Report of the
NCWM Board of Directors
Kristin Macey, Chair
California

1000 INTRODUCTION

This is the report of the Board of Directors (BOD) (hereinafter referred to as the “Board”) for the 102nd Annual Meeting of the National Conference on Weights and Measures (NCWM). This report is based on the Interim Report offered in the NCWM Publication 16, “Board Report,” testimony heard at public hearings, comments received from the regional weights and measures associations and other parties, the addendum sheets issued at the Annual Meeting, and actions taken by the membership at the voting session of the Annual Meeting. The voting items presented below were adopted as presented when this report was approved.

Table A identifies the agenda and appendix items by reference key, title of item, page number, and the appendices by appendix designations. The acronyms for organizations and technical terms used throughout the agenda are identified in Table B. The first four digits of an item’s reference key are assigned from the Subject Series List. The status of each item contained in the report is designated as one of the following: (D) Developing Item: the Committee determined the item has merit; however, the item was returned to the submitter or other designated party for further development before any action can be taken at the national level; (I) Informational Item: the item is under consideration by the Committee but not proposed for Voting; (V) Voting Item: the Committee is making recommendations requiring a vote by the active members of NCWM; (W) Withdrawn Item: the item has been removed from consideration by the Committee.

Table C provides a summary of the results of the voting on the Committee’s items and the report in its entirety. Some Voting Items are considered on an individual basis; others may be grouped in a consent calendar. Consent calendar items are Voting Items that the Committee has assembled as a single Voting Item during their deliberation after the open hearings on the assumption that the items are without opposition and will not require discussion. The Voting Items that have been grouped into consent calendar items will be listed on the addendum sheets. Prior to adoption of the consent calendar, the Committee entertains any requests from the floor to remove specific items from the consent calendar to be discussed and voted upon individually.

Proposed revisions to the handbook(s) are shown as follows. 1) deleted language is indicated with a bold face font using strikeouts (e.g., this report), and 2) proposed new language is indicated with an underscore bold faced font (e.g., new items). When used in this report the term “weight” means “mass”.

Note: It is the policy to use metric units of measurement in publications; however, recommendations received by NCWM technical committees and regional weights and measures associations have been printed in this publication as submitted. Therefore, the report may contain references to U.S. customary units.

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# Table A

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<td>1400</td>
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<td>1400-1</td>
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### Table B
Glossary of Acronyms and Terms

<table>
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<th>Acronym</th>
<th>Term</th>
<th>Acronym</th>
<th>Term</th>
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<td>AMC</td>
<td>Associate Membership Committee</td>
<td>NTEP</td>
<td>National Type Evaluation Program</td>
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<tr>
<td>CTT</td>
<td>Conformity to Type</td>
<td>OIML</td>
<td>International Organization of Legal Metrology</td>
</tr>
<tr>
<td>ISWM</td>
<td>International Society of Weighing and Measuring</td>
<td>OWM</td>
<td>Office of Weights and Measures</td>
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<tr>
<td>MAA</td>
<td>Mutual Acceptance Arrangement</td>
<td>PDP</td>
<td>Principal Display Panel</td>
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<tr>
<td>L&amp;R</td>
<td>Laws and Regulations Committee</td>
<td>PDC</td>
<td>Professional Development Committee</td>
</tr>
<tr>
<td>NCWM</td>
<td>National Conference on Weights and Measures</td>
<td>VCAP</td>
<td>Verified Conformity Assessment Program</td>
</tr>
<tr>
<td>NIST</td>
<td>National Institute of Standards and Technology</td>
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### Table C
Summary of Voting Results

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<td>Year</td>
<td>Nays</td>
<td>Year</td>
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<tr>
<td>1200-5</td>
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<td></td>
<td>Voice Vote</td>
</tr>
<tr>
<td>1200-6</td>
<td></td>
<td></td>
<td>Voice Vote</td>
</tr>
<tr>
<td>To hear the amendment.</td>
<td></td>
<td></td>
<td>Voice Vote</td>
</tr>
<tr>
<td>1200-6</td>
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<td></td>
<td>Voice Vote</td>
</tr>
<tr>
<td>To amend.</td>
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<td></td>
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<td>1200-6</td>
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<td>Voice Vote</td>
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<tr>
<td>As amended.</td>
<td></td>
<td></td>
<td>Voice Vote</td>
</tr>
<tr>
<td>To Accept the Report</td>
<td></td>
<td></td>
<td>Voice Vote</td>
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1100 ACTIVITY REPORTS

1100-1 MEMBERSHIP

Membership

The chart and graph below show NCWM membership levels as of June 30 of recent years by membership categories. The potential growth remains significant and NCWM continues to enhance programs and services that add value to membership.

<table>
<thead>
<tr>
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<td></td>
<td>Associate</td>
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<td>802</td>
<td>818</td>
<td>842</td>
<td>813</td>
<td>814</td>
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<td></td>
<td>Foreign Associate</td>
<td>87</td>
<td>89</td>
<td>76</td>
<td>64</td>
<td>50</td>
<td>58</td>
<td>62</td>
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<tr>
<td></td>
<td>Total Associate</td>
<td>904</td>
<td>892</td>
<td>882</td>
<td>866</td>
<td>868</td>
<td>900</td>
<td>875</td>
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<td>State Government</td>
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<td>675</td>
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<td>603</td>
<td>558</td>
<td>589</td>
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<td>Local Government</td>
<td>474</td>
<td>492</td>
<td>491</td>
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<td>486</td>
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<td>495</td>
<td>524</td>
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<td>Total Active</td>
<td>1132</td>
<td>1167</td>
<td>1156</td>
<td>1095</td>
<td>1044</td>
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<tr>
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<td>16</td>
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<td></td>
<td>Other Federal Government</td>
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<td>11</td>
<td>9</td>
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<td>11</td>
<td>11</td>
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<tr>
<td></td>
<td>Foreign Government</td>
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<td>2313</td>
<td>2297</td>
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<td>2149</td>
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<td>2180</td>
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The 101st Annual Meeting was held at the Grand Hyatt in downtown Denver, Colorado, with attendance among the highest of the past 10 years and a large number of exhibitors. The Committees successfully moved on many important items on their agendas.

The 2017 Interim Meeting in San Antonio, Texas, was also very successful. For the second year, a special educational session was held on Wednesday morning. This year was a panel discussion on weights and measures in agriculture. Panelists included Ms. Kristin Macey (California), Mr. Ron Hayes (Missouri), Mr. Stephen Benjamin (North Carolina), Mr. Stuart Strnad (Texas), Ms. Stacey Schofield (GIPSA) and Mr. Ken Tichota (Nebraska). The session was very well attended and included very interesting discussions as each presenter delivered messages on impact in a wide range of agriculture market sectors. Because these sessions have been so successful, NCWM will continue to hold Wednesday morning educational sessions at the Interim Meetings. Anyone with ideas for compelling topics may submit them to NCWM for consideration by the Chairman.

Interim Meetings:
- January 21 - 24, 2018 Sirata Beach Resort and Conference Center, St. Petersburg, Florida
- January 13 - 16, 2019 Francis Marion Hotel, Charleston, South Carolina

Annual Meetings:
- July 15 - 19, 2018 103rd Annual Meeting: Hyatt Regency Tulsa Hotel in Tulsa, Oklahoma
- July 14 - 18, 2019 104th Annual Meeting: Hyatt Regency Hotel, Milwaukee, Wisconsin
- July 2020 Location to be determined in the Western Region
The 103rd Annual Meeting will be located at the Hyatt Regency Tulsa Hotel in Tulsa, Oklahoma. This hotel is in the heart of downtown Tulsa’s vibrant business, entertainment, and cultural districts. The hotel overlooks the scenic gardens of the Williams Center Complex and is only eight miles from Tulsa International Airport. Adjoined via skybridge to Williams Towers, our luxury, high-rise Tulsa hotel is adjacent to the famous Tulsa Performing Arts Center and just a few walking blocks from the Cox Convention Center, BOK Center, and more than 50 restaurants and bars. For more information about the 103rd Annual Meeting, go to www.ncwm.net/sems/event_detail/2018-annual-ok or contact Ms. Elisa Stritt, NCWM Office Manager, at (402) 434-4872 or elisa.stritt@ncwm.net.

In January 2019 NCWM Interim Meeting, we will return to the Francis Marion Hotel, Charleston, South Carolina. This location was a favorite of attendees in 2013. It is truly a beautiful hotel situated perfectly for attendees to get the full Charleston experience. For more information about this meeting, contact Ms. Elisa Stritt, NCWM Office Manager, at (402) 434-4872 or elisa.stritt@ncwm.net.

The Board of Directors strives to plan meetings in locations that have reasonably priced airline service and are within government per diem rates. The board also evaluates locations and bids from hotels based on their ability to offer comfortable rooms, quality meeting space, and a variety of nearby entertainment and dining options.

1100-3 PARTICIPATION IN INTERNATIONAL STANDARD SETTING

Dr. Charles Ehrlich, NIST OWM, provided a report during open hearings of the 102nd NCWM Annual Meeting in Pittsburgh, Pennsylvania. An updated report is also included as an appendix to this agenda of the Board of Directors. (See Appendix A.)

See the NTEP Committee Agenda for additional reports on NCWM’s involvement internationally, including the Mutual Recognition Arrangement (MRA) with Measurement Canada and the Mutual Acceptance Arrangement (MAA) with OIML.

1100-4 ASSOCIATE MEMBERSHIP COMMITTEE ACTIVITY

The Associate Membership Committee (AMC) is organized in accordance with the Bylaws of the National Conference on Weights and Measures, Inc. In addition, AMC operates by its own bylaws, which are available on the Committee pages of www.ncwm.net. AMC meets at least two times per year in conjunction with NCWM Interim and Annual Meetings. It consists of between 5 and 10 members who, amongst themselves, elect officers to serve as Chair, Vice-Chair, and Secretary/Treasurer. See Appendix B for information on current members and officers.

AMC has established a reputation of promoting and improving NCWM and has demonstrated its desire to improve understanding of weights and measures activities in public and private sectors.

The NCWM membership dues for Associate members of $90 are $15 higher than that for Active or Advisory members. The extra $15 is not for NCWM, but rather is placed in a separate account referred to as the AMC Fund. While AMC has discretion to allocate the funds in various ways, one means of allocating these funds is to provide grants in support of weights and measures training. The Committee receives applications and awards training grants from the AMC fund in accordance with their “Guidelines for Selection and Approval of Training Funds,” which are posted on the Committee’s webpage on www.ncwm.net. Downloadable applications for training grants and reimbursement forms are also available at this site.

The criteria to receive AMC funds for training are as follows:

1. Funding request forms that are complete, specific, and detailed will receive priority attention for approval. Based on the degree of missing or ambiguous information provided, individual requests may not be given any consideration during the AMC review process pending further clarification.
2. Training requests that benefit higher numbers of participants are generally preferred over those for fewer or single-person benefit. Multi-state training that encourages uniformity will also be given priority consideration.

3. In general, attending meetings such as NCWM Annual Meetings, Interim Meetings, or regional associations meetings will not be considered training.

4. As a lower priority, requests for the purchase of training materials will be considered, but requests for purchase of assets (such as projectors) will not.

5. Reasonable funding for travel and expenses will be considered if it is necessary to acquire an “expert trainer” that would benefit a high number of weights and measures officials. This will be an option when qualified volunteers are not available.

Regulatory agencies are encouraged to make use of these funds to improve training opportunities and the expertise of inspection personnel.

AMC members are also looking for new, perhaps innovative ways to play a more effective role in the NCWM structure to further improve the organization.

