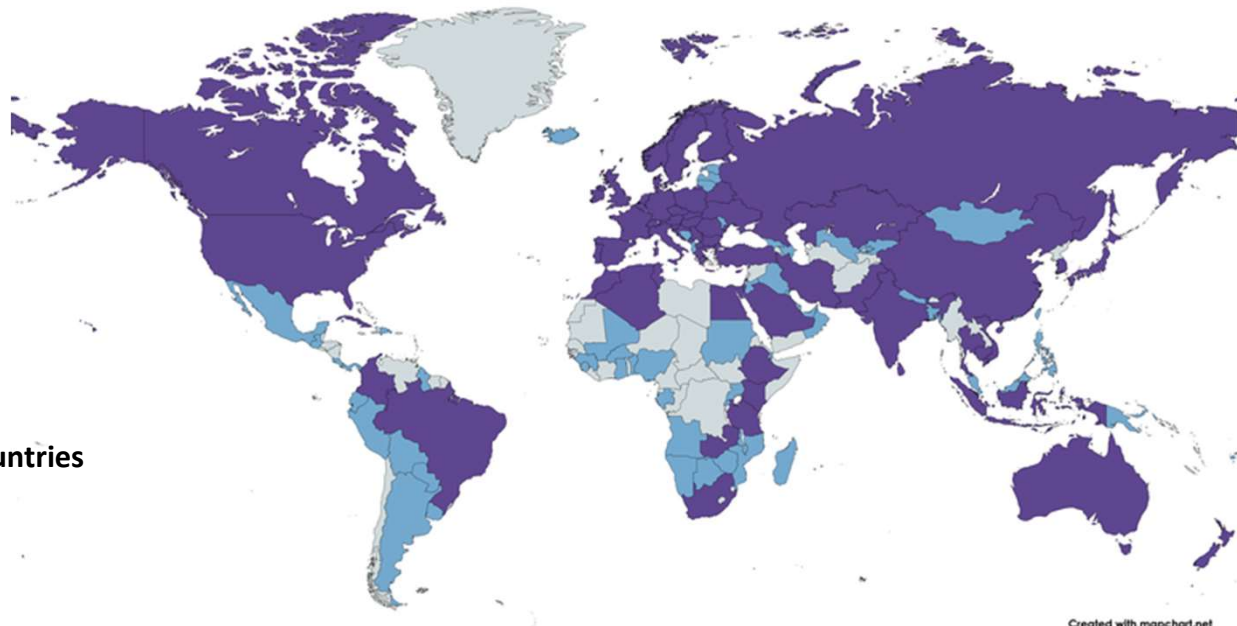
The **mission** of the OIML is to enable economies to put in place effective legal metrology infrastructures that are mutually compatible and internationally recognized, for all areas for which governments take responsibility, such as those which facilitate trade, establish mutual confidence and harmonize the level of consumer protection worldwide.

OIML Membership comprises:

- 64 Member States (countries that have ratified the [OIML Convention](#)), and
- 66 Corresponding Members (countries or economies that are not yet Member States, but that are interested in the work of the OIML)

**130
Members**

- 64 OIML Member States
- 66 OIML Corresponding Member Countries



The **four pillars** of the OIML's activity are:

1. **production and publication of technical standards (recommendations)**, including various publications and guides
2. **operating the OIML Certification System (OIML-CS)** which is a mutual recognition system for measuring instruments used in legal applications such as trade
3. **capacity building and outreach initiatives** through our Countries and Economies with Emerging Metrology Systems (CEEMS) program, and
4. **cooperation with international organisations** to advocate the importance of legal metrology as part of the Quality Infrastructure



Global Quality Infrastructure



OIML Certification System (OIML-CS)



BASIC
PUBLICATION

OIML B 18
Edition 2022 (E)

Framework for the OIML Certification System
(OIML-CS)

Cadre pour le Système de Certification OIML (OIML-CS)

**Framework for the OIML
Certification System (OIML-CS)**

OIML B 18 Edition 2022 (E)



ORGANISATION INTERNATIONALE
DE MÉTROLOGIE LÉGALE

INTERNATIONAL ORGANIZATION
OF LEGAL METROLOGY

Principles of the OIML-CS

- The OIML-CS is a system for issuing, registering and using OIML certificates and their associated type evaluation reports for measuring instruments based on the requirements specified in OIML Recommendations
- It is a single Certification System with two Schemes:
 - “Scheme A”
 - “Scheme B”
- Classified as Scheme 1a (ISO/IEC 17067): type approval only
- Aims to facilitate, accelerate and harmonise the work of national and regional bodies that are responsible for type evaluation and type approval of measuring instruments subject to legal metrological control

