

Appendix A

Report on the Activities of the International Organization of Legal Metrology (OIML) and Regional Legal Metrology Organizations

Weights and Measures Division, NIST

INTRODUCTION

The Weights and Measures Division (WMD) of the National Institute of Standards and Technology (NIST) is responsible for coordinating U.S. participation in the International Organization of Legal Metrology (OIML) and other international legal metrology organizations. Learn more about OIML at the website www.oiml.org and about NIST Weights and Measures Division at the WMD website www.nist.gov/owm. Dr. Charles Ehrlich, Group Leader of the International Legal Metrology Group (ILMG), can be contacted at charles.ehrlich@nist.gov or at (301) 975-4834 or by fax at (301) 975-8091.

Please note: OIML publications are available without cost at <http://www.oiml.org>.

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Table B
Glossary of Acronyms

BIML	International Bureau of Legal Metrology	IR	International Recommendation
B	Basic Publication	IWG	International Work Group
CD	Committee Draft ¹	MAA	Mutual Acceptance Arrangement
CIML	International Committee of Legal Metrology	MC	Measurement Canada
CPR	Committee on Participation Review	OIML	International Organization of Legal Metrology
D	Document	R	Recommendation
DD	Draft Document ²	SC	Technical Subcommittee
DR	Draft Recommendation ²	TC	Technical Committee
DoMC	Declaration of Mutual Confidence	WD	Working Draft ³
DV	Draft Vocabulary ²	USNWG	U.S. National Work Group
ILMG	International Legal Metrology Group		

¹ CD: a draft at the stage of development within a technical committee or subcommittee; in this document, successive drafts are numbered 1 CD, 2 CD, etc.

² DD, DR, and DV: draft documents approved at the level of the technical committee or subcommittee concerned and sent to BIML for approval by CIML.

³ WD: precedes the development of a CD; in this document, successive drafts are number 1 WD, 2 WD, etc.

Details of All Items
(In Order by Reference Key Number)

I. Report on the Activities of the OIML Technical Committees

This section reports on recent activities and the status of work in OIML Technical Committees (TCs) and Technical Subcommittees (SCs) of specific interest to members of the NCWM. Also included are schedules of future activities of the Secretariats, the U.S. National Work Groups (USNWGs), and the International Work Groups (IWGs) of the Committees and Subcommittees.

TC 3/SC 1 “Pattern approval and evaluation” (United States)

The subcommittee approved the U.S. proposal for a combined revision of OIML D 19 “Pattern evaluation and pattern approval” and D 20 “Initial and subsequent verification of measuring instruments and processes” into a single document entitled “Principles of metrological control of measuring instruments: type approval and verification.” Key elements of OIML D 3 “Legal qualification of measuring instruments,” R 34 “Accuracy classes of measuring instruments,” and R 42 “Metal stamps for verification officers” will also be incorporated into the combined revision of OIML D 19 and D 20. The revised documents will incorporate recent developments such as the OIML certificate system, D 27 “Initial verification of measuring instruments utilizing the manufacturer’s quality management system,” and the “Framework for a mutual acceptance arrangement (MAA) on OIML type evaluations.” Consideration will be given to the appropriate conformity assessment options developed by the ISO Council Committee on Conformity Assessment (ISO CASCO), including quality systems, product certification, and accreditation. Consideration will also be given to information technology and statistical methods to increase or decrease verification intervals based upon proven instrument performance. For more information on this activity, contact Dr. Ambler Thompson at (301) 975-2333 or at ambler@nist.gov.

TC 3/SC 5 “Conformity assessment” (United States and BIML)

The subcommittee held a meeting in May 2008 to begin revision of the documents B 3 (Certificate System) and B 10 (MAA). The meeting included discussion of a new document on the incorporation of measurement uncertainty into conformity assessment decisions in legal metrology; in January 2008, a revised WD was sent to the BIML and other technical advisors for review. For more information on this activity, contact Dr. Charles Ehrlich at (301) 975-4834 or at charles.ehrlich@nist.gov.