Mr. Chris Guay reported on the activity of the AMC including the status of the AMC fund, emphasizing the ways in which the AMC fund is being used to support training and special projects in the advancement of NCWM’s mission. He encouraged additional applications for offsetting costs of training activities. Mr. Kurt Floren of Los Angeles County expressed great appreciation for the funding that the AMC provided to sponsor the travel for trainers. Mr. Brett Gurney provided a report on his experience traveling to Saipan to provide NIST Handbook 133 training to 25 through the AMC fund. CNMI Governor Ralph Torres reported an estimated $3 million in annual losses for consumers due to inaccurate package contents that are imported to the region through the Saipan seaport. Mr. Gurney said the training was a huge success, and he was impressed by the enthusiasm to learn and commitment to their work. He expressed gratitude to the AMC for making this effort possible and for their ongoing efforts to support NCWM’s mission.

The AMC met during the 102nd Annual Meeting on Tuesday evening, July 18, 2017, at 5:00 p.m. All Annual Meeting attendees, especially NCWM Associate members are encouraged to attend AMC Meetings. (See Appendix B for the AMC Meeting Minutes from January 2017.)

1100-5 I TASK GROUPS, SUBCOMMITTEES, STEERING COMMITTEES

Focus Groups, Task Groups, Subcommittees, Steering Committees:
Focus groups, task groups, subcommittees and steering committees are created by appointment by the NCWM Chairman and operate as defined in NCWM Policy 1.5.1. Subgroups Supporting the Work of the Organization. A task group is given a specific charge, and it reports to the appropriate NCWM standing committee. A task group will disband at the completion of its assignment. A subcommittee is charged with ongoing responsibilities in support of a standing committee in a specific field of expertise. A steering committee is charged with unbiased fact-finding that will assist NCWM membership in decision processes for difficult issues. A steering committee will disband upon completion of its specific charge.

NCWM offers resources to these task groups and subcommittees including meeting space at Interim and Annual Meetings, conference calling and web-meeting services, group e-mail services, a dedicated web page for posting andarchiving documents related to their work, and broadcast e-mail services to reach targeted audiences. Additionally, NIST OWM provides technical advisors and web-meeting forums. These tools enable year-around progress of task group and subcommittee work.

Because NCWM task groups and subcommittees are part of the NCWM organizational structure and report directly to its standing committees, their proposals may possibly appear in NCWM Publication 15 without first being vetted through a regional association. Any such proposals are properly vetted through the open hearings of NCWM.
The Promotional Toolkit Task Group reports to the Board of Directors. Among the activities of this group, it has
developed four videos, each showcasing inspection activities in the supermarket, scale inspections, retail motor-fuel
dispenser inspections, and motor fuel quality. Mr. Stephen Benjamin (North Carolina) reported on behalf of the
Promotional Toolkit Task Group that a fifth video was shot recently on package inspections. Suggestions for
additional videos include LPG meter inspections, grain moisture meters, and possibly two videos on metrology; one
focused on the laboratory and the other linking this to the field.

Mr. Alan Walker (Florida) reported that the WIM Task Group will submit an information paper to the regions this fall
in their ongoing effort to put standards in NIST Handbook 44, “Specifications, Tolerances, and Other Technical
Requirements for Weighing and Measuring Devices,” for these types of devices.

A new Safety Task Group is being formed under the leadership of Ms. Julie Quinn of Minnesota to report to the
Professional Development Committee. The task group will identify the common safety hazards encountered by
inspectors and the resources available to mitigate those hazards. The task group will also focus on areas where
resources are lacking and how those resources can be developed. Future reporting of this task group will appear in
the Professional Development Committee report.

**Fuels and Lubricants Subcommittee:**
This group reports to the Laws and Regulations Committee. For more information, contact:

**Chair**  
Dr. Matthew Curran  
Florida Department of Agriculture and Consumer Service  
3125 Conner Boulevard, Building 2  
Mail Stop L2  
Tallahassee, FL 32399-1650  
Phone: (850) 921-1570  
E-mail: matthew.curran@freshfromflorida.com

**Packaging and Labeling Subcommittee:**
The group reports to the Laws and Regulations Committee. For more information, contact:

**Chair**  
Mr. Christopher Guay  
Procter and Gamble Co.  
One Procter and Gamble Plaza  
Cincinnati, OH 45202  
Phone: (513) 983-0530  
Email: guay.cb@pg.com

**Promotional Tool Kit Task Group:**
This group reports to the Board of Directors. For more information, contact:

**Chair**  
Mr. Stephen Benjamin  
North Carolina Department of Agriculture  
Raleigh, NC 27699  
Phone: (919) 707-3225  
Email: steve.benjamin@ncagr.gov
Weigh-in-Motion Vehicle Scale Task Group:
The group reports to the Specifications and Tolerances Committee. For more information, contact:

Co-Chair
Mr. Alan Walker
Florida Bureau of Standards
6260 Buckingham Road
Fort Meyers, FL 33905
Phone: (850) 274-9044
Email: alan.walker@freshfromflorida.com

Co-Chair
Mr. Tim Chesser
Arkansas Bureau of Standards
4608 West 61st Street
Little Rock, AR 72209
Phone: (501) 570-1159
Email: tim.chesser@aspb.ar.gov

Safety Task Group:
This group reports to the Professional Development Committee:

Chair
Ms. Julie Quinn
Minnesota Weights and Measures Division
14305 South Cross Drive
Suite 150
Burnsville, MN 55306
Phone: (651) 5369-1555
E-mail: julie.quinn@state.mn.us

1100-6 I REGIONAL ASSOCIATION ACTIVITIES

Upcoming Regional Association Meetings:

Spring 2017 Meetings

CWMA Annual Meeting
May 22 - 25, 2017
Lincoln, Nebraska
Contact: Sherry Turvey
E-mail: sherry.turvey@kda.ks.gov

NEWMA Annual Meeting
May 15 - 18, 2017
Saratoga Springs, New York
Contact: James Cassidy
E-mail: jcassidy@cambridgema.gov

Fall 2017 Meetings

WWMA Annual Meeting
September 24-28, 2017
Scottsdale, Arizona
Contact: Michelle Wilson
E-mail: mwilson@azda.gov
NEWMA Interim Meeting
October 24-26, 2017
Hyatt Place Old Port
433 Fore Street
Portland, ME 04101
Contact: James Cassidy
E-mail: jcassidy@cambridgema.gov

CWMA Interim Meeting
October 16-18, 2017
Embassy Suites
Two Convention Center Plaza
St. Charles, MO 63303
Contact: Sherry Turvey
E-mail: sherry.turvey@kda.ks.gov

SWMA Annual Meeting
October 8-11, 2017
Wyndham Riverfront Little Rock
2 Riverfront Place
Little Rock, Arkansas 72114
Contact: Tim Chesser
E-mail: tim.chesser@aspb.ar.gov

1200 STRATEGIC PLANNING, POLICIES, AND BYLAWS

1200-1 STRATEGIC PLANNING

The Executive Director presents a Strategic Plan progress report each year at the fall Board Meeting. The Board conducts a strategic planning session every other year in January at its quarterly meeting just prior to the Interim Meeting. The next strategic planning session will be Friday, January 19, 2018, in St. Petersburg, Florida, prior to the NCWM Interim Meeting. Members can review the Strategic Plan online at www.ncwm.net in the “About” section. The Board welcomes member input. Suggestions may be submitted to Executive Director, Don Onwiler, at don.onwiler@ncwm.net.

There are five Goals in the NCWM Strategic Plan:

1. Enhance NCWM as a national and international resource for measurement standards development.
2. Expand the role of NCWM as a resource for state and local weights and measures programs.
3. Promote uniform training for individuals involved in weights and measures.
4. Continue to improve NTEP.
5. Preserve the financial stability of NCWM.

Goal 1: Enhance the National Conference on Weights and Measures as a national and international resource for standards development:
Under this goal, NCWM has recognized the benefit of participating in other organizations where appropriate as a means of drawing on mutual resources toward common goals and heightening awareness of NCWM. This has been very successful in recent years.

Also as part of this goal, NCWM is hoping to increase stakeholder participation in NCWM through outreach efforts.
Goal 2: Expand the role of the National Conference on Weights and Measures as a source of support for state and local weights and measures programs:
NCWM is increasing the number of press releases. This will raise the level of recognition for NCWM and its membership as a resource for expert information in a vast array of topics.

Another part of this goal is to conduct surveys on occasion that benefit our members. In some cases, surveys are used to create benchmarks for comparison with future surveys.

A task group was formed and continues its work to develop a “toolkit” of items that can be used by program administrators to generate awareness and support for their programs. This toolkit is available on the NCWM website at www.ncwm.net/resource/promotional-toolkit. North Carolina took the lead in developing the first video, which is now available. The Board of Directors and the Associate Membership Committee have pledged matching funds toward four additional video productions.

In 2015, NCWM began posting a “Tip of the Month” on its website. Ideas are welcome and should be addressed to Mr. Onwiler at don.onwiler@ncwm.net.

Also new in 2015 is a strategy to develop guidance for retaining personnel and succession planning for positions in state and local weights and measures agencies.

Goal 3: Enhance the technical competence of individuals involved in weights and measures:
The Professional Certification Program has been a high priority under this goal. Mr. Ross Andersen serves as Certification Exam Coordinator working with the Professional Development Committee (PDC) and Subject Matter Experts (SME). Volunteer SMEs are needed in the areas of LP Gas Meters and Price Verification. Anyone interested in assisting with the writing and reviewing exam questions should contact NCWM.

The PDC is also working with Mr. Andersen to develop two types of basic level exams; one type for service agents and the other for inspectors that are completing their initial training. See more discussion on this in the PDC report.

There are several other strategies under Goal 3. Advancement toward those strategies includes a cooperative effort with NIST whereby NCWM uses grant funds from NIST to fund travel for approved trainers from around the country to assist with NIST training events. See the “Training” tab at www.ncwm.net for more information.

Goal 4: Continue to improve the National Type Evaluation Program:
In support of this goal, NCWM surveys regulatory officials every two years to monitor how they access NTEP Certificates of Conformance in the field. The mobile version of the website has benefited them greatly. As technology advances, NCWM will have a better understanding for how it can make Certificates of Conformance more accessible.

Other strategies in Goal 4 are toward training for applying information from NTEP Certificates of Conformance, maintaining viable laboratory support through authorized labs and international agreements, and continued implementation of the Verified Conformity Assessment Program.

Goal 5: Preserve the financial stability of NCWM:
In an attempt to be prepared, the Board has studied potential hazards that could present a burden on NCWM’s financial reserves. This is being balanced with continued efforts to improve services in support of customers and membership. The Board closely monitors the financial health of the organization through monthly reports and formal reviews at each of the Board meetings. An independent audit of the NCWM finances is conducted at the close of each fiscal year.

The next strategic planning session will be held in January 2018 in conjunction with the NCWM Interim Meeting.

NCWM Chair Kristin Macey reported that a recent survey of weights and measures programs has been developed and sent to all states in support of the goals of the strategic plan. This survey is very comprehensive. States should forward the survey invitation to any county or city weights and measures programs within their state. Mr. Steven Harrington provided further explanation of the survey and requested that respondents complete the survey in a timely manner.
manner, rather than wait for the October 1 deadline. Any agency that has not received the survey invitation and
guidance document should contact Executive Director Don Onwiler. For clarification on the actual survey questions,
responders should contact Mr. Steven Harrington. Contact information is provided in the survey guidance document.

Chairman Macey also reported that a team will develop a survey on fuels and lubricants quality inspection programs.

1200-2 IMPROVING THE NCWM STANDARDS DEVELOPMENT PROCESS

Source: NCWM Board of Directors (2016)

Purpose: Assess the NCWM standards development process to determine ways to improve efficiency and participation.

