

SUMMARY PROCEEDINGS

Legal Metrology Seminar for the Americas

16–20 July 2000

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Introduction

The Legal Metrology Seminar for the Americas was held in conjunction with the 85th Annual Meeting of the National Conference on Weights and Measures (NCWM) in Richmond, Virginia (USA) from July 16–20, 2000. It served as a follow up on some of the subjects considered at the *Workshop on Legal Metrology for the Americas* (WLMA), held at NIST in June 1998. NIST cosponsored the Seminar with the Members and Associate Members of the NCWM.

The objective was to discuss legal metrology practices and capabilities for type evaluation and approval of measuring instruments and devices and the legal requirements for prepackaged products. The discussions were to take into consideration developments internationally as well as in other regions of the world. Relevant issues would be raised and addressed through both formal presentations and an open dialogue among participants, and, as a consequence, specific opportunities for mutually beneficial actions within the Americas could be identified for future consideration.

Because of the limited scope of the Seminar, a selected number of nations within the Americas were invited to explore further regional cooperation in legal metrology for the benefit of all. Invitations to the Seminar were sent to the following countries: Argentina, Brazil, Canada, Colombia, Costa Rica, Ecuador, El Salvador, Jamaica, Mexico, Peru, Uruguay and Venezuela. All of the countries invited participated except Mexico. Seventeen persons participated in the Seminar representing twelve countries. Another fourteen persons representing US manufacturers and

industry and four from NIST provided specific presentations (see Annex A). In addition to those listed, several other representatives of manufacturers and members of the NCWM participated as observers.

The Seminar participants from countries in the Americas also observed the proceedings of the Annual Meeting of the NCWM, and simultaneous interpretation of the NCWM proceedings was provided in Spanish. At the end of each day's sessions, Mr. Ken Butcher (NIST) discussed the highlights of the NCWM program with the participants. Dr. Richard Kayser, Director of Technology Services at NIST, presented the President's address to the NCWM on Tuesday, July 18, and also gave a brief talk to the Seminar participants during their session on that day's NCWM highlights.

The Seminar began on the morning of Sunday, July 16. A welcoming presentation was given by Mr. Wes Diggs, Chairman of the NCWM.

Dr. Ehrlich facilitated the introduction of participants and then provided an "Overview of the Activities for the Week." He also served as the facilitator of the Seminar in all its sessions.

Overview of the NCWM

Mr. Henry Oppermann, Chief, Weights and Measures Program, NIST, gave an "Overview of the NCWM." He included a brief history of the NCWM and its relationship with NIST and also provided an explanation of the objectives, organization and structure, activities including meetings, membership, and leadership of the NCWM.

OIML activities

Dr. Chappell gave a presentation on "OIML activities". In particular, he provided information about the development within the OIML of a project on a "mutual acceptance arrangement (MAA) on OIML type evaluation" and on another project that would establish an International Quantity (IQ) mark for prepackaged products.

The MAA project is within OIML TC 3/SC 5 *Conformity assessment* for which the United States is the Secretariat, and OIML approval is expected within the next year. It will establish a voluntary framework whereby the responsible bodies in OIML Member States could accept and utilize in their relevant national or regional type approval programs those OIML type evaluation test reports and reports for any supple-

mentary or different tests accompanied by certificates of conformance. It covers the means by which an agreement can be established, implemented and amended and the period of its duration. The MAA procedures also provide for appealing and resolving issues and for terminating agreements. The MAA has three main objectives:

- (a) to establish rules and procedures for fostering mutual confidence in the test results of measuring instruments indicating conformity to OIML requirements;
- (b) to promote the global harmonization, uniform interpretation and implementation of legal requirements for measuring instruments; and
- (c) to promote efficiency in time and cost of official type evaluations and approvals of measuring instruments.

The IQ mark project for prepackaged products is being developed as a part of the revision of OIML R 87 *Net content in prepackages*. Its ultimate objective is to establish an OIML program for facilitating the international trade of prepackaged products. Under the proposed program, packers could apply an IQ mark to their packaged products provided they have in place a quality system and testing laboratory to determine the net content (quantity) in the packaged product. Such packers would have to be authorized and subjected to audits by or on behalf of the national responsible bodies of OIML Member States participating in the OIML program.