TC 5/SC 2 “Software” (Germany and BIML)

A 1 CD of OIML "General requirements for software-controlled measuring instruments" was received in June 2007 and circulated to the NCWM Software Sector and other interested U.S. parties. The U.S. comments on the 1 CD were submitted to the International Secretariat in September 2007, and a meeting of the OIML Software Subcommittee was held in Berlin in December 2007. When complete, the OIML document will serve as guidance for software requirements in International Recommendations by OIML technical committees. A 2 CD was received in February 2008. The final draft document is out for vote with a September 2008 deadline. The ILMG participated in NCWM Software Sector meetings in Lake Tahoe, California, and Little Rock, Arkansas, in October and May 2007. Please contact Dr. Ambler Thompson at (301) 975-2333 or at ambler@nist.gov if you would like to receive information and participate in this project.

TC 6 “Prepackaged products” (South Africa)

In September 2007, NIST hosted the OIML TC 6 committee at NIST in Gaithersburg, Maryland. There was continued discussion on the issue of an OIML International Quantity Mark, referred to as an IQ Mark. The IQ Mark, designed to eliminate trade barriers, would be a program that would allow for an international system of acceptance of prepackaged goods. Receiving countries want imported packages to meet all requirements, and packers in exporting countries want to be sure prepackaged goods will not be rejected after arriving in the destination country. Such a program would also require that participants meet specific requirements in order to participate in a program for quantity control and marking of prepackaged goods. The United States is participating in a work group that will develop guidelines on good manufacturing practices and additional documentation for selected criteria that would be used in the IQ Mark's accreditation programs.

It was agreed that all members of the TC 6 would send out a questionnaire to all current stakeholders, including industry, and federal and state agencies seeking input to specific questions. Please contact Lisa Warfield at (301) 975-3308 or at lisa.warfield@nist.gov if you would like more information about the work of this subcommittee or to participate in any of these projects.

TC 8/SC 1 “Static volume and mass measurement” (Austria and Germany)

The subcommittee has two documents currently out for a CIML postal ballot: OIML R 71 “Fixed storage tanks,” and R 85 “Automatic level gages for measuring the level of liquid in fixed storage tanks.” Final approval for both of these recommendations is expected in October 2008. The revision of R 80 “Road and rail tankers” should be completed in 2009. Please contact Ralph Richter at (301) 975 3997 or at ralph.richter@nist.gov if you would like copies of the documents or to participate in any of these projects.

TC 8/SC 3 “Dynamic volume and mass measurement for liquids other than water” (United States and Germany)

OIML R 117-1 “Dynamic measuring systems for liquids other than water, Part 1: Metrological and technical requirements” has undergone an extensive revision. The Recommendation obtained 100 % international “yes” votes and final CIML approval at the CIML meeting in Shanghai, China, in October 2007. The revision incorporates new instrument technologies and includes a merger with OIML Recommendations R 86 “Drum meters” and R 105 “Mass flowmeters.” After publication of R 117-1, Recommendations R 86 and R 105 will be withdrawn. The ILMG has worked closely with the USNWG on flowmeters, Germany, and the Netherlands on this effort. Meetings of the USNWG on flowmeters were held during the NCWM Interim Meeting in January 2007 in Jacksonville, Florida, the NCWM Annual Meeting in July 2007 in Utah, and the NCWM Annual Meeting in July 2008 in Burlington, Vermont. Measurement Canada has also been a strong contributor to this effort. Subcommittee work on R 117-2 “Test methods” and R 117-3 “Test report format” has begun. If you have any questions, would like a copy of the R 117-1 DR, or would like to participate in the next phases of this project, please contact Ralph Richter at (301) 975-3997 or ralph.richter@nist.gov.

TC 8/SC 6 “Measurement of cryogenic liquids” (United States)

In July 2007 the Secretariat (United States) requested that Participating members and U.S. stakeholders decide if there was sufficient justification for opening a new project to revise R 81 “Dynamic measuring devices and systems for cryogenic liquids.” The response received by the Secretariat indicated that a revision of R 81 was justified to update: (1) electronic tests in accordance with the latest edition of OIML D 11 (2004) and/or the latest IEC and ISO standards, (2) technical requirements to include new developments in hydrogen measurements, (3) Annex C to include current recommendations for density equations, and (4) existing sections into three distinct parts similar in format to recently-developed OIML Recommendations.