Background/Discussion: At the 100th NCWM Annual Meeting in 2015, several members suggested to the Board of Directors that the standards
development process could be improved upon in ways that would make it move more efficiently and at the same time
encourage broader attendance and participation by stakeholders. Some suggestions included modeling NCWM’s
process to be more like an ANSI process and possibly voting on standards twice per year instead of once.

In January 2016, NCWM Chairman, Jerry Buendel, formed a Charter Team and set out four phases in developing
recommendations to improve the standards development process. In Phase 1, the Charter Team evaluated the
NCWM’s existing process and outlined its strengths and weaknesses and report back to the Board of Directors in July
2016. Phase 2 is planned as the phase in which the team identifies potential changes to existing NCWM processes
and considers their impact on operation of regional associations, NIST, NCWM governance, and others to provide
adequate regulations to users on a timelier basis. Also in Phase 2, the Charter Team will consider other regulation
setting models that may be suitable for NCWM. In Phase 3 the Charter Team will offer two alternatives for
consideration by the Board. The alternatives will include implementation plans and identify barriers and issues. In
Phase 4 the Board will select the changes and begin implementation.

Charter Team Members are:

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization/Membership</th>
<th>Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>John Gaccione, Chair</td>
<td>Westchester County, New York</td>
<td>Northeast Region</td>
</tr>
<tr>
<td>Joe Gomez</td>
<td>New Mexico</td>
<td>Western Region</td>
</tr>
<tr>
<td>Rob DeRubeis</td>
<td>Michigan</td>
<td>Central Region</td>
</tr>
<tr>
<td>Dr. Matthew Curran</td>
<td>Florida</td>
<td>Southern Region</td>
</tr>
<tr>
<td>Eric Golden</td>
<td>Cardinal Scales Mfg.</td>
<td>Associate Membership</td>
</tr>
<tr>
<td>Rob Upright</td>
<td>Seraphin Test Measure</td>
<td>Associate Membership</td>
</tr>
<tr>
<td>Don Onwiler</td>
<td>NCWM</td>
<td></td>
</tr>
<tr>
<td>Carol Hockert</td>
<td>NIST OWM, Retired</td>
<td></td>
</tr>
</tbody>
</table>

NCWM Chairman Kristin Macey attended a meeting of the Charter Team at the 2017 Interim Meeting as it continues
its work in Phase II. She provided a report during open hearings. The team is exploring the possibility of NCWM
having voting sessions at both meetings each year instead of just the July meeting. The team envisions a system where
a new proposal could be submitted to the Southern and Western regions in the fall and to the Central and Northeastern
regions in the spring. The spring and fall meetings would be conducted in a very similar fashion to the current regional
associations’ annual meetings. At both meetings, the Committees will assign a status to each item that will be carried
over to the next NCWM meeting. The Charter Team believes this approach addresses many of the issues that were
identified in the current process that NCWM uses. The discussion is now focused on when adopted standards would
become enforceable and whether they could be published once per year or trice per year. The group will study the
impact on NIST resources and regulatory programs in developing its recommendations. The group will also discuss
possible alternatives and hopes to have a final Phase II report available for the July 2018 Annual Meeting. (See
Appendix C for a copy of the report.)
NCWM Chairman Kristin Macey has asked the team to consider a Lean Six Sigma approach of identifying and implementing specific tools to help the team meet its goals.

Since the existing standards development process and voting system are defined in NCWM Bylaws, there is the probability that any solutions would be brought to a vote of the general NCWM membership in the form of bylaw amendments.

The Board of Directors believes this process should be slow and deliberate so any action taken will be well-conceived and in the best interest of NCWM and its stakeholders. The Board will communicate with membership throughout this process in open hearings, the newsletter, NCWM Publication 15 agendas, and NCWM Publication 16 reports.

Mr. Jerry Buendel reported as newly appointed chairman of the NCWM Charter Team on its activities. The group will hold web meetings with the goal of submitting a report to membership at the 2018 Interim Meeting.

1200-3 I PUBLICATION AND DISTRIBUTION OF NCWM WORK PRODUCTS

Source: Packaging and Labeling Subcommittee (2015)

Purpose: Develop a plan for publication and distribution of new NCWM work products.

Background/Discussion: The NCWM Package and Labeling Subcommittee (PALS) is developing a document that provides principles and recommendations to capture best practices for the many kinds of existing quantity related statements which appear on package Principal Display Panels (PDPs). These are statements, which are present, in addition to the required declaration of net quantity. The practice of adding these expressions has increased significantly over the past decade, and it is recognized that some statements can help consumers make fair value comparisons while others arguably may confuse or mislead consumers.

The principles and recommendations under development by PALS are intended to provide both manufacturers and regulators with a standard and guidance regarding best practices for these kinds of statements to provide increased uniformity and statement integrity. Rather than attempt to create regulations covering these topics, which would require involvement of multiple federal agencies, PALS believes the development of principles and recommendations provides an actionable and reasonable approach for bringing standardization and consistency to this topic.

Mr. Chris Guay explained that this project is a two-step process.

1. Identify and remove any policies and guidelines published in Appendix D of NIST Handbook 130 that are obsolete.

2. Leave remaining items in the handbook, but also reorganize them into a new electronic publication which will expand as new guidance documents or policies are developed.

A focus group within the Board of Directors provided the following recommendations for these guidance documents:

• Create a new tab on the website that would also have the handbooks.

• Duplicate the Interpretations and Guidelines in Section VI of NIST Handbook 130, reorganize them by topic and post them to the website in the same tab.

• Guidance documents should be adopted by a vote of membership under the Board agenda or appropriate standing committee.
- Modify Form 15 to accommodate proposals related to the guidance documents
- In the process, also simplify Form 15.

The reorganized Interpretations and Guidelines from Handbook 130 were presented at the May 2016 Board Meeting. At that meeting, Mr. Ken Butcher, NIST, OWM, explained that these were originally developed to provide leverage for enforcement agencies. The focus group will provide a final review of the new document. Upon completion of that review, the document will be posted to the NCWM Website.

The simplified Form 15 was approved and will be implemented immediately. The form was also modified to include its use in recommending changes to the new guidance document.

**1200-4  I  POLICY 3.2.2. PROCEDURES TO MODIFY HANDBOOKS**

**Source:**
NCWM Board of Directors (2017)

**Purpose:**
Streamline the open hearings by establishing a status for items that have been assigned to a subcommittee, steering committee, or task group for development whereby the standing committee will refrain from taking comments until it receives recommendations that can be presented for discussion.

**Item under Consideration:**
Amend NCWM Policy 3.2.2. Procedures to Modify Handbooks as follows:

**G. Interim Meeting**

1. The Committee shall hold public hearings at the Interim Meeting for the purpose of discussing and taking comments on all agenda items.

2. Upon request, the Committee will provide the opportunity for presentations by government officials, industry representatives, consumer groups, or other interested parties during the Interim Meeting. Requests to make presentations must be received by the Committee Chairman or Technical Advisor at least two weeks prior to the start of the meetings.

**H. Interim Meeting Report**

1. Items under consideration by the Committee, and about which the Committee offers comments or recommendations to NCWM to act upon during the Annual Meeting, will be included in the Committee’s Interim Report published in the Annual Meeting Program and Committee Reports (NCWM Publication 16).

2. The Annual Meeting Program and Committee Reports will be prepared and distributed to Conference members approximately three months prior to the NCWM Annual Meeting.

**I. Classifications for Agenda Items**

At the Interim Meeting, the Committee can classify proposals in one of three ways as:

1. “**Voting**” – These are items the Committee believes are fully developed and ready for final consideration of the voting membership. Each item has either received majority support from the Committee or the Committee has reached agreement that it is ready for voting status to let NCWM membership decide. The Committee has the ability to remove items from the voting agenda at the Annual Meeting by changing the status prior to a vote of the NCWM membership. The Committee may amend voting items during the course of the Annual Meeting based on additional information received following the Interim
Meeting and testimony received at the Annual Meeting. These items may also be amended by the voting membership during the voting session of the Annual Meeting following the procedures outlined in the NCWM Bylaws; or

2. “Informational” – These items are deemed by the Committee to have merit. They typically contain a proposal to address the issue at hand and a meaningful background discussion for the proposal. However, the Committee wants to allow more time for review by stakeholders and possibly further development for addressing concerns. The Committee has taken the responsibility for any added development of Informational items. For particularly difficult items, the Committee may assign the item to an existing Subcommittee under its charge or request that the NCWM Chair appoint a special task group that reports to the Committee. At the Annual Meeting, the Committee may change the status of the items but not to Voting status, because the item has not been published as such in advance of the meeting; or

3. “Developing” – These items are deemed by the Committee to have merit, but are found to be lacking enough information for full consideration. Typically, the item will have a good explanation of the issue, but a clear proposal has yet to be developed. By assigning Developing status, the Committee has sent the item back to the source for or assigned it to some other entity outside the scope of the Committee with the responsibility of further development. The Committee Report will provide the source with a clear indication of what is necessary to move the item forward for full consideration. The item will be carried in the Committee agenda in bulletin board fashion with contact information for the person or organization that is responsible for the development. Since the Committee is not required to receive testimony on developing items, this status should be carefully implemented so as not to weaken the standards development process; or

4. “Assigned” – These items are deemed by the Committee to have merit, but are found to need further development before being considered by the Committee. Typically, the item will have a good explanation of the issue, but a clear proposal has yet to be developed and the Committee thinks further development should be conducted by a subcommittee, steering committee or task group. The Committee Report will provide the designated group with clear direction and expectations. The item will be carried in the Committee agenda in bulletin board fashion and will include contact information for the chairperson of the responsible subcommittee, steering committee, or task group. Since the item is being developed by a designated group outside of the Committee, the Committee will not receive testimony during open hearings on assigned items; however, a representative of the responsible group will provide a brief progress report on the development efforts. An assigned item will be returned to the Committee when the responsible group feels the item is fully developed or no further progress can be made in developing the item. A Committee may revoke the assigned status at any time.

5. “Withdrawn” – These are items that the Committee has found to be without merit. The Committee's determination to withdraw should not be based on the Committee's opinion alone but on the input received from stakeholders. The Committee's report will contain an explanation for the withdrawal of the item. Once an item appears in NCWM Publication 16 as Withdrawn, the status of that item may not be amended. The item may be reintroduced through the regional associations for consideration as a new item.

(Amended 2013)

Background/Discussion:
In recent years, open hearings have exceeded the allotted time. Much of the testimony during these open hearings is being spent on items that are still under development by a subcommittee or task group. The Board of Directors believes that debates and testimony during open hearings should be spent on items where the “item under consideration” has been developed and is being presented for action by the standing committee and NCWM membership.
Under this proposal, the standing committee agenda would identify those items that are assigned by the committee to a subcommittee, steering committee, or task group with the status “Assigned.” Those items with this status will not be discussed in open hearings other than an optional update report from the chairman of the group that is developing a recommendation. When the Committee receives a recommendation to present as the “Item under Consideration,” the Committee would change the status to “Informational” or “Voting” to allow for the normal vetting through open hearings.

Mr. Chuck Corr of ADM an at-large officer on the Board of Directors provided a presentation at the 2017 Interim Meeting explaining this proposed additional agenda item status. The item prompted several comments regarding various elements of the current process including the following.

- Consider a deadline for Developing Items to be developed so they don’t linger too long on agendas.
- Create a forum separate from the Committee agendas to discuss Developing Items.
- Bring back the Online Position Forum, but as a “Discussion Forum.”
- Put the assigned developer of an item in control of the content for that item in NCWM Publications 15 and 16.
- Do not bring Developing Items up for open hearing discussions until they are developed.
- Provide an example of a properly developed item that is ready for consideration.