Objectives of the OIML-CS

- Promote global harmonisation, and the uniform interpretation and implementation of legal metrological requirements for measuring instruments
- Avoid unnecessary re-testing when obtaining national type evaluations ... while achieving and maintaining confidence in the results in support of facilitating global trade of instruments
- Establish rules and procedures for fostering mutual confidence in the results of type evaluations

Scope of the OIML-CS

- 41 OIML Recommendations are in the OIML-CS
- 39 currently in Scheme A
- Two are in Scheme B and will transition to Scheme A
- OIML Recommendations are intended as model regulations
- Member States morally obliged to implement them
- OIML Recommendations include:
 - Metrological and technical requirements
 - Test procedures
 - Test report and type evaluation report formats

INTERNATIONAL
RECOMMENDATION

OIML R 49-1
Edition 2024 (E)

Water meters for cold potable water and hot water.
Part 1: Metrological and technical requirements

Compteurs d'eau potable froide et d'eau chaude.
Partie 1: Exigences métrologiques et techniques

OIML R 49-1 (Ed. 2024) (E)



ORGANISATION INTERNATIONALE
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OF LEGAL METROLOGY

INTERNATIONAL
RECOMMENDATION

OIML R 129-1
Edition 2020 (E)

Multi-dimensional measuring instruments.
Part 1: Metrological and technical requirements

Instruments de mesure multidimensionnels.
Partie 1: Exigences métrologiques et techniques

OIML R 129-1 (Ed. 2020) (E)



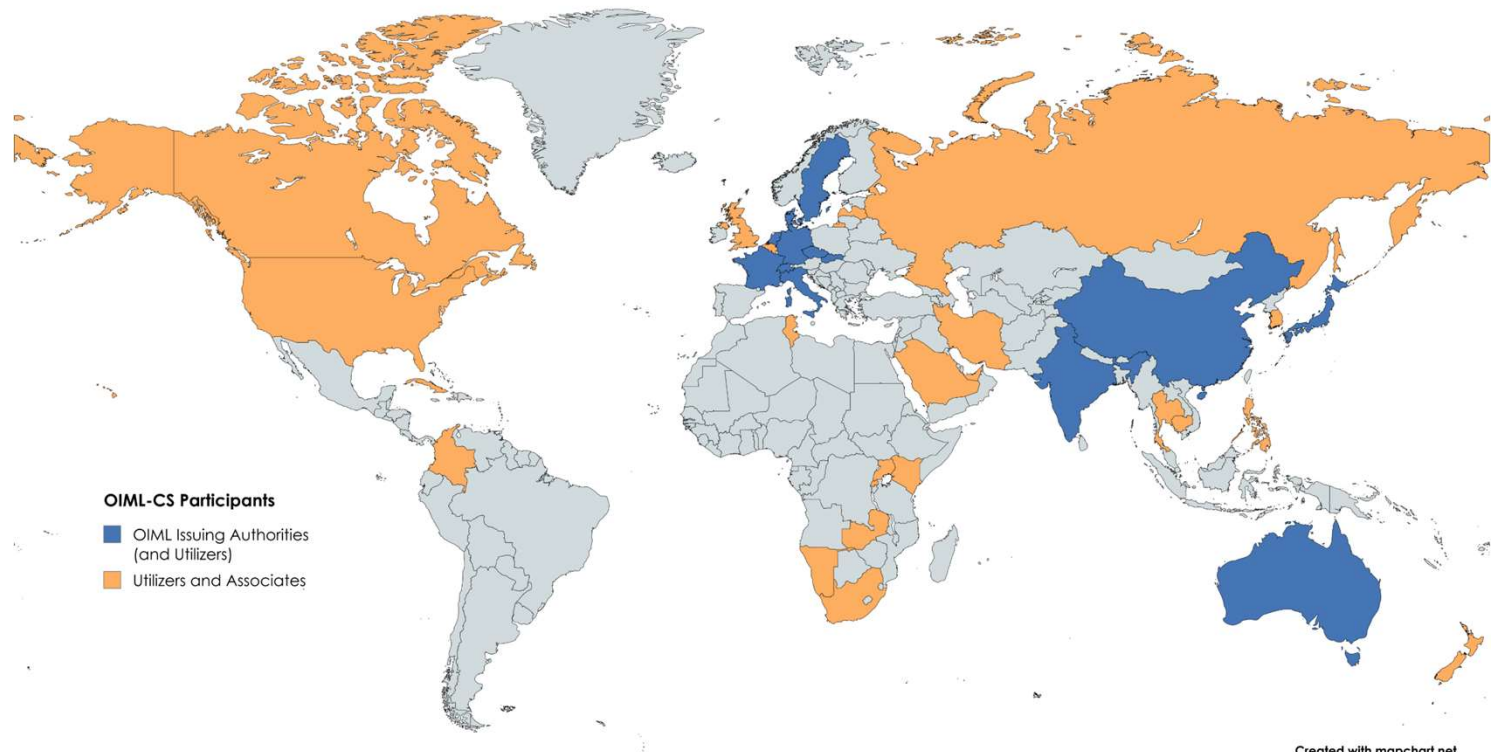
ORGANISATION INTERNATIONALE
DE MÉTROLOGIE LÉGALE
INTERNATIONAL ORGANIZATION
OF LEGAL METROLOGY