Subsequently, the Secretariat submitted a proposal to the BIML requesting approval for the start of a new project to revise R 81. The BIML submitted the proposal at the October 2007 42nd Meeting of the CIML and was granted approval of the project. The Secretariat will ask members of TC 8/SC 6 to review and formally comment on R 81. The Secretariat is forming a National Work Group to establish a U.S. position on the appropriate updates to the document. To obtain more information or to participate in this project, please contact Juana Williams at (301) 975-3989 or juana.williams@nist.gov.

TC 8/SC 7 “Gas metering” (Netherlands)

In October 2007, the CIML approved the merger of TC 8/SC 7 (with France and Belgium as co-secretariats) and TC 8/SC 8 “Gas meters” (with Netherlands as secretariat). Netherlands has assumed responsibility of this newly merged technical subcommittee. In April 2007, a DR of the new Recommendation “Measuring systems for compressed natural gas (CNG) for vehicles” was circulated with annexes covering performance tests for electronic devices and basic test procedures. The Recommendation was approved by the CIML in October 2007. The United States voted “no” on this document at the CIML meeting because some of the systems testing requirements were considered to be excessive and very expensive.

Also in April 2007, a postal ballot was circulated on another new Recommendation, “Measuring systems for gaseous fuel” and U.S. comments were submitted in June 2007. This Recommendation is intended for large pipelines with large flow rates and high operating pressures. This Recommendation was approved by the CIML in October 2007.

The final draft of OIML R 137-1 “Gas meters” was approved by the CIML at their October 2006 meeting in Cape Town, South Africa. Published in 2007, OIML R 137-1 combines and replaces three old Recommendations that will soon be withdrawn: R 6 “General provisions for gas volume meters,” R 31 “Diaphragm gas meters,” and R 32 “Rotary piston gas meters and turbine gas meters.” Development of R 137-2 “Test methods” is now underway. Please contact Ralph Richter at (301) 975-3997 or ralph.richter@nist.gov if you would like to obtain a copy of any of these gas measurement documents or if you would like to participate in future work of this subcommittee.

TC 9 “Instruments for measuring mass” (United States)

The Secretariat of TC 9 reported that the new edition of R 76-1 was published in December 2007. Members of TC 9 and the USNWG will be solicited on whether or not to initiate a new project to review R 60 “Metrological regulation for load cells.” Based on the results of the solicitation, the Secretariat will provide the BIML with a recommendation on whether or not a project to revise R 60 should be initiated. The questionnaire will ask for feedback on everything from the basic principles of R 60 (e.g., tolerances and accuracy classes) to exploring the addition of new requirements. For more information on these efforts, please contact Steve Cook at (301) 975-4003 or steven.cook@nist.gov.

TC 9/SC 1 “Nonautomatic weighing instruments” (Germany and France)

The revision of R 76 “Non-automatic weighing instruments” is of major importance to U.S. interests because the Recommendation serves as the foundation for a majority of the laws and regulations that govern weighing instruments around the world. The revision includes new language addressing metrological controls for type evaluations, conformity, initial and subsequent inspections, suitability of separable components and requirements for metrological software. The USNWG was consulted concerning proposals to harmonize NIST Handbook 44 and R 76. As reported at the 2007 NCWM Interim Meeting, the DR of R 76-1 was approved by the CIML in October 2006. Most recently, the United States voted “yes” on the DR of R 76-2 “Test report format.” R 76 was published in December 2007. For more information on these efforts, please contact Steve Cook at (301) 975-4003 or steven.cook@nist.gov.

TC 9/SC 2 “Automatic weighing instruments” (United Kingdom)

The Recommendation R 134-1 “Automatic instruments for weighing road vehicles in motion – total load and axle weighing” was approved by CIML in October 2006. U.S. comments concerning terminology and document scope were incorporated in the document. The test report format of this document, R 134-2, has been approved by the subcommittee and is going through a final editorial process at the BIML.

The 3 CD of R 106 Parts 1 and 2, “Automatic rail-weighbridges” were distributed by the Secretariat to members of TC 9/SC 2 in September 2007. In distributing the 3 CD, the Secretariat commented that although the 2 CD achieved majority approval, there were substantial comments and some amendments to the technical requirements of the 2 CD. Comments and a U.S. “yes” vote on the 4 CD of R 106 Parts 1 and 2 were sent in July 2008.