Mr. Corr explained, the establishment of an “Assigned” status would focus discussion of those items to the appropriate venue such as a subcommittee or task group until they are ready for consideration by the larger body in open hearings. All activities would provide full transparency.

The following is an example of how “Assigned” items would be handled in NCWM Publication 15 and 16 Committee agendas. This example is representative of the Laws and Regulations Committee.

Sample Agenda Index:

2801 FUELS AND LUBRICANTS SUBCOMMITTEE ACTIVITY REPORTS........................................49
  2801-1 A Uniform Regulation for the Method of Sale of Commodities, Section 2.XX. Automatic Transmission Fluid.................................................................49

2802 PACKAGING AND LABELING SUBCOMMITTEE ACTIVITY REPORTS..........................52
  2802-1 A Uniform Packaging and Labeling Regulation, Section 13.1. Introductory Offers ...............49

Sample Agenda Item:

2801 FUELS AND LUBRICANTS SUBCOMMITTEE ACTIVITY REPORTS

NOTE: The following items have been assigned to the Fuels and Lubricants Subcommittee for development. The Chair or other representative of the subcommittee will provide an update report on these items during open hearings. See Appendix A, page XX for additional background and discussion on these items.
2801-1 A Uniform Regulation for the Method of Sale of Commodities, Section 2.XX. Automatic Transmission Fluids

Source:
American Petroleum Institute (2016)

Purpose:
Define how transmission fluids shall be identified in the marketplace on delivery documents and invoices and receipts from service.

Item under Consideration:
This item is being developed by the Fuels and Lubricants Subcommittee.

Background/Discussion:
See Appendix A, Page XX

1200-5 V BYLAWS, ARTICLE VI – DIRECTORS

(This Item was Adopted.)

Source:
NCWM Board of Directors (2017)

Purpose:
Increase the term of office of the Treasurer on the Board of Directors from one year to three years to ensure better continuity and expertise.

Item under Consideration:
Amend the NCWM Bylaws as follows;

Article VI – Directors

Section 1 – Directors

The Directors of the National Conference on Weights and Measures, Inc., shall be:

An 11-member Board of Directors consisting of:

1. Chairman,
2. Past-Chairman,
3. Chairman-Elect,
4. Treasurer, and
5. Seven other Directors: Four directors to be elected from the active membership, the Nominating Committee will endeavor, where practical, to nominate one director from each of the four regional Conferences, (Central, Northeastern, Southern and Western: the "Active Directors"); one director from the associate membership (the "Associate Director"); and two at-large Directors, (the "at-large Directors") who may be elected from the Active, Advisory, or Associate membership who are eligible to serve.

The treasurer and the active, associate and at-large directors may be consecutively re-elected, however, the consecutive reelection of a Chairman and Chairman-Elect is prohibited. Should the Chairman-Elect for
Section 3 - Nominations and Elections

D. Terms of Office

1. The Chairman, Chairman-Elect, Past Chairman, and Treasurer, shall serve for a term of one year or until their successors are respectively elected or appointed and qualified. The Treasurer may be re-elected. The consecutive reelection of a Chairman and Chairman-Elect is prohibited; however, the eight seven other directors may be consecutively re-elected. The eight seven other directors shall serve for five-year terms; except for the Associate Director and Treasurer, who shall serve a three-year term. Elections shall take place at such intervals as are necessary to retain an 11-member Board at all times, except that vacancies shall be filled under Section 3, paragraph E, below.

2. All Directors shall take office immediately following the close of the Annual Meeting at which they were elected.

3. Should the Chairman-Elect for any reason be unable or unwilling to be installed as Chairman, his/her successor shall be elected by the Board of Directors. In this event, the newly elected Chairman-Elect shall be installed as Chairman.

E. Filling Vacancies

In case of a vacancy in any of the elective offices, the Chairman (or, if the vacancy is for the Chairman’s position, the immediate Past-Chairman) shall nominate a replacement, and that person shall be appointed to fill the office if a majority of the members of the Board approve the nomination.

Background/Discussion:
There was a consensus of the officers of the Board of Directors at the July 2016 meeting to increase the term of office for the Treasurer from one year to three years. This increase would allow the Treasurer to develop a deeper understanding of the financial affairs of the Conference. No comments were received at the 2017 Interim Meeting.

1200-6 V BYLAWS, ARTICLE X – VOTING SYSTEM

(This Item was Adopted)

Source:
NCWM Board of Directors (2017)

Purpose:
Replace the terms “official” and “unofficial” with clearer terminology to describe whether a vote has met the required number of votes to pass or fail within each house.

Item under Consideration:
Amend the NCWM Bylaws as follows:

Article I - Voting System
Section 4 - Minimum Votes Needed for an Official Vote of a in each House on Technical Items

A. House of State Representatives

A minimum of 27 votes in favor of, or 27 votes in opposition to, an issue must be cast for an item to pass or fail in that house, the vote to be considered official. If 54 or more votes are cast in the House of State Representatives, a simple majority of the total votes is required to pass (or defeat) the issue. Should a tie vote occur, with 27 or more votes each in favor and opposition, the item neither passes nor fails and shall be addressed as set forth in Section 9A (C).

B. House of Delegates

A minimum of 27 votes in favor of, or 27 votes in opposition to, an issue must be cast for an item to pass or fail in that house, the vote to be considered official. If 54 total or more votes are cast in the House of Delegates, a simple majority rules. If the minimum 27 votes in support or opposition are not cast, the issue is decided by the vote of the House of State Representatives. If there is a tie vote with 27 or more votes each in favor and opposition, the item neither passes nor fails and shall be addressed as set forth in Section 9A (C).

Section 9A -Voting – Technical Issues

Only members of the House of Delegates and the House of State Representatives will vote on the technical questions before the Corporation. At the conclusion of debate (if authorized) on a motion, there shall be a call for the vote by voice vote, a show of hands, standing, or electronic count. The requirements for an official vote (minimum votes) in a house are found in Article X, Section 4.

A. Motion Accepted If:

1. the majority of the House of State Representatives casts an official vote, the required minimum votes in favor of the item

   And

2. the majority of the House of Delegates casts an official vote, the minimum required votes in favor of the item or the House of Delegates fails to cast an official vote, the minimum required votes in opposition to the item.

C. Motion Rejected If:

1. the majority of the House of State Representatives casts an official vote, the minimum required votes in opposition of the item

   And

2. the majority of the House of Delegates casts an official vote, the minimum required votes in opposition of the item or the House of Delegates fails to cast an official vote, the minimum required votes in opposition to the item.

D. Issue Returned to Committee for Future Consideration if:

1. The House of Representatives fails to cast an official vote, the minimum required votes.
2. An official vote is cast in each house but one house votes yea and the other house votes nay.

Or

3. Either the House of Representatives or House of Delegates casts a tie vote of 27 votes or more each in favor and in opposition to the item.

The issue cannot be recalled for another vote at the same Annual Meeting.

**Voting on Technical Issues: The Two-House System**

<table>
<thead>
<tr>
<th>House of Delegates</th>
<th>Majority Vote Yea</th>
<th>Majority Vote Nay</th>
<th>Tie Vote</th>
</tr>
</thead>
<tbody>
<tr>
<td>Official Vote (≥ 27 Votes)</td>
<td>Motion Accepted</td>
<td>Motion Accepted</td>
<td>Returned to Committee</td>
</tr>
<tr>
<td>Unofficial Vote (&lt; 27 Votes)</td>
<td>Returned to Committee</td>
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<tr>
<td>Official Vote (≥ 27 Votes)</td>
<td>Motion Accepted</td>
<td>Motion Accepted</td>
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<tr>
<td>Unofficial Vote (&lt; 27 Votes)</td>
<td>Returned to Committee</td>
<td>Returned to Committee</td>
<td>Returned to Committee</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>House of State Representatives</th>
<th>Majority Vote Yea</th>
<th>Majority Vote Nay</th>
<th>Tie Vote</th>
</tr>
</thead>
<tbody>
<tr>
<td>Official Vote (≥ 27 Votes)</td>
<td>Returned to Committee</td>
<td>Motion Rejected</td>
<td>Returned to Committee</td>
</tr>
<tr>
<td>Unofficial Vote (&lt; 27 Votes)</td>
<td>Returned to Committee</td>
<td>Returned to Committee</td>
<td>Returned to Committee</td>
</tr>
<tr>
<td>Official Vote (≥ 27 Votes)</td>
<td>Returned to Committee</td>
<td>Motion Rejected</td>
<td>Returned to Committee</td>
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<tr>
<td>Unofficial Vote (&lt; 27 Votes)</td>
<td>Returned to Committee</td>
<td>Returned to Committee</td>
<td>Returned to Committee</td>
</tr>
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</table>

**Background/Discussion:**

Presently, the bylaws define an “official” vote as one that has met the specified minimum number of votes within a house. In 2015, a table was incorporated into Article X to help clarify action taken on issues depending on whether the “official” vote has been achieved. When this table was developed, the term “unofficial” was introduced to describe any house vote that did not meet the minimum number of required votes for an “official” vote. It has been mentioned however, that those votes are still official votes, even if the minimum votes are not cast.
The Board of Directors suggests removing the terms “official” and “unofficial.” Instead, the bylaws would simply define the number of votes needed in each house and the outcome of the item based on those requirements. This proposal does not change in any way the interpretation of the bylaws or how they are applied.

Based on comments received in open hearings, the proposal is modified as follows to provide further clarity and to provide editorial correction to the lettering.

The words “majority of the” were added to Section 9A, Parts A. 1., A. 2., B.1., and B. 2.

The words, “in opposition to the item” were added to the end of Section 9A, Parts A. 2. and B. 2.

Clean copy of the voting table as proposed:

<table>
<thead>
<tr>
<th>Voting on Technical Issues: The Two-House System</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>House of Delegates</strong></td>
</tr>
<tr>
<td>Majority Vote Yea</td>
</tr>
<tr>
<td>≥ 27 Votes</td>
</tr>
<tr>
<td>≤ 27 Votes</td>
</tr>
<tr>
<td>Majority Vote Nay</td>
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<tr>
<td>≤ 27 Votes</td>
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<tr>
<td>Tie Vote</td>
</tr>
<tr>
<td>≥ 27 Votes</td>
</tr>
<tr>
<td>≤ 27 Votes</td>
</tr>
</tbody>
</table>

| **House of State Representatives**               |
| Majority Vote Yea                               |
| ≥ 27 Votes                                      |
| ≤ 27 Votes                                      |
| Majority Vote Nay                              |
| ≥ 27 Votes                                      |
| ≤ 27 Votes                                      |
| Tie Vote                                        |
| ≥ 27 Votes                                      |
| ≤ 27 Votes                                      |

1300 FINANCIAL

1300-1 FINANCIAL REPORT

NCWM operates on a fiscal year of October 1 through September 30. Budgets are set to be conservative on projected revenues and realistic on anticipated expenses. In 2017, the Board implemented a 10-year forecasting method to assist in the budgeting process.

The Board of Directors continues to monitor its ability to fully implement contingency plans based on potential costs compared to reserve funds.
Treasurer Ray Johnson reported that a $100,000 Certificate of Deposit recently matured and was combined with a $12,000 cash balance in the Charles Schwab account to invest in a new $112,000, five-year CD.

The following is the balance sheet as of June 30, 2017, in comparison with the same time the previous year. Assets in the balance sheet were inflated by $20,668.70 in 2016 by the NIST Training Initiative Grant that was awarded to NCWM. Those funds have been depleted, and the new grant will reimburse NCWM as funds are spent. This will provide a more stable representation of NCWM’s actual assets. Assets are also inflated by the Associate Membership Fund. These funds are accumulated through the additional $15 dues paid by Associate Members and are spent at the discretion of the Associate Membership Committee in accordance with Committee Bylaws.

