

# International Organization of Legal Metrology

# Organisation Internationale de Métrologie Légale













# Developing a Common Vision for Scientific and Legal metrology: The OIML Perspective

Roman Schwartz President, CIML

26. CGPM, 15 November 2018 Versailles, France



# Outline



- The OIML Mission
- Current Priorities and Activities
- Towards a Common Vision















## What is the OIML?



- An Intergovernmental Treaty Organization
- Established in 1955
- 23 Charter Members
- 1<sup>st</sup> International Conference on Legal Metrology in 1956



- An "International Standards-Setting Organization" under the terms of the WTO/TBT Agreement
- OIML publications should be applied, when appropriate, by all signatories of the TBT Agreement when developing technical regulations













www.oiml.org

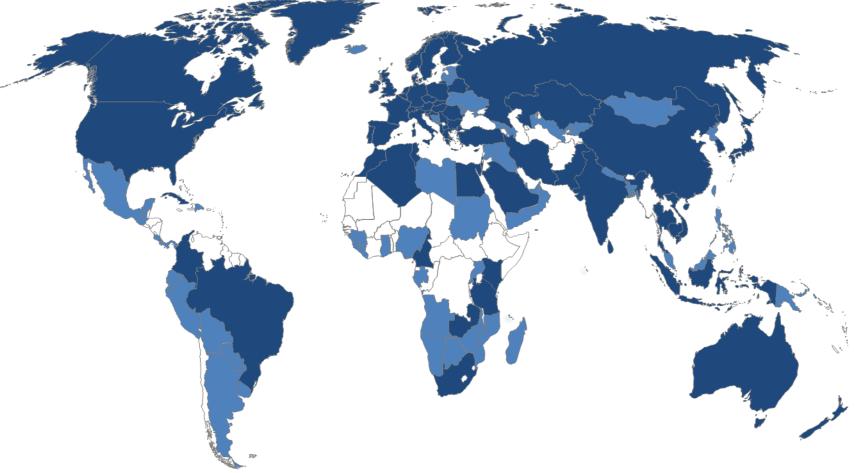








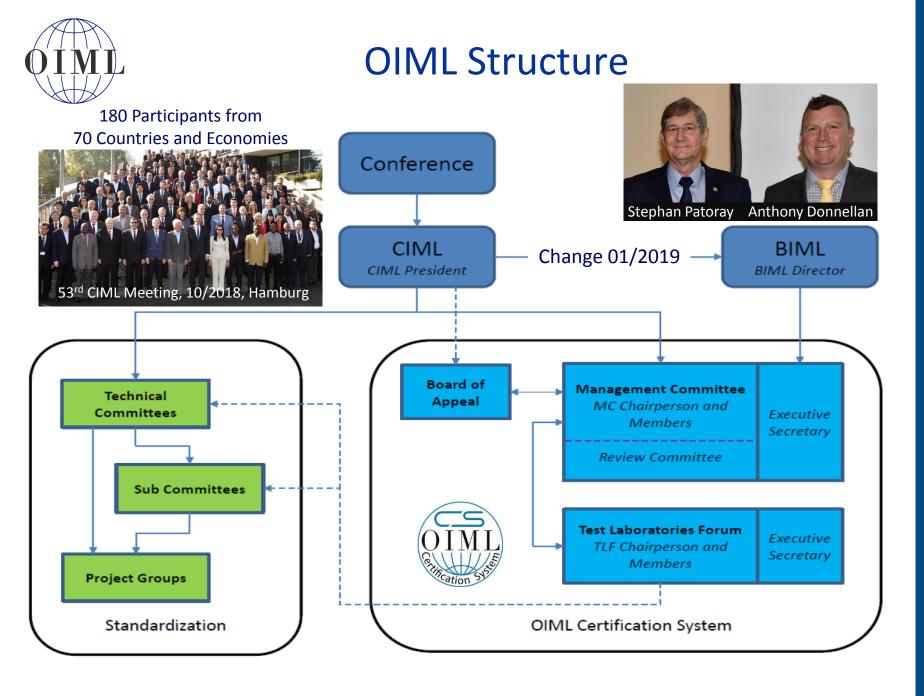




**62 OIML Member States** 

Organizations

**65 OIML Corresponding Member Countries /** 

















## The OIML Mission

















... 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.