Participants in the OIML-CS



OIML-CS participation

- 14 OIML Issuing Authorities and 28 Test Laboratories approved under the OIML-CS
- 37 Utilizers and Associates



OIML Issuing Authority

certification body from an OIML Member State issuing OIML Certificates and associated OIML type evaluation reports in accordance with Scheme A or Scheme B

Test Laboratory

laboratory performing certain or all tests on a type of measuring instrument. A Test Laboratory is designated by an OIML Issuing Authority and accepted by the Management Committee

Note: A Test Laboratory may be an internal Test Laboratory of an OIML Issuing Authority, a third-party Test Laboratory or a Manufacturer's Test Laboratory (MTL)

[illegible]

Participants in the OIML-CS

Utilizer

national issuing authority or national responsible body from an **OIML Member State** that has signed a Declaration, indicating the terms of acceptance of OIML certificates and/or OIML type evaluation reports issued under Scheme A or Scheme B

Associate

national issuing authority or national responsible body from an **OIML Corresponding Member** that has signed a Declaration indicating the terms of acceptance of OIML certificates and/or OIML type evaluation reports

["Secret Utilizer"]

any organisation other than a Utilizer or an Associate that accepts OIML certificates and/or OIML type evaluation reports issued under Scheme A or Scheme B]

[illegible]

Requirements (OIML IAs and TLs)

- Requirements for the participation of OIML Issuing Authorities and their Test Laboratories in Scheme A and Scheme B are the same, but the method of demonstrating compliance is different
- **OIML Issuing Authorities** are required to demonstrate compliance with **ISO/IEC 17065**
- **Test Laboratories** are required to demonstrate compliance with **ISO/IEC 17025**

Demonstrating Compliance

- For participation in Scheme B, it is sufficient to demonstrate compliance on the basis of “self-declaration”, with additional supporting evidence
- For participation in Scheme A, compliance is demonstrated by peer evaluation, on the basis of accreditation or peer assessment
- Accreditation assessment teams shall include Legal Metrology Expert(s) approved by the OIML
- Peer assessment teams shall comprise a Management System Expert (team leader) and Legal Metrology Expert(s) approved by the OIML



OIML Certification System (OIML-CS) Implementation Accreditation in Legal Metrology

Legal Metrology Experts

Legal Metrology Experts validated by the OIML-CS Management Committee to participate in Accreditation and Peer Assessments under the OIML-CS

Expert Name	Country	OIML Recommendation																Assessment Experience	
		R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	ISO/IEC 17025	ISO/IEC 17065
Petra Miliute	LT																		
W. Chen	AU																		
Mario Zamora	AT																		
Dirk Bils	BE																		
Joan Carlos Martos Sanchez*	ES																		
Luciano Bruno Favotto	BR																		
Gillian Coover	CH																		
Bernhard Höbnerhauer	CH																		
Wang Jian	CN																		
Hu Manhong	CN																		
Hong Shi	CN																		
Shi Lebing	CN																		
Yang Jing	CN																		
Yang Youdao	CN																		
Zhong Jialin	CN																		
Zhou Shanyuan	CN																		



OIML Certification System (OIML-CS) Implementation Accreditation in Legal Metrology