<table>
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<tr>
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<td>Total Checking/Savings</td>
<td>$1,575,656.56</td>
<td>$1,537,147.46</td>
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<td>Accounts Receivable</td>
<td>$38.00</td>
<td>$23.00</td>
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<tr>
<td>Other Current Assets</td>
<td>$72,872.70</td>
<td>$92,360.30</td>
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<td>Other Assets</td>
<td>$17,818.54</td>
<td>$15,436.99</td>
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<td><strong>TOTAL ASSETS</strong></td>
<td>$1,666,385.80</td>
<td>$1,644,967.75</td>
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<tr>
<th>LIABILITIES &amp; EQUITY</th>
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<tbody>
<tr>
<td>Current Liabilities</td>
<td>$43,406.48</td>
<td>$39,423.45</td>
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<tr>
<td><strong>Total Liabilities</strong></td>
<td>$43,406.48</td>
<td>$39,423.45</td>
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</table>

| Equity                              |                |                |
| Designated - Associate Membership   | $25,517.49     | $29,542.91     |
| Designated – NIST Training Grant   | $0             | $20,668.70     |
| Unrestricted Net Assets            | $1,418,856.63  | $1,375,059.54  |
| Net Income                         | $178,605.20    | $180,273.15    |
| **Total Equity**                   | $1,622,979.32  | $1,605,544.30  |
| **TOTAL LIABILITIES & EQUITY**     | $1,666,385.80  | $1,644,967.75  |

1400 OTHER ITEMS

1400-1 ELECTRONIC VOTING SYSTEM

**Source:**
NCWM Board of Directors (2017)

**Purpose:**
Implement a modern, fast, and reliable voting system that will improve efficiency of voting sessions.
Background/Discussion:
NCWM purchased a wireless electronic voting system in 2016. It was used at the 2016 Annual Meeting for the first time. Unfortunately, the wireless communication was slower than expected, raising concerns for whether votes were being received. After voting on several items in this manner, the voting assembly reverted back to manually counting raised state placards and hands.

After reviewing the circumstances of this first attempt, several hardware issues were identified that would have delayed communication. Additionally, there appeared to be some user issues, partially from experimentation by some voters who wanted to see how the vote tally responds and partially from incorrect use of the keypads. The latter can be overcome with simple education in how to interpret information provided to the voter through the keypad display.

Following the 2016 Annual Meeting, the manufacturer of the voting system provided several updates to the software to improve communication speed between the keypads and the computer. Several hardware improvements were also made to increase the speed of communication between the keypads and the computer. Upon further testing, the system appeared to be more responsive. The voting process will also be modified by removing the time limit to vote. This will allow each voter to receive confirmation from the system that their vote has been registered.

The attendees of the 2017 Interim Meeting attempted to run tests of the system to see if the concerns were alleviated. Unfortunately, there was a software disconnect between the data collection software and the slide presentation software. The cause of this disconnect was identified and further testing was conducted at the CWMA Annual Meeting in May 2017.

The voting system was successfully implemented at the 102nd Annual Meeting and will be used at future Annual Meetings.
Appendix A

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

National Institute of Standards and Technology (NIST), Office of Weights and Measures (OWM)

INTRODUCTION

The OWM at NIST is responsible for coordinating United States participation in OIML and other international legal metrology organizations. Learn more about OIML at www.oiml.org and about NIST, OWM at www.nist.gov/owm.

Dr. Charles Ehrlich, Program Leader of the International Legal Metrology Program, can be contacted at (301) 975-4834 by fax at (301) 975-8091 or charles.ehrlich@nist.gov.

Note: OIML publications are available electronically without cost at www.oiml.org.

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<th>Title of Content</th>
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<td>Environmental Conditions (Netherlands)</td>
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<td>4</td>
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<td>Dynamic Volume and Mass Measurement for Liquids Other Than Water (United States and Germany)</td>
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<td>Measurement of Cryogenic Liquids (United States)</td>
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<td>Instruments for Measuring Mass (United States)</td>
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### Table B
**Glossary of Acronyms and Terms**

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<th>Acronym</th>
<th>Term</th>
<th>Acronym</th>
<th>Term</th>
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<tbody>
<tr>
<td>ANSI</td>
<td>American National Standards Institute</td>
<td>ISO</td>
<td>International Standardization Organization</td>
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<tr>
<td>APEC</td>
<td>Asia-Pacific Economic Cooperation</td>
<td>IWG</td>
<td>International Work Group</td>
</tr>
<tr>
<td>APLMF</td>
<td>Asia-Pacific Legal Metrology Forum</td>
<td>LMWG</td>
<td>Legal Metrology Work Group</td>
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<tr>
<td>APMP</td>
<td>Asia-Pacific Metrology Program</td>
<td>MAA</td>
<td>Mutual Acceptance Agreement</td>
</tr>
<tr>
<td>B</td>
<td>Basic Publication</td>
<td>MTL</td>
<td>Manufacturers’ Testing Laboratory</td>
</tr>
<tr>
<td>BIML</td>
<td>International Bureau of Legal Metrology</td>
<td>NIST</td>
<td>National Institute of Standards and Technology</td>
</tr>
<tr>
<td>BIPM</td>
<td>International Bureau of Weights and Measures</td>
<td>NTEP</td>
<td>National Type Evaluation Program</td>
</tr>
<tr>
<td>CD</td>
<td>Committee Draft(^1)</td>
<td>OIML</td>
<td>International Organization of Legal Metrology</td>
</tr>
<tr>
<td>CIML</td>
<td>International Committee of Legal Metrology</td>
<td>OWM</td>
<td>Office of Weights and Measures</td>
</tr>
<tr>
<td>CTT</td>
<td>Conformity to Type</td>
<td>PG</td>
<td>Project Group</td>
</tr>
<tr>
<td>D</td>
<td>Document</td>
<td>R</td>
<td>Recommendation</td>
</tr>
<tr>
<td>DD</td>
<td>Draft Document(^2)</td>
<td>SC</td>
<td>Technical Subcommittee</td>
</tr>
<tr>
<td>DoMC</td>
<td>Declaration of Mutual Confidence</td>
<td>SIM</td>
<td>Inter-American Metrology System</td>
</tr>
<tr>
<td>DR</td>
<td>Draft Recommendation(^2)</td>
<td>TC</td>
<td>Technical Committee</td>
</tr>
<tr>
<td>DV</td>
<td>Draft Vocabulary(^3)</td>
<td>USNWG</td>
<td>U.S. National Work Group</td>
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<tr>
<td>GA</td>
<td>General Assembly</td>
<td>VIM</td>
<td>International Vocabulary of Metrology</td>
</tr>
<tr>
<td>IEC</td>
<td>International Electrotechnical</td>
<td>VIML</td>
<td>International Vocabulary of Legal</td>
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<td>Commission</td>
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<tr>
<td>IQ Mark</td>
<td>International Quantity Mark</td>
<td>WD</td>
<td>Working Draft(^3)</td>
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</table>

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

\(^2\) DD, DR, and DV: a draft document approved at the level of the technical committee, subcommittee or project group concerned and sent to BIML for approval by CIML.

\(^3\) WD: working draft that precedes the development of a CD; in this document, successive drafts are number 1 WD, 2 WD, etc.
I. REPORT ON THE ACTIVITIES OF THE OIML TECHNICAL COMMITTEES

This section reports on recent activities and the status of work in the OIML Technical Committees (TCs), Technical Subcommittees (SCs), and Project Groups (PGs) of specific interest to members of the National Conference on Weights and Measures (NCWM). Schedules of future activities of the TC/SC Secretariats, PG Conveners, the U.S. National Work Groups (USNWGs), and the International Work Groups (IWGs) and Project Groups of the TCs and SCs are also included.

TC 3/SC 5 Conformity Assessment (United States)
The OIML Basic Publications B 3:2011 Certificate System and B 10:2012 Mutual Acceptance Arrangement (MAA) are the core documents underpinning the OIML Certificate System. An amendment to B 10 was approved by the CImL that allows for the voluntary use of test data from manufacturer’s test laboratories (MTLs) under specially supervised conditions (NCWM has adopted the position that it will not accept test data under the MAA that was obtained from MTLs).

The OIML Ad Hoc Working Group (AHWG) on the OIML Certificate System developed a proposal that will significantly change the way that the OIML Certificate System is structured, managed, and operated. This proposal includes the creation of an OIML Certification System (called OIML-CS) that would be managed by a Management Committee instead of by the BIML. Advisory Committees to the Management Committee are also planned. The AHWG put this proposal forward to the CIML at its meeting in Arachon, France, in October 2015, where it was approved. The AHWG was then disbanded, and a new certification system project group (CSPG) was established that prepared a draft of a proposed new framework document establishing the OIML-CS, for voting on at the 2016 CIML Meeting (in Strasbourg, France). Prior to this CIML Meeting, a meeting of the CSPG was held (in Teddington, England) to resolve issues with the framework document, which permitted the framework document to be approved at the 2016 CIML Meeting. Also, approved at the 2016 CIML Meeting was the creation of a Preliminary Management Committee (PrMC), also Chaired by Dr. Schwartz. Draft Operational Documents for the OIML-CS were discussed at a meeting of the PrMC in February 2017 in Berlin, Germany. A second meeting of the PrMC was held in Shanghai, China, in June 2017 so that all the OIML-CS documents could be approved at the 2017 CIML Meeting, with implementation of the OIML-CS anticipated to begin in January 2018. Until the new OIML-CS is fully implemented, the current Basic and MAA systems will continue and will be supported by the BIML.

A meeting of the CPR was held in Shanghai, China, in June 2017; the United States was represented at the meeting by Mr. Darrell Flocken (NCWM NTEP) and Dr. Charles Ehrlich (NIST OWM).

A new OIML Guide OIML G 19 entitled The Role of Measurement Uncertainty in Conformity Assessment Decisions in Legal Metrology was published in January 2017. This document was published as an OIML Guide, rather than a Document, to give the user community, the necessary time to consider how to incorporate it into OIML Recommendations. If there are any questions, or for more information, please contact Dr. Ehrlich at (301) 975-4834 or charles.ehrlich@nist.gov. Please also see the MAA section in the National Type Evaluation Program (NTEP) Committee Report of this publication.

TC 5/SC 1 Environmental Conditions (Netherlands)
OIML D 11, General requirements for measuring instruments - Environmental conditions has been published. This is a very important document in the OIML system and is used by all the OIML TCs as a general reference for technical and testing requirements on all measuring instruments. Highlights of this recent revision cycle include: expanding the terminology section, updating several testing sections to reflect the latest International Electrotechnical Commission (IEC) reference standards, and including a new environmental class (“E3”) for a non-mains local source of electrical power supply. Please contact Mr. Ralph Richter at (301) 975-3997 or ralph.richter@nist.gov, if you would like additional information on TC 5/SC 1 or OIML D 11.
TC 5/SC 2 Software (Germany and BIML)
A new project to revise OIML D 31, General Requirements for Software-controlled Measuring Instruments was approved in October 2016. This document serves as guidance for software requirements in International Recommendations by OIML TCs. The United States will participate in the technical work on this project, which will expand the scope of the document to include software verification. A new Working Draft (WD) has been distributed by the convener with comments requested by June 2017. Please contact Dr. Ambler Thompson at (301) 975-2333 or if you would like to discuss OIML software efforts.

TC 6 Prepackaged Products (South Africa)
A new publication entitled “Guidance for Defining the System Requirements for a Certification System for Prepackages” will be finalized and submitted to the CIML for adoption in 2017. This guideline was developed to assist countries in establishing reciprocal agreements to accept the test results on prepackaged goods.