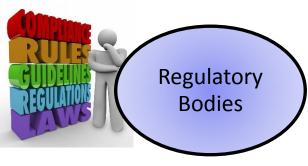
(OIML Strategy, B 15:2011)



# **OIML Stakeholders**









Manufacturers

# **Measuring Instruments**



Field Inspection + Supervising **Bodies** 



... in the age of globalization and digitization















# Relevance of OIML for Regulatory Bodies

 OIML develops / provides model regulations, technical standards and relevant
 International Documents for use by legal metrology authorities and manufacturers in support of the WTO / TBT Agreement.



- Document D 1:2012Considerations for a Law on Metrology
- Document D 2:2007Legal Units of Measurement
- Document D 9:2004
   Principles of metrological supervision















# Current Priorities of the OIML

O S



- On-going technical activities
- Increase speed and efficiency of OIML technical work
- Increase awareness of stakeholders for the new
   OIML Certification System (OIML-CS)
- Meeting the needs of Countries and Economies with Emerging Metrology Systems (CEEMS)
- Closer cooperation with other international organizations, notably the Metre Convention, to promote metrology as an important part of a sound quality infrastructure (QI) of a modern economy
- Challenge:Digitization of Economy and Society in a globalized world













# **Technical Activities**



#### Technical work

- 18 Technical Committees
- 45 Sub Committees
- 49 Project Groups





#### Outcome

- over 100 Recommendations
- 27 Documents
- 14 Basic Publications
- 2 Vocabularies
- 18 Guides











# Relevance of OIML for Manufacturers



# **OIML** develops / provides International Recommendations and Documents that ...









foster innovation and support global trade in MI



harmonize test procedures for MI



facilitate harmonized testing and certification of MI



enable mutual recognition of test data

form the basis for Certification Systems



# **Supporting Global Trade**



















# The new OIML-CS







- Is a Single Certification System based on ISO/IEC 17025, ISO/IEC 17065 and OIML Recommendations
- Replaces the previous Basic and MAA Systems
- Covers 19 Measuring Instrument Categories up to now
- Further 18 categories will be added 2019/2020
- Includes 12 OIML Issuing Authorities so far
- Includes 23 Utilizers and Associates up to now (Member States and Corresponding Members)















# Measuring Instruments under the OIML-CS

(Examples)





R 49 Water meters









- R 117 Fuel dispensers
- R 137 Gas Meters



































# Two different Metrology Organizations ...

... with complementary missions,

... with common denominators,

... with increasing collaboration,

... which together represent the whole spectrum of scientific, industrial and legal metrology.







#### The BIPM Perspective:

(Quote from the 2020-2023 Draft BIPM Work Programme)

"...The BIPM staff and the BIML (the bureau of the OIML) have worked increasingly closely in recent years.

This trend continues.

Whilst the missions of the two organizations are complementary, both now present an integrated description of the worldwide metrology infrastructure, and its benefits."