Type evaluation

A general session was conducted on "National type evaluation". Presentations were given on the specific practices in the United States, Canada and Brazil by respectively Ms. Tina Butcher of the NIST Weights and Measures Program, Mr. Alan Johnston, President, Measurement Canada, Industry Canada, and Mr. Cezar Luis Leal Moreira da Silva, General Manager, Department of Legal Metrology, INMETRO, Brazil. A general discussion followed in which the other participants provided information about type evaluation in their countries. Most indicated that type evaluations were not carried out in their countries, and some pointed out that instruments were not manufactured locally.

Round table discussions by representatives of manufacturers were presented on type evaluation of the following measuring instruments and devices:

• *Type evaluation of weighing devices in the Americas*

Moderator: Mr. Daryl Tonini, Technical Director, Scale Manufacturers Association, Inc. (SMA) and

- Mr. Darrell Flocken, Manager, International Weights and Measures, Mettler-Toledo, Inc.
- Mr. Quenton Olson, Teda Huntleigh
- Mr. Gary Lameris, Design Engineer, Hobart Corporation

Summary: The panel identified the membership and objectives of the Scale Manufacturers' Association. Members of the panel discussed the requirements for marketing their products in North America, Central and South America, Europe and the Asia-Pacific. The US-Canada mutual recognition on type approvals and the status of accepting the NCWM's National Type Evaluation Program (NTEP) within the various states of the United States were discussed. The presenters highlighted the benefits of developing and maintaining regional forums for weights and measures organizations and establishing cooperation among them to reduce barriers to trade.

• *Type evaluation of metering devices in the Americas*

Moderator: Mr. Jeff Kelly, International Sales Manager, Hoffer Flow Controls Inc.

- Mr. John Skuce, Manager, FMC Management Solutions
- Mr. Robert M. Traettino, Liquid Controls, Inc.
- Mr. Michael Keilty, Micro Motion, Inc.

Summary: The panel provided an explanation of the goals of the Meter Manufacturers' Association that included education, technology issues and uniformity. It was emphasized that the Association is dedicated to the promotion of uniform international metrology regulation.

• *Type evaluation of gasoline dispensers in the Americas*

Moderator: Mr. Richard Tucker, Manager Approvals, Tokheim Corporation

- Mr. Gordon Johnson, Manager Regulatory Affairs, Marconi Commerce Systems, Inc.
- Mr. Mike Gallo, Wayne Division - Dresser Industries

Summary: The panel identified the objectives of the Gas Pump Manufacturers' Association and identified their strategy to achieve global approval of their products. A result of a survey of the current

approval requirements in certain countries in the Americas was presented and discussed. The wish was expressed that NCWM-NTEP certification should be accepted within the region.

Packaging and labeling

On Wednesday, July 19, a general session was conducted on "Net content and labeling requirements for prepackaged products." Presentations were given on the specific practices in the United States and Canada by respectively Mr. Ken BUTcher, Technical Standards Activities Program, NIST, and Mr. Gilles Vinet, Vice President, Program Development, Measurement Canada.

A round table discussion by representatives of the packaging industry was presented on packaging and labeling of products:

• *Package requirements in the Americas*

Moderator: Mr. Christopher B. Guay, Principal, Proctor and Gamble Co.

- Mr. John A. Baker, Senior Manager Merchandise Compliance/Regulations, Pier 1 Imports
- Mr. Richard Davis, Manager, Product Safety and Compliance, Fort James Corporation

Summary: The panel described the variety and global nature of their industry and highlighted the significant disparities that exist in legal labeling requirements among trading partners and that are complicated by differences in quantity units, language, formats and environmental issues. The panel presented three recommendations for the benefit of the industry and consumers for consideration by the Seminar participants: (1) allow metric only net content statements on product labels in the United States, (2) work towards establishing an agreement or guideline to permit the use of a standard label, and (3) seek to establish clear rules that change less frequently and that can be easily adaptable and understood.

Hemispheric issues

The last sessions of the Seminar were held on Thursday, July 20. Prior to these, each participant was requested to submit proposals for a discussion of "Hemispheric issues." The proposals were to be based on the issues raised during the Seminar in the formal presentations and discussions.