Management System Experts – Team Leaders (Lead Assessors)

- 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, Gulan	CH		
STOLZ, Harry	DE		
JENSEN, Hans Delgaard	DK		
LORNTZEN, Erik Bruun	DK		
AGARWAL, Ashutosh	IN		
VERBEEK, Jos	NL		
BAREL, André	NL		
VERBEEK, Dick	NL		
PRENUS, Alexander	SI		
KALLGREN, Håkan	SE		
GLAS, Gregory	UK		
WICK, Ahmet	UK		
TEH BROCKE, Andrew	UK		
AVILA, Luis Font	VE		

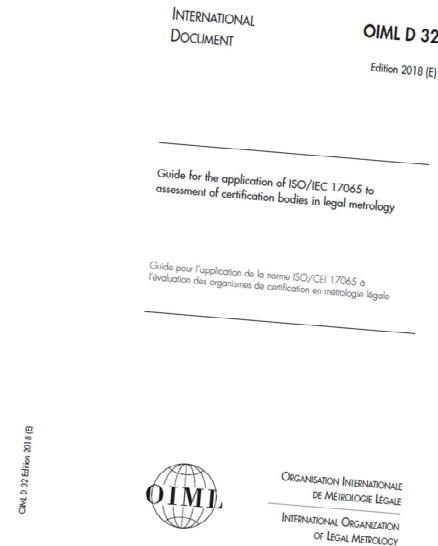
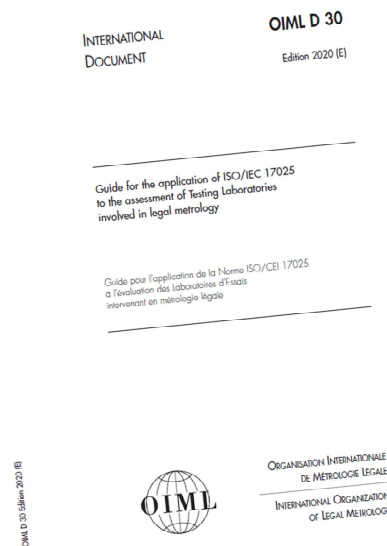
- Team Leaders nominated by ILAC/IAF Full Member Accreditation Bodies to lead Peer Assessments under the OIML-CS

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		
JIN, Ping	CHAS		
DEL PILAR QUIJANO, Rodio	ONAC		

Demonstrating Compliance - accreditation

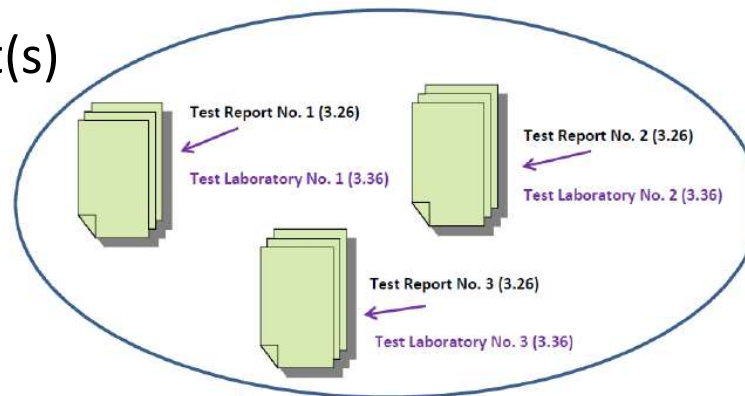
- Where accreditation is chosen, the Accreditation Body:
 - IAF Multilateral Recognition Arrangement (IAF MLA) for the OIML Issuing Authority
 - ILAC Mutual Recognition Arrangement (ILAC MRA) for the Test Laboratory
- Joint Assessment Procedures with ILAC and IAF – support accreditation assessments under the OIML-CS
 - Guidelines for use of accreditation
 - Use of OIML experts in accreditation assessment teams
 - Scope of accreditation

- Guidance and interpretation on the application of ISO/IEC 17025 and ISO/IEC 17065 to legal metrology
- OIML D 30 applies to testing, and OIML D 32 applies to product certification (type approval)



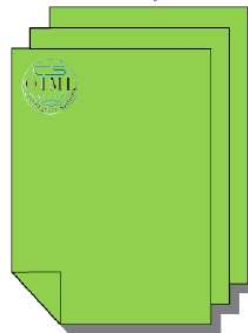
Operation of the OIML-CS

Test report(s)