A new edition of OIML Recommendation R 87 “Quantity of Product in Prepackages” (equivalent to NIST Handbook 133, “Checking the Net Contents of Packaged Goods”) has been published on the OIML website. This new edition includes a comprehensive overhaul of the statistical requirements and sampling plans (the revisions were prepared by Mr. Blaza Toman of NIST’s Statistical Engineering Division) to correct errors discovered by a statistician from Asia a few years ago. The United States and several other countries were successful in opposing efforts by several European Union countries to add drained weight test procedures and packaging requirements utilized in that region to the new edition of R 87. Those procedures were rejected primarily because they failed to recognize drained weight test methods that have been in use around the world for decades, which have been adopted by Codex Alimentarius. The preliminary ballot of R 87 passed in September 2015. A sufficient majority of CIML Members supported the Draft Recommendation, but it was decided that two issues concerning sample sizes and the statistical requirements for sampling needed to be resolved before the Final Draft Recommendation could be submitted to the CIML for final approval. The project group held a meeting in Rio de Janeiro, Brazil, in January 2016 and resolved the statistical issues. The CIML approved the final draft of R 87 in October 2016.

OIML R 79, Labeling Requirements for Prepackaged Products received final CIML approval in October 2015 and has now been published. The United States voted “yes” on both the CIML preliminary ballot in June 2015 and the final Draft Recommendation.

For more information or to participate on the activities of this committee, please contact Mr. Ken Butcher at (301) 975-4859 or kbutcher@nist.gov.

TC 8 Measurement of Quantities of Fluids (Japan)
Based on responses received on a questionnaire concerning several projects in TC 8, Japan decided to cancel a project to combine and revise R 40, R 41 and R 43 into a single standard entitled Standard volumetric measures. Japan also decided to delay the project to revise R 63 Petroleum Measurement Tables (1994) until the corresponding ISO standard is next revised. The Secretariat plans to start the revision of R 119, Pipe Provers for Testing of Measuring Systems for Liquids Other Than Water (1996) – this document is important for other OIML Recommendations involving liquid measurement. Please contact Mr. Ralph Richter at (301) 975-3997 or ralph.richter@nist.gov, if you would like copies of any of these documents or to participate in the project to revise R 119.

TC 8/SC 1 Static Volume and Mass Measurement (United States and Netherlands)
The United States and The Netherlands became the new Co-Secretariats of TC 8/SC 1 in June 2016 after Germany announced that it wished to step down as Secretariat. The United States chairs the Project Group that drafted new sections of OIML 71 Fixed Storage Tanks and R 85 Automatic Level Gages for Measuring the Level of Liquid in Fixed Storage Tanks to add specific requirements for specialized tanks. The 1CDs of R 71 and R 85 were distributed for project group comment in March 2016. The 2CD of OIML R 80-2, Road and Rail Tankers, Test Methods was distributed in April 2016. A meeting to discuss all these TC 8/SC 1 projects was held in June 2016 in Gothenburg, Sweden. The Subcommittee also discussed the importance of revising OIML R 125, Measuring Systems for the Mass of Liquids in Tanks, at the meeting in Sweden, and a new project to revise R 125 was approved by the CIML in October 2016. Please contact Mr. Ralph Richter at (301) 975-3997 or 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)
This subcommittee continues the effort on a new project for the “immediate revision” of all three parts of R 117, Dynamic Measuring Systems for Liquids Other Than Water. This new project will fully harmonize all three parts and add new annexes to R 117 for several complete measuring systems, including: (a) measuring systems for the unloading of ships' tanks and for rail and road tankers using an intermediate tank, (b) measuring systems for liquefied gases under pressure (other than LPG dispensers), (c) measuring systems for bunker fuel, and (d) measuring systems for liquefied natural gas (LNG). The 1 CD of R 117 was distributed in April 2016, and an R 117 project group meeting was held in Delft, The Netherlands, in July 2016 to resolve comments received on the 1 CD. If you have any questions or would like to participate in this project, please contact Mr. Ralph Richter at (301) 975-3997 or ralph.richter@nist.gov.

TC 8/SC 6 Measurement of Cryogenic Liquids (United States)
The Secretariat for R 81, Dynamic Measuring Devices and Systems for Cryogenic Liquids, distributed a first committee draft (1 CD) of R 81 to project group members and the USNWG for their review and comment; this comment period on R 81 closed in September 2016. To obtain more information or to participate in this project, please contact Ms. Juana Williams at (301) 975-3989 or juana.williams@nist.gov.

TC 8/SC 7 Gas Metering (Netherlands)
All three parts of OIML R 137, Gas Meters, have been published. Extensive U.S. comments on the 1 CD, the 2 CD, and the DR were developed in cooperation with the measurement committees of the American Gas Association. The OIML R 137 document is especially important to the U.S. interests because the American National Standards Institute (ANSI) B 109 committee on gas measurement is using the published R 137 to create a new performance-based standard for gas meters in the United States. Please contact Mr. Ralph Richter at (301) 975-3997 or ralph.richter@nist.gov, if you would like to participate in these efforts or if you would like to obtain a copy of any of these gas measurement documents.

Although all three parts of OIML R 139, Compressed gaseous fuel measuring systems for vehicles, have recently been published, a project to initiate a new revision of R 139 was approved by the CIML in October 2016. The Netherlands and Japan serve as Co-Conveners on this new project that will mostly focus on ensuring that the Recommendation fully and accurately includes proper requirements and test procedures for hydrogen fuel dispensers. A kick-off meeting of the R 139 Project Group was held in February 2017 in Tokyo, Japan. This standard is important to U.S. stakeholders, especially in the effort to maximize harmonization between domestic and international legal metrology requirements used for the delivery of alternative fuels. A 1 CD of R 139 was distributed in the summer of 2017. To obtain more information on this effort, please contact Mr. Ralph Richter at (301) 975-3997 or ralph.richter@nist.gov.

TC 9 Instruments for Measuring Mass (United States)
The United States distributed the 5th Committee Draft (CD) of all parts of R 60 Metrological Regulation for Load Cells (Metrological and technical requirements and Metrological controls and performance tests) in October 2016. Votes and comments from the R 60 Project Group were received and collated in January 2017. Twenty votes in total were received from the P members of TC 9/p1. The votes consisted of: 1 abstention; 2 “no” votes; and 18 “yes” votes. The threshold needed for approval of the 5th Committee Draft was met. While the two-thirds majority needed for approval of the 5 CD was exceeded, some Project Group members had submitted comments that implied there were a few significant issues, which were unacceptable to those members. Considering those significant issues could result in the rejection of the 5 CD during a CIML preliminary ballot, it was determined that a subgroup be formed to resolve those few issues. A meeting of that subgroup (TC 9/p1/SG 1) was convened on March 14, 2017, and resulted in additional revisions to the 5 CD. These revisions alleviated the objections raised by the PG members working in that subgroup. The current draft (5.1 CD) was posted on the appropriate OIML PG Workspaces. Provided the 5.1 CD is approved by the PG, it will then be forwarded to the CIML for preliminary ballot. For more information on TC 9 activities, please contact Mr. John Barton at (301) 975-4002 or john.barton@nist.gov.

TC 9/SC 1 Non-Automatic Weighing Instruments (Germany and France)
A new project to revise OIML R 76:2006 Non-automatic weighing instruments was approved by the CIML in October 2016 at its annual meeting in Strasbourg, France. In addition to revising R 76, the project group has been requested to provide suggestions on how to best approach the verification and inspection of these measuring
TC 9/SC 2 Automatic Weighing Instruments (United Kingdom)
In October 2016, the CIML approved a new TC 9/SC 2 project to develop a new OIML Recommendation on Continuous totalizing automatic weighing instruments of the arched chute type. To receive copies of the documents concerning this project or to obtain more information on the work of this subcommittee, please contact Mr. John Barton at (301) 975-4002 or john.barton@nist.gov.

The TC 9/SC 2 Secretariat has distributed the 5 CD of OIML R 61, Automatic gravimetric filling instruments; votes and the Project Group approved the 5 CD. The Preliminary Ballot of R 51 was approved. The TC 9/SC 2 Secretariat distributed a questionnaire concerning a possible project to revise OIML R 51, Automatic catch-weighing instruments, which was last revised in 2006. The proposed international effort to revise R 51 was also announced by the NCWM. Please contact Mr. Rick Harshman at (301) 975-8107 or richard.harshman@nist.gov if you are interested in the project to revise this document.

TC 17/SC 1 Humidity (China and United States)
The voting on the preliminary ballot of OIML R 59, Moisture Meters for Cereal Grains and Oilseeds, closed in July 2016. R 59 received final CIML approval in October 2016, and it was published on the OIML website in March 2017. Please contact Ms. G. Diane Lee at (301) 975-4405 or diane.lee@nist.gov if you would like more information on this effort.

TC 17/SC 8 Quality Analysis of Agricultural Products (Australia)
Preliminary ballot voting closed in Nov 2015 on a new draft document, Measuring Instruments for Protein Determination in Grains. The United States submitted a “no” vote with some significant comments on the DR based on the non-uniformity with the testing requirements in OIML R 59. These issues were resolved, and this new Recommendation received final CIML approval in October 2016. It was published as OIML R 146 on the OIML website in February 2017. Please contact Ms. G. Diane Lee at (301) 975-4405 or diane.lee@nist.gov, if you would like more information on this effort.

OIML Mutual Acceptance Arrangement (MAA)
The report on the OIML MAA can be found in the TC 3/SC 5 report above and in the NTEP section of this document. For further information on the MAA and its implementation, please contact Dr. Charles Ehrlich at (301) 975-4834 or email charles.ehrlich@nist.gov.

II. REPORT ON THE 51ST CIML MEETING AND THE 15TH OIML INTERNATIONAL CONFERENCE IN STRASBOURG, FRANCE IN OCTOBER 2016

Mr. Peter Mason, CIML member from the United Kingdom and President of the CIML, opened the meeting and gave the President’s Report.

Mr. Stephen Patoray, who has been serving as BIML Director since January 2011, provided several reports on financial and administrative matters at the BIML, including improvements that have been implemented since his arrival at the BIML. Mr. Patoray also discussed several upgrades to the OIML website. Mr. Patoray’s appointment as the BIML Director will end in 2018.

The Committee sadly noted the unexpected passing of BIML Assistant Director Mr. Willem Kool, and posthumously awarded him the OIML Medal. It was decided that the vacant position of a BIML Assistant Director be advertised with the plan to have a new BIML Assistant Director appointed at the 52nd CIML Meeting in 2017.

Dr. Roman Schwartz of the PTB in Germany is currently serving as CIML First Vice-President; the Committee selected Dr. Schwartz to continue serving in the role for a six-year term.
The Committee welcomed Thailand as a new Member State and welcomed Angola as a new Corresponding Member.

The Committee noted a report on OIML activities in liaison with other international organizations aimed at developing countries. The Committee also noted the report of an advisory group that was established to carry out wide consultation, to seek suggestions, and to build up links with other bodies with an interest in promoting the economic development of countries and economies with emerging metrology systems.

The CIML, recognizing the continued efforts that are needed to assist in building the capacity of legal metrology institutions and their staff in countries and economies with emerging metrology systems (CEEMS), instructed the Bureau to (1) continue its efforts to participate in capacity building activities through training courses and other regional activities organized by other organizations, and (2) further develop the OIML website such that it may be used as a source of up-to-date information on capacity-building initiatives, including training materials and, if feasible, a database of experts available to contribute to such work. The CIML also requested relevant Technical Committees and Subcommittees to take note of the demand from CEEMS to ensure Recommendations take more account of the needs of CEEMS.