The subcommittee approved a revision of R 107 “Discontinuous totalizing automatic weighing instruments (totalizing hopper weighers),” and approval was granted on the 1 DR at the October 2007 42nd meeting of the CIML. However, the Secretariat first accommodated U.S. concerns by inserting into the document that national legislation will dictate whether the automatic zero-tracking feature is allowed in a country. The U.S. CIML member pointed out at the CIML meeting that the United States does not allow the automatic zero-tracking feature. If you would like to receive copies of these documents or work on these projects, contact Richard Harshman at (301) 975-8107 or at harshman@nist.gov and John Barton at (301) 975-4002 or john.barton@nist.gov.

TC 17/SC 1 “Humidity” (China)

The Secretariat (China) is working closely with the United States and a small IWG to revise OIML R 59 “Moisture meters for cereal grains and oilseeds.” All drafts have been distributed to the USNWG, which for the most part is a subset of the NTEP Grain Sector. A 4 CD was circulated to the IWG in August 2006. U.S. comments on the 4 CD were returned to the Secretariat in November 2006. A TC 17/SC 1 meeting was hosted by NIST in September 2007 to discuss the comments to the 4 CD. At the TC 17/SC 1 September 2007 meeting, the subcommittee also discussed harmonization of the Recommendation for moisture with the TC 17/SC 8 subcommittee’s Recommendation for protein. Please contact Diane Lee at (301) 975-4405 or at diane.lee@nist.gov if you would like to participate in this work group.

TC 17/SC 8 “Quality Analysis of Agricultural Products” (Australia)

A new subcommittee has been formed to study the issues and write a working draft document “Measuring instruments for protein determination in grains.” Australia is the Secretariat for this new subcommittee. A work group meeting was held in September 2006 in Ottawa, Canada, to discuss comments on the 1 CD. A TC 17/SC 8 meeting was hosted by NIST in September 2007 to discuss the 2 CD. At the September 2007 meeting, the TC 17/SC 8 subcommittee also discussed comments concerning the maximum permissible errors (MPEs) and harmonization of the TC 17/SC 8 Recommendation for protein with the TC 17/SC 1 Recommendation for moisture. Please contact Diane Lee at (301) 975-4405 or at diane.lee@nist.gov if you would like to participate in this work group.

OIML Mutual Acceptance Arrangement (MAA)

Note: The report on the OIML Mutual Acceptance Arrangement (MAA) has moved. It can now be found in the NTEP section of the NCWM Annual Report. For further information on the MAA and its implementation, please contact Dr. Charles Ehrlich at charles.ehrlich@nist.gov or at (301) 975-4834 or by fax at (301) 975-8091.

II. Report on the 42nd CIML Meeting in Shanghai, China, October 24 - 26, 2007

The International Committee of Legal Metrology (CIML) opened with addresses given by Mr. Li Chuanqing, Minister of the General Administration of Quality Supervision, Inspection and Quarantine of the People’s Republic of China (AQSIQ), Mr. Zhou Taitong, Deputy Mayor of Shanghai, and Mr. Alan E. Johnston, CIML President. A quorum was reached as 48 Member States out of 59 were present or represented at the meeting.

The Committee noted that two new Corresponding Members, the United Arab Emirates and Sudan, had joined the OIML in the past year.

The CIML gave final approval to the following publications in China:

- Combined Revision of R 4, R 29, R 45 and R 96 “Vessels for commercial transactions” (now R 138)
- Combined Revision of R 117, R 105 and R 86 “Dynamic measuring systems for liquids other than water, Part 1: Metrological and technical requirements” (new R 117-1)
- New OIML Recommendation “Compressed gaseous fuel measuring systems for vehicles” (now R 139)
New OIML Recommendation “Measuring systems for gaseous fuel” (now R 140)
- Revision of R 21 “Taximeters”
- Revision of R 107-1 “Discontinuous totalizing automatic weighing instruments (totalizing hopper weighers), Part 1: Metrological and technical requirements – Tests, and Part 2: Test report format” (the United States voted “yes”, but indicated that the “automatic zero-tracking feature” is not permitted in the United States)
- Revision of R 35 “Material measures of length for general use, Part 1: Metrological and technical requirements”
- Amendment 2 to D 2 “Legal units of measurement”

The CIML took action on the following publications:

- Recommendation R 24 “Standard one meter bar for verification officers” was re-confirmed
- Document D 4 “Installation and storage conditions for cold water meters” was withdrawn

The CIML approved the following new work projects:

- Project to revise R 79 “Labeling requirements for pre-packaged products”
- Project to revise R 81 “Dynamic measuring devices and systems for cryogenic liquids”
- Project to revise R 66 “Length measuring instruments”
- Project to revise the new OIML Draft Recommendation “Compressed gaseous fuel measuring systems for vehicles” – a new work item in (the newly merged) TC 8/SC 7.