OIML Issuing Authority (3.24)

Type evaluation
report



OIML Type Evaluation Report (3.28)

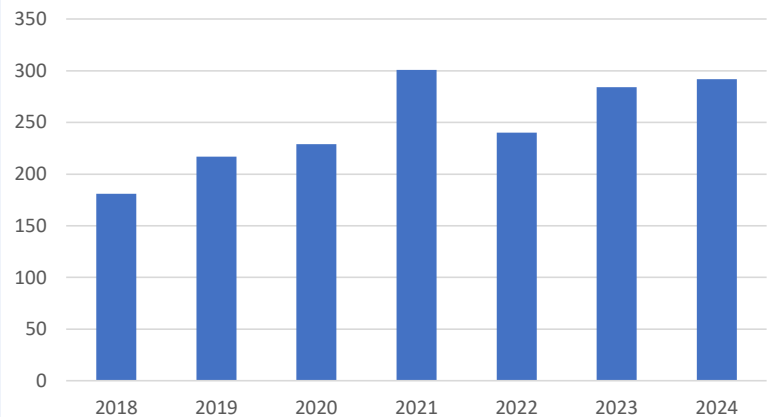
A sample OIML Certificate form. It includes the OIML logo, a title 'OIML Certificate (3.22)', and various fields for 'Issuing Authority', 'Applicant', 'Manufacturer', 'Product', 'Model', 'Serial Number', 'Date of Issue', and 'Date of Validity'. It also contains a section for 'Declaration of Conformity' and a signature line.

OIML Certificate (3.22)

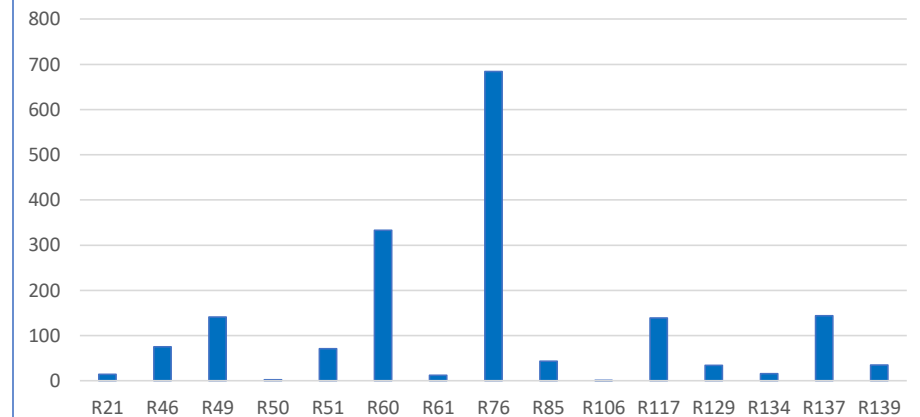
Certificate

OIML-CS certificates issued

Total certificates (2018 – 2024)



Certificates by Recommendation (2018 – 2024)



OIML certificates are a 'passport'

An OIML certificate is a 'passport' for measuring instruments entering the international market

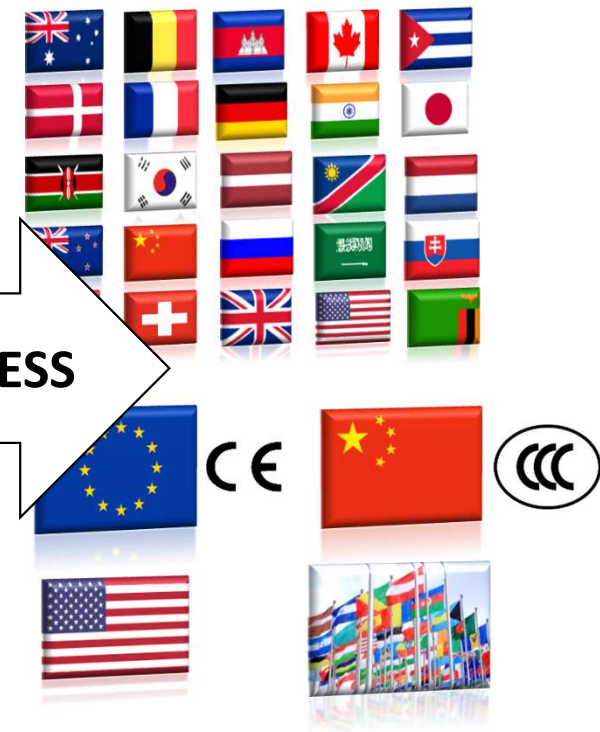
"One-time testing; One certificate; Global Access"