The Committee recognized the continuing efforts of the Ad-hoc Working Group that is working to revise OIML B 6:2013, *Directives for OIML technical work*.

The Committee approved the following final draft publications:

- Revision of R 59, *Moisture meters for cereal grains and oilseeds*;
- Revision of R 87, *Quantity of product in prepackages*;
- New Recommendation (will become R 146) *Protein measuring instruments for cereal grains and oilseeds*;
- New Recommendation (will become R 147) *Standard blackbody radiator for the temperature range from –50 °C to 2500 °C*.

The Committee approved several new technical projects:

- Revision of D 31:2008, *General requirements for software controlled measuring instruments*;
- Revision of R 46:2012, *Active electrical energy meters*;
- Revision of R 76:2006, *Non-automatic weighing instruments*;
- Development of a new Recommendation on *Continuous totalizing automatic weighing instruments of the arched chute type*;
- Development of a new Recommendation on *Near infra-red saccharimetry instruments*.

The Committee held lengthy discussions on the effort to create and implement the new OIML Certification System (called OIML-CS) that would be managed by a Management Committee instead of by the BIML. (For a summary of this effort, please see the TC 3/SC 5 section of this report.) Until the new OIML-CS is fully operational, the current Basic and MAA systems will continue and will be supported by the BIML.
The Committee instructed the secretariats of Technical Committees and Subcommittees and the conveners of Project Groups, when OIML Recommendations for relevant categories of measuring instruments are being developed or revised, to ensure that a requirement should be included, if necessary, stating that the instruments shall not exploit the maximum permissible errors or systematically favor any party. The Committee also instructed the Bureau to monitor the implementation of this resolution.

The Committee congratulated this year’s recipient of the OIML Award for Excellent Achievements in Legal Metrology in Developing Countries – The Institute of Trade Standards Administration, Kenya.

III. FUTURE OIML MEETINGS
The 52nd CIML Meeting is being planned to be held in Cartagena, Columbia, in October 2017. The 53rd CIML Meeting is being planned to be held in Hamburg, Germany, in October 2018.

IV. REGIONAL LEGAL METROLOGY ORGANIZATIONS
A meeting of the Inter-American Metrology System (SIM) General Assembly is organized annually and is the event where delegates from National Metrology Institutes of the Americas meet to discuss important issues. The past two years, the SIM General Assembly was held in in Punta Cana, Dominican Republic, (November 2015) and in Montevideo, Uruguay (November 2016). Mr. Hector Laiz from INTI, Argentina serves as the SIM President. The new chair for the Legal Metrology Working Group is Mr. Raimundo Alves de Rezende, Legal Metrology Director of INMETRO, Brazil. The organization is working to build capacity in legal metrology for SIM member countries. In April 2016, INTI organized a workshop on “Metrological requirements for household water meters” in Lima, Peru. Please contact Mr. Ralph Richter at (301) 975-3997 or ralph.richter@nist.gov for more information on SIM.

The 23rd Meeting of the Asia-Pacific Legal Metrology Forum (APLMF) was hosted by Japan and was held in Tokyo in November 2016. Starting in January 2016, New Zealand assumed the APLMF Secretariat, and Mr. Stephen O’Brien of New Zealand’s Ministry of Business, Innovation and Employment (MBIE) assumed the Presidency. Previously, the People’s Republic of China held the Presidency and the Secretariat of APLMF for several years.

The main objectives of APLMF are to coordinate regional training courses in legal metrology and to provide a forum for exchange of information among legal metrology authorities. APLMF activities are facilitated through its seven work groups. The most active WG is the Working Group on Training Coordination chaired by Australia. In 2016, APLMF held the following training courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Venue/Host</th>
<th>Trainers</th>
<th>Delivery Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verification of Fuel Dispensers</td>
<td>Pattaya City, Thailand</td>
<td>Australia</td>
<td>July 11 - 13, 2016</td>
</tr>
</tbody>
</table>

The results of a recent APLMF survey clearly indicated that the more than 20 courses conducted by APLMF in the last 10 years were highly valued by the member economies, promoted harmonization in the Asia-Pacific region, and frequently led to revised/improved legislation and regulations in the member economies.

A significant joint project entitled “Metrology Enabling Developing Economies in Asia” (MEDEA) has been launched by APLMF, the Asia Pacific Metrology Programme (APMP) and the Physikalisch-Technische Bundesanstalt (PTB). This four-year project is being managed by PTB and is primarily funded by Germany. The project aims to foster and further develop the capabilities of the APLMF and the Asia-Pacific Metrology Program (APMP) to support developing economies in the Asia-Pacific region, to promote metrology systems within developing economies, and to strengthen
the metrology systems/infrastructure within developing economies. Several more training courses are planned through the MEDEA Project.

Mr. Ralph Richter represented the United States at the APLMF meeting in Tokyo, Japan. Mr. Richter served as the Acting-Chair of the APLMF work group on Mutual Recognition Arrangements (acting for Dr. Charles Ehrlich) and gave a report and update on the OIML Certificate System project. Mr. Richter also presented the U.S. Country Report.

Cambodia is scheduled to host the next APLMF meeting in October 2017. Please contact Mr. Ralph Richter at (301) 975-3997 or ralph.richter@nist.gov for more information on APLMF and the 2017 APLMF Annual Meeting.
Appendix B

Associate Membership Committee (AMC)  
Agenda and Draft Meeting Minutes

Richard Shipman, Chair  
Rice Lake Weighing Systems

<table>
<thead>
<tr>
<th>Table A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table of Contents</td>
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<table>
<thead>
<tr>
<th>Title of Content</th>
<th>Page</th>
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</thead>
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<tr>
<td>AGENDA</td>
<td>2</td>
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<td>APPENDIX B - ASSOCIATE MEMBERSHIP COMMITTEE (AMC) ANNUAL MEETING MINUTES</td>
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<tr>
<td>1. Call to Order</td>
<td>3</td>
</tr>
<tr>
<td>2. Acceptance of Previous Minutes</td>
<td>3</td>
</tr>
<tr>
<td>3. Financial Review</td>
<td>3</td>
</tr>
<tr>
<td>4. Committee Liaison Reviews</td>
<td>3</td>
</tr>
<tr>
<td>5. Review of Funding Applications</td>
<td>4</td>
</tr>
<tr>
<td>6. Vacant AMC Positions</td>
<td>4</td>
</tr>
<tr>
<td>7. New Business</td>
<td>4</td>
</tr>
<tr>
<td>8. Adjournment</td>
<td>5</td>
</tr>
<tr>
<td>9. Attendance</td>
<td>5</td>
</tr>
</tbody>
</table>
AGENDA

I. Call to Order
II. Approval of Meeting Minutes
III. Financial Condition
IV. NCWM Industry Representative Reports
    (a) Board of Directors Report
    (b) Professional Development Committee Report
    (c) Laws and Regulations Committee Report
V. AMC Fund Disbursement Requests
VI. Filling Vacant Positions
VII. Old Business
VIII. New Business
IX. Adjournment
APPENDIX B
ASSOCIATE MEMBERSHIP COMMITTEE (AMC)
ANNUAL MEETING MINUTES

July 2017
Pittsburgh, Pennsylvania

1. Call to Order
The Meeting was called to order by Mr. Dick Shipman (Committee Chair) at 5:00 p.m.

2. Acceptance of Previous Minutes
Mr. D. Shipman called for a motion to accept the minutes from the previous meeting (held January 2017). Mr. Bill Calloway (Vice Chair) made the motion. Mr. Mark Flint (Secretary) seconded the motion. The motion passed unanimously.

3. Financial Review
Mr. D. Shipment lead a review of funds for the Committee.

- The Committee began the fiscal year (as of October 1, 2016) with $25,967.91. As of June 30, 2017, the Committee had funds in the amount of $25,157.49.
- There is $9747.50 in payments pending leaving $15,409.99 in available funds.
- Mr. Doug Rathbun (State of Illinois) expressed his gratitude for a grant given to the State of Illinois.
- Mr. D. Shipment asked for a motion for approval of the budget. Mr. M. Flint made the motion. The motion was seconded by B. Calloway. Budget was accepted unanimously.

4. Committee Liaison Reviews
Mr. Chris Guay (Procter & Gamble) gave a review of the Board of Directors meeting, held July 15, 2017.

- NIST has hired a metrologist.
- NCWM is developing a CD Compilation of meetings dating to 1905.
- NIST, Office of Weights and Measures held 50 meetings with 900 students between July 2016 and June 2017.
- NIST budget for 2018 has not been set but a flat budget over 2017 is expected.
- Measurement Canada currently has 177 authorized service providers conducting inspections resulting in a substantial increase in inspections.
- Packaging and Labeling Subcommittee (PALS) has an opening for one industry position.
- Mr. Jerry Buendel has been designated by Ms. K. Macey as Charter Team Chair. Two additional appointments will be made by Mr. J. Cassidy.
- A Task Force is being formed to conduct surveys on Fuels and Lubricants testing.
- ISWM was present at the Board Meeting to discuss overlap in regulatory and industry training.
Mr. D. Shipman presented a review of Professional Development Committee (PDC).

- A presentation was given on Inspector Certification. Several States provided testimony that they would like to see tests for basic weighing and measurement as soon as possible.
- The Safety Task Force was reviewed. A discussion was held on whether training of safety should be provided from Industry to Regulators, with the general thought being that Industry may be more advanced in safety practices than Regulators.

Rebecca Richardson (Mark IV Consulting) provided an update on Laws and Regulations Committee

- She noted that Mr. Lou Sakin (City of Hopkinton, Massachusetts) is terming from the Committee.
- Mr. Matt Curren (State of Florida) is stepping down as the Fuels and Lubricants Subcommittee Chair.
- The polystyrene issue has been moved from Voting to Informational status.

No Industry member currently sits on the Standards and Technology Committee. Mr. C. Guay noted, historically, there has been concern from industry that an industry member on the Committee may give a particular Sector undue influence.

Further discussion was held regarding the Charter Committee. Mr. Eric Golden discussed the fact that the new Chair (J. Buendel) would like to follow up on eight current recommendations for workflow through the group. One possible item being discussed is twice per year voting. Several comments were made during the discussion that the current system is broken and needs to be redeveloped.

5. Review of Funding Applications

Mr. D. Shipment began discussions on two current funding applications

- The State of New York submitted an application in the amount of $3500 for funds to cover classroom and AV equipment rental for a training school. Mr. D. Shipman commented that the he was not sure if the application was specific enough. Mr. C. Guay made the motion to accept the application. The motion was seconded by Mr. Bill Calloway (Crompco). The Committee voted unanimously to accept the application.
- The State of Missouri submitted an application in the amount of $2500 for funds to cover NIST training on Handbook 133, “Checking the Net Contents of Packaged Goods,” to be held in Lebanon, Missouri, on March 26 - 30, 2018. Mr. M. Flint made the motion to accept the application. The motion was seconded by Mr. B. Calloway. The Committee voted unanimously to accept the application.

6. Vacant AMC Positions

Mr. D. Shipman opened the discussion on vacant positions on the AMC. He stated that each position has a one-year term. He stated it has been practice that the Vice Chair and the Secretary each “moved up” one position each year. Mr. B. Calloway will serve as Chair this coming year. Mr. M. Flint will serve as Vice Chair this coming year. Mr. D. Shipman opened the floor to nominations for Secretary. Mr. Bob Weise (Northwest Tank) volunteered for the position. The Committee voted unanimously to make him Secretary on the AMC for this coming year.