The CIML also approved the following proposals in China:

- Proposal to merge subcommittees TC 8/SC 7 Gas metering and TC 8/SC 8 Gas meters, with the Netherlands as the Secretariat of the combined subcommittee
- Proposal to reallocate the responsibility for Measuring Container Bottles from TC 8 to TC 6

The Committee noted efforts by the “Conformity to Type Work Group.” The WG is in the early stages of developing a project to study the issue of conformity to type on a global basis. The WG conducted two surveys on the subject in the past year, but survey results have thus far proved to be inconclusive as to how OIML should proceed on this. Further study will follow. A few countries have indicated they will be conducting some tests related to this effort, although this is not a formally sanctioned OIML activity.

The Committee also took note of a presentation given by the BIML Director concerning the development of the first draft tables of correspondence between OIML Recommendations and the applicable requirements in the European “Measuring Instruments Directive (MID).” The Bureau plans to continue its cooperation with WELMEC on this issue and requested the European participants of the appropriate TCs/SCs to assist in this effort as soon as a Recommendation reaches DR status.

The CIML presented awards to the following individuals in recognition of their outstanding contribution to legal metrology:

- Mr. Romain Eggermont (Belgium)
- Mr. Gerard Lagauterie (France)
- Mr. Wayne Stiefel (United States)
- Mr. Ali Tukai (Tanzania)
- Mr. Bruno Vaucher (Switzerland)

It also gave Letters of Appreciation to:

- Mr. Peter Brandes (Germany)

- Dr. Charles Ehrlich (United States)
- Mr. Mikhailchenko Vassily Nikolaevich (Kazakhstan)

III. Future OIML Meetings

The 13th OIML Conference and the 43rd CIML Meeting will be held in Sydney, Australia, in October 2008, and the CIML accepted Kenya's invitation to hold the 44th CIML Meeting in 2009.

IV. Regional Legal Metrology Organizations

Meeting of the SIM General Assembly and SIM Legal Metrology Working Group (LMWG)

The SIM General Assembly was held in Ottawa, Canada, in September 2007. Dr. Humberto S. Brandi, Director of Scientific and Industrial Metrology (SIM) at INMETRO Brazil, is the SIM President (elected last year). Marcos Senna (senna@inmetro.rs.gov.br), also of INMETRO in Brazil, was announced as the new Chairman of the SIM Legal Metrology Work Group (LMWG). A meeting of the SIM LMWG was held in March 2008. Topics that were discussed at the meeting included composition of the SIM Legal Metrology Working Group, SIM Legal Metrology directory, survey on training needs and their implementation, events organization costs (translation, mikes, data-show, etc.), events calendar (dates, venue, organization committee, instructors, etc.), budget for 2008-2009, and correspondence/communications in LMWG. The next Annual SIM meeting will be held in the Honduras in September 2008. Please contact Dr. Ambler Thompson at (301) 975-2333 or at ambler@nist.gov for more information.

APLMF Meeting

The 14th APLMF Meeting was held October 18 - 20, 2007, in Zouzhuang, China (just outside of Shanghai). The United States was represented by Dr. Charles Ehrlich, who serves as Chairman of the APLMF Work Group on Mutual Recognition Arrangements, and Mr. Wayne Stiefel. The APLMF conducted three training courses/seminars in 2007, including a train-the-trainer course on the verification of Mechanical Weighing Scales. A workshop on Metrology of Agricultural Products and Foods was held February 7 - 9, 2007, in Chiang Mai, Thailand, and a Seminar on Electricity Meters was held March 19 - 22, 2007, in Shanghai, China. The Peoples Republic of China assumed the Presidency and Secretariat of the APLMF at the conclusion of this meeting. The next meeting of the APLMF will be in late October 2008 in Sydney, Australia, just prior to the 43rd CIML meeting and the 13th OIML Conference.

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