# Global Quality Infrastructure (QI)



















& mutual recognition

# Quality Infrastructure (QI)



of test labs &

certification bodies





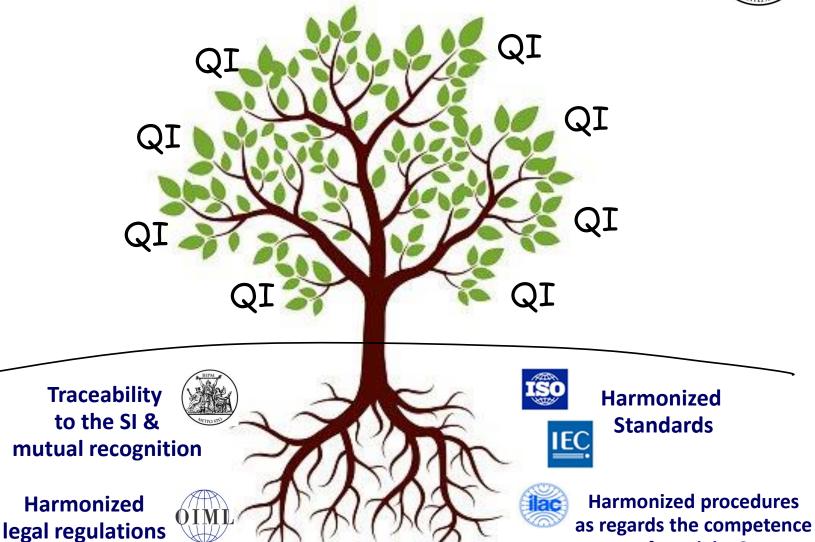














# Global Quality Infrastructure





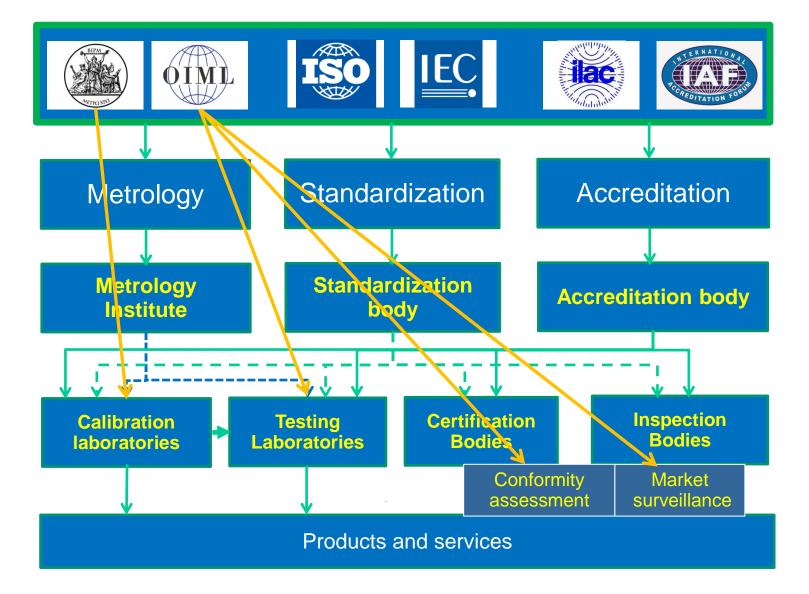














## Common denominators

ators

OIML

- Trust in measurement results
- Traceability of measurements
- Promoting free trade eliminating technical barriers to trade (WTO/TBT)
- Minimizing costs and work load for the actors on the market
- Promoting 'awareness raising' as regards the importance of metrology and providing information for decision makers
- Engagement with the Global Quality Infrastructure capacity building community











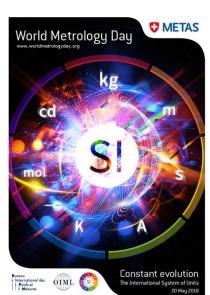




# Existing Collaboration (1)



- Bilateral relationship (without MoU), and through the BIPM-OIML-UNIDO MoU (signed 2008)
- Annual bilateral and multipartite meetings at senior level (2018: revision of 'Joint BIPM, OIML, ILAC and ISO Declaration on Metrological Traceability')
- Periodical meetings between the Directors of BIML and BIPM and the senior staff, to address both technical matters and organizational matters of common interest to the two organizations
- World Metrology Day = joint initiative, website hosted by the OIML

















# **Existing Collaboration (2)**



- DCMAS Network, which is being renamed to INetQI, and drafting of a definition of the Quality Infrastructure
- Participation of BIPM in the OIML CEEMS Advisory Group
- Contribution of BIPM in the revision of the OIML
   Document D1
- Participation of OIML in the JCGM, WG1 (GUM),
   WG2 (VIM) and CCU
- BIML lecturing on **BIPM CBKT courses**

















# The OIML Perspective:

- Focus on common denominators and 'strong points'
- Explore opportunities for an <u>'holistic approach'</u> to jointly and coherently promote 'metrology' (scientific, industrial, legal) as a key element of a sound quality infrastructure of a modern economy
- Obvious opportunity: Joint CEEMS / CBKT activities
   (use of new 'QI toolkit' published by the World Bank?)
- Joint development of e-learning material?

e-Learning Platform





























#### The OIML Perspective (cont.):

Future / further development of the Joint Web Portal?

Welcome to the Joint BIPM-OIML Web Portal



#### **General Information**

World Metrology Day About Metrology The World Metrology System Metrology and the Environment Metrology and Trade Metrology and Health Metrology and Safety Impact Studies

#### The BIPM

Introduction
Role and Work
Global Coordination - CIPM MRA
BIPM and other Organizations

#### The OIML

Legal Metrology Information and Harmonization Certification and Recognitions www.metrologyinfo.org





**www.oiml.org** 

#### **BIPM-OIML Resource Center**

The BIPM-OIML Resource Center is jointly operated by the Bureau International des Poids et Mesures (BIPM) and the International Organization of Legal Metrology (OIML).

Its objective is to provide metrologists and key metrology decision makers worldwide with information about metrology, why it is needed and how everyone benefits from accurate measurements be it on an individual or multi-national basis.

This site also serves as a portal to the two Organizations' web sites, and provides useful links to other related Organizations dealing with metrology.

Metrology: The Science of Measurement www.metrologycareers.com







#### The OIML Perspective (cont.):

- Future / further development of the Joint Web Portal?
- Time to (re)consider the trilateral or a new bilateral MoU?
- Proposal to explore opportunities in a Joint Task Group















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