C. Ehrlich and S. Chappell led the discussions and the hemispheric issues identified as being important with regard to establishing effective cooperation were:

- providing basic information about legal metrology in each country including:
 - the responsible person and body concerning the regulation of measuring instruments;
 - requirements for manufacturers to sell instruments for legal-for-trade applications; and
 - a database of legal requirements;
- establishing mutual arrangements for developing confidence in weighing and measuring instrumentation sold in various countries;
- conducting periodic forums and training;
- harmonizing regulations for legal metrology including:
 - procedures for testing and verifying instruments (when appropriate); and
 - labeling and net content requirements for pre-packages;
- providing information on the status of the legal metrology infrastructure:
 - laws and regulations;
 - administrative procedures;
 - type evaluation (inspection and tests); and
 - verification;
- using and applying uniform terms and definitions;
- considering cultural and political factors;
- providing materials to convey the importance of legal metrology to political leaders and to the public;
- funding; and
- coordinating work with regional development authorities.

Regional legal metrology activities

S. Chappell gave a presentation on "Regional legal metrology activities". He pointed out the benefits derived from regional cooperation including:

- (a) strengthening trading partners;
- (b) assisting developing countries;
- (c) increasing competence and confidence among participants;
- (d) enhancing market opportunities for competent instrument manufacturers and producers of pre-packaged products; and
- (e) facilitating continued partnership and global influence.

The regional activities covered were:

- (1) the Asia-Pacific Legal Metrology Forum (APLMF);
- (2) European Cooperation in Legal Metrology (WELMEC);
- (3) Southern Africa Development Community Cooperation in Legal Metrology (SADC MEL); and
- (4) the Working Group on Legal Metrology within the Inter-American Metrology System (SIM).

The membership, functions and objectives of these organizations were briefly discussed.

Seminar resolutions

Draft resolutions were presented based on consideration of the presentations and the hemispheric issues discussed, and then C. Ehrlich reviewed them with participants. After editing during the discussions, the following resolutions were unanimously adopted:

- 1) An inquiry should be distributed to develop a listing of the national responsible body for legal measuring instruments in each member state of the Organization of American States (OAS).

Note: the instruments listed initially and addressed in the other resolutions should be non-automatic weighing instruments, meters for measuring liquids, and vehicular fuel dispensers.

- 2) An inquiry should be distributed to OAS member states to determine the metrological and technical requirements that measuring instruments must meet in order for a manufacturer or importer to market those instruments for legal-for-trade applications.
- 3) A Mutual Acceptance Arrangement (MAA) for type evaluation of measuring instruments should be developed for voluntary consideration in the Americas based on the ongoing OIML work on this subject. This MAA is intended to develop confidence among participants that includes those that accept and issue test reports and certificates of conformity and those that only accept test reports and certificates.
- 4) A draft procedure of general requirements for initial verification should be prepared for con-

sideration in harmonizing such procedures within the Americas.

- 5) Training courses should be developed and implemented for the testing of measuring instruments during initial and subsequent verification.
- 6) An inquiry should be distributed to OAS member states requesting copies of (or references to Internet sites containing) their laws on legal metrology.
- 7) The OIML should be requested to give priority to the revision of D 1 *Law on Metrology*.
- 8) An inquiry should be distributed to OAS member states requesting: (a) copies of their packaging and labeling laws and regulations (or references to Internet sites containing this information) and (b) an identification of the responsible bodies.
- 9) Training courses should be developed for implementing packaging and labeling based on the requirements of OIML R 79 *Labeling requirements for prepackaged products* and R 87 *Net content in prepackages*.
- 10) Information should be exchanged among the member states to educate consumers and others in the area of legal metrology.
- 11) These resolutions shall be submitted to the SIM Working Group on "legal metrology" for consideration in implementing them within their scope of their work by December 31, 2000. Consideration shall be given to pursue those items not to be covered by the SIM working group.

SIM Working Group on Legal Metrology

A meeting of the SIM Working Group on Legal Metrology was held after the Seminar, chaired by Mr. Cezar da Silva (Brazil). The other official representatives participating in the Working Group meeting were Mr. Edgar Sanchez (Costa Rica), Mr. Edwin Pineiros (Ecuador), Ms. Ernestine Horsham (Jamaica), Mr. Luis A. Garcia y Santos (Uruguay), and Dr. Charles Ehrlich (USA). All other participants in the Seminar were observers at the meeting. ■