	R 21:2007	R 35:2007	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 111:2004	R 117:1995	R 117:2007
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)			✓	✓	✓	✓																
IN1 Legal Metrology Division, Department of Consumer Affairs (LMD, DoCA)	✓		✓	✓																		
IT1 Tifernogas s.r.l.																						
JP1 NMIJ/AIST								✓	✓	✓				✓	✓						✓	✓
NL1 NMI Certin B.V.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
NL3 KEMA B.V.		✓																				
SE1 Research Institutes of Sweden (RISE)	✓					✓	✓	✓	✓	✓	✓	✓		✓	✓					✓	✓	✓
SK1 Slovak Legal Metrology (SLM)			✓	✓											✓							

ONE TIME TESTING



GLOBAL ACCESS



OIML-CS Management Committee

- Management Committee is responsible for the operation of the OIML-CS
- Meets annually and reports to the CIML
 - Marc Schmidt, NL (Chairperson)
 - Katharina Gierschke, DE (Deputy Chairperson)
 - Tenth MC meeting (26-27 March 2025)
 - Held in Prague, Czech Republic
- Key topics discussed
 - Removal of ISO/IEC 17020 as a pathway for OIML IAs to demonstrate competence
 - Exploring the possibility of including Conformity to Type (CTT) in the OIML-CS
 - Development and future growth of the OIML-CS
 - IAF endorsement of the OIML-CS
 - Technical developments (future Recommendations) and modular approvals
 - Digitalisation issues
 - Revision of OIML D 19 *Pattern approval and pattern evaluation*



- IAF 'endorsement' of the OIML-CS to assist with accreditation of OIML Issuing Authorities
- Exploring the possible inclusion of Conformity to Type (CTT) in the OIML-CS
- Continued expansion of scope (Recommendations), e.g.
 - EVSE/EVCS
 - OIML R 91 (Speed meters)
- Modular approvals
- Assessment requirements (accreditation / peer assessment)

There are benefits for different stakeholders:



- Consumers can rely on certified measuring instruments, which fulfill internationally agreed requirements
- Manufacturers can get testing services for their measuring instruments from competent and recognised OIML Issuing Authorities and Test Laboratories
- National authorities can rely on internationally accepted OIML certificates without duplicate testing and can issue national or regional type approvals

The OIML-CS is a certification system which:



- strengthens **trust** in measuring instruments and measurement results
- enables **certification** of measuring instruments, avoiding duplicate testing and acceptance on an international level
- facilitates **international trade** of measuring instruments
- makes the **work of legal metrology authorities more efficient**



Welcome to the OIML website

The mission of the OIML is to enable economies to put in place effective legal metrology infrastructures that are mutually compatible and internationally recognized, for all areas for which governments take responsibility, such as those which facilitate trade, establish mutual confidence and harmonize the level of consumer protection worldwide.

Key facts and figures:

- 91 active projects
- 1140 registered technical experts
- 195 technical publications
- 127 Members
- Since 1955

The OIML is an "international standard-setting body" in the sense of the World Trade Organization's Technical Barriers to Trade Agreement. OIML publications should therefore be applied, when appropriate, by all signatories of the TBT Agreement when developing technical regulations, in application of Article 2.4 of that Agreement.

[READ MORE](#)



Technical work

Publications development by OIML TCs, SCs and PGs



OIML-CS

OIML Issuing Authorities, Utilizers, Associates, Certificates



CEEMS

Countries and Economies with Emerging Metrology Systems

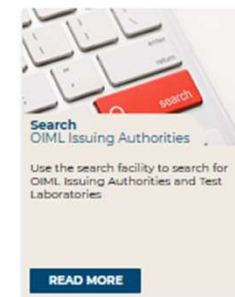
Welcome to the OIML-CS homepage



The OIML Certification System (OIML-CS) is a system for issuing, registering and using OIML certificates and their associated OIML type evaluation/test reports for types of measuring instruments (including families of measuring instruments, modules, or families of modules), based on the requirements of OIML Recommendations.

An animated video "Introduction to the OIML Certifications System (OIML-CS)" was uploaded to the OIML YouTube channel on 2023-09-29.

[READ MORE](#)



Thank you for your attention

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www.oiml.org/en