7. New Business

Further discussion was held regarding industry representation on the S & T committee. Don Onwiler (NCWM) suggested that the AMC spell out the rational for having an industry representation. Several members expressed the opinion that the issue should be discussed further at the interim meeting.
8. Adjournment

Mr. Jim Pettinato made the motion to adjourn the meeting. The motion was seconded by Mr. C. Guay. The meeting was adjourned at 6:08 p.m.

9. Attendance

<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation</th>
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<tbody>
<tr>
<td>Mark Flint</td>
<td>ADM</td>
</tr>
<tr>
<td>Jim Hewston</td>
<td>J.A. King</td>
</tr>
<tr>
<td>Louis Straub</td>
<td>Fairbanks Scale</td>
</tr>
<tr>
<td>Eric Golden</td>
<td>Cardinal Scale</td>
</tr>
<tr>
<td>Rob Upright</td>
<td>VPG Transducers</td>
</tr>
<tr>
<td>Russ Vires</td>
<td>Mettler-Toledo</td>
</tr>
<tr>
<td>Jim Pettinato</td>
<td>Technip FMC</td>
</tr>
<tr>
<td>David Calix</td>
<td>NCR Corp.</td>
</tr>
<tr>
<td>Ron Gibson</td>
<td>Seraphin</td>
</tr>
<tr>
<td>Doug Rathbun</td>
<td>Illinois Department of Agriculture</td>
</tr>
<tr>
<td>Matthew J. Morrison</td>
<td>B &amp; R Stores</td>
</tr>
<tr>
<td>Ann Boeckman</td>
<td>Kraft Heinz</td>
</tr>
<tr>
<td>Jan Konijnenburg</td>
<td>Rice Lake Weighing Systems</td>
</tr>
<tr>
<td>Chris Guay</td>
<td>Proctor and Gamble</td>
</tr>
<tr>
<td>Bob Murnane</td>
<td>Seraphin</td>
</tr>
<tr>
<td>Richard Suiter</td>
<td>Richard Suiter Consulting</td>
</tr>
<tr>
<td>Henry Oppermann</td>
<td>Weights &amp; Measures Consulting</td>
</tr>
<tr>
<td>Patrick Brutus</td>
<td>Walmart</td>
</tr>
<tr>
<td>Rebecca Richardson</td>
<td>Mark IV Consulting</td>
</tr>
<tr>
<td>Mauricio Mejia</td>
<td>State of Florida</td>
</tr>
<tr>
<td>Chris Bradley</td>
<td>Seraphin</td>
</tr>
<tr>
<td>Bob Weise</td>
<td>NorthWest Tank</td>
</tr>
<tr>
<td>Bill Callaway</td>
<td>Crompco</td>
</tr>
<tr>
<td>Richard Shipman</td>
<td>Rice Lake Weighing System</td>
</tr>
</tbody>
</table>
Appendix C

Report of Team Charter to the Chairman

July 2016

In recent years, concerns have been raised over the ability of the National Conference on Weights and Measures (NCWM) to accept, review, and pass or reject items that appear on its Committee’s agenda in a timely manner. Team Charter was asked to assess the current status of standards development in NCWM and identify areas that are problematic. The following report includes a brief overview of the existing standards process and provides examples of recent items that appeared on the agendas of NCWM Committees and outlines areas where changes are needed.

The report also identifies other standards groups whose workings may provide valuable information to Team Charter as its work progresses. Also identified are the participants in NCWM, as well as end users of the work product of NCWM.

NCWM’s internal structure includes a Board of Directors, Standing Committees, Special Purpose Committees, the National Type Evaluation Committee, and Ad Hoc Committees, Subcommittees, Task Forces, and Study Groups.


Interested parties wishing to present an item (proposal) to the National Conference on Weights and Measures must follow the guidelines described in NCWM’s Bylaws, Policies, and Rules. Items of a technical nature are assigned to a standing committee and then included as an agenda item at both the regional and national levels. Agenda items are reviewed and discussed at the regional and national level and then either presented as a voting item or removed from an agenda.
NCWM – THE “MEETING FLOW” OF AGENDA ITEMS AS THEY MOVE FROM REGIONAL MEETINGS TO NATIONAL MEETINGS

FALL MEETINGS
SOUTHERN WEIGHTS AND MEASURES ASSOCIATION ANNUAL MEETING
NORTHEAST WEIGHTS AND MEASURES ASSOCIATION INTERIM MEETING
SPRING MEETING
NORTHEAST WEIGHTS AND MEASURES ASSOCIATION ANNUAL MEETING
NCWM ANNUAL MEETING JULY VOTING ON AGENDA ITEMS
NCWM INTERIM MEETING JANUARY
FALL MEETINGS
WESTERN WEIGHTS AND MEASURES ASSOCIATION ANNUAL MEETING
CENTRAL WEIGHTS AND MEASURES ASSOCIATION INTERIM MEETING
SPRING MEETING
CENTRAL WEIGHTS AND MEASURES ASSOCIATION ANNUAL MEETING

Other National and International Standards Setting Groups:

Studying the methodology of standards setting used by other standards setting organizations will assist Team Charter in addressing the concerns raised in Phase 1 of the report.

American Society for Testing and Materials (ASTM) www.astm.org/
ASTM International is an international standards organization that develops and publishes voluntary consensus technical standards for a wide range of materials, products, systems, and services.

Society of Automotive Engineers (SAE) www.sae.org/
SAE International, initially established as the Society of Automotive Engineers, is a U.S.-based, globally active professional association and standards organization for engineering professionals in various industries.

International Standards Organization (ISO) www.iso.org/iso/home.html
The International Organization for Standardization (ISO) is an international standard-setting body composed of representatives from various national standards organizations. The organization promotes worldwide proprietary, industrial, and commercial standards.

National Institute of Standards and Technology (NIST) www.nist.gov/
NIST promotes U.S. innovation and industrial competitiveness by advancing measurement science, standards, and technology in ways that enhance economic security and improve our quality of life.

The American National Standards Institute (ANSI) www.ansi.org/
ANSI oversees the development of voluntary consensus standards for products, services, processes, systems, and personnel in the United States.

Underwriters Laboratories (UL) ulstandards.ul.com/

UL is a product safety testing, certification, and standards development organization.


NFPA is a trade association that creates and maintains standards and codes for usage and adoption by local governments.

International Electrotechnical Commission (IEC) www.iec.ch/

IEC is a nonprofit organization that develops and publishes standards concerning electrical technologies.

**Stakeholders in the National Conference on Weights and Measures:**

Membership in NCWM is made up of three classes: Active, Advisory, and Associate. For the purposes of voting on an agenda item, NCWM is divided into three (3) houses; the House of State Representatives, The House of Delegates, and The House of General Membership. NCWM presently has 2300 members.

**Membership Breakdown**

<table>
<thead>
<tr>
<th>Type</th>
<th>Number of Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active</td>
<td>1162</td>
</tr>
<tr>
<td>Associate</td>
<td>884</td>
</tr>
<tr>
<td>Advisory</td>
<td>254</td>
</tr>
<tr>
<td>Total</td>
<td>2300</td>
</tr>
</tbody>
</table>

**Active Members:**

Applies to individuals in the employ of States, Commonwealths, Territories, or Possessions of the United States, their political subdivisions, the Navajo Nation, and the District of Columbia, who are actively engaged in the enforcement of weights and measures laws and regulations.

- Each of these groups designates one official as its representative to the House of State Representatives.
- All remaining State, County, and City Regulatory Weights and Measures Officials in attendance are seated in the House of Delegates.

**Advisory Members:**

Applies to (1) representatives of agencies of the Federal Government, (2) representatives of State and local governments other than those involved in the enforcement of weights and measures laws and regulations, (3) foreign government officials, and (4) retired persons who are interested in the objectives and activities of the Corporation and who participate as individuals rather than as representatives of a particular industry or interest group.

- These members are seated in the House of General Membership.
Associate Members:

Applies to representatives of manufacturers, industry, business, consumers, and other persons who are interested in the objectives and activities of the Corporation and who do not qualify as Active or Advisory members.

These members are seated in the House of General Membership

At the Annual Meeting of the Conference in July of each year, committees of the conference present agenda items to the membership for debate and a possible vote. All registered attendees may comment on both business and technical items during open hearings and voting sessions. However, the adoption of technical items and committee reports is to be decided by a formal vote of the active members in accordance with the NCWM Bylaws. For business items presented by the Board of Directors, all NCWM Associate, Advisory, and Active members are eligible to vote.

End Users:

NIST/NCWM Publications are used by government agencies at the federal, state, and local levels. The publications when adopted become law, regulations or rules depending on the involved public entity. Private sector users (manufacturers, wholesalers, and retailers) use the publications as guidelines to insure compliance with state and local weights and measures regulations.

<table>
<thead>
<tr>
<th>Public Sector Users</th>
<th>Private Sector Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Inspectors</td>
<td>Manufacturers</td>
</tr>
<tr>
<td>Auditors</td>
<td>Producers</td>
</tr>
<tr>
<td>Supervising Officials</td>
<td>Commodity Packers</td>
</tr>
<tr>
<td>Device Evaluators</td>
<td>Retailers - Consumer Goods</td>
</tr>
<tr>
<td>Law Enforcement</td>
<td>Advertisers and Marketers</td>
</tr>
</tbody>
</table>

The timelines below represent five (5) wide ranging recent agenda items.

Compressed Natural Gas/Liquefied Natural Gas - Method of Sale

2013: New Informational Item: Assigned to a new steering committee

2014: Item Withdrawn by Submitter

- New Voting Item by same submitter: Returned to Committee
- Steering Committee charged with making recommendations prior to Annual
- Steering Committee provided recommendations in June
- NIST offered an alternative proposal in July for mass
- Voting was on the Steering Committee’s version

2015: Voting Item: Returned to Committee

- Conference now had two “compromise” proposals; one establishing volume equivalents and the other establishing mass
- The Committee agreed to move the volume equivalents version for vote
2016: Voting Item

Length of Time on a Committee(s) Agenda – 3 Years

Net Results – No New Rule, Regulation, or Law Added to Handbooks

Automatic Temperature Compensation Timeline:

2000: Proposed by WWMA for VTMs
2001: Informational
2002: Voting Item Returned to Committee
2003: Voting Item Returned to Committee
2004: Voting Item Returned to Committee
   • New proposed Method of Sale for ATC
2005: Both items were informational
2006: Both items were informational
2007:
   • ATC Steering Committee was formed
   • NCWM Chair testified at congressional hearing on ATC
   • L&R vote on permissive ATC Returned to Committee
   • ATC for RMFD was proposed – Informational
   • ATC for VTMs was adopted
2008:
   • L&R presented informational item with 2 options for ATC recommendation and original proposal
   • ATC for RMFD was informational
2009:
   • L&R moved item from voting to withdrawn
   • S&T retained informational item for RMFDs
2010: S&T withdrew item for RMFDs

Length of Time on a Committee(s) Agenda – 11 Years

Net Results – No New Rule, Regulation or Law Added to Handbooks

Software Identification Timeline

2005: Software Sector was created to address software concerns including identification
2007: Software Sector submitted G-S.1. Identification as a Developing item
2008: Item was upgraded to Informational
2009: Informational
2010: Informational
2011: Downgraded to Developing
2012: Developing
2013: Developing
2014: Developing
2015: Developing
2016: Voting Item

**Length of Time on a Committee(s) Agenda – 12 Years**

**Net Results – No New Rule, Regulation or Law Added to Handbooks**

**Pasta Timeline**

2010: Voting Item Returned to Committee
2011: Voting Item Returned to Committee
2012: Voting Item Returned to Committee
2013: Adopted

**Length of Time on a Committee(s) Agenda – 4 Years**

**Net Results – New Guidance Given on package Inspections - Added to Handbooks**

**GPS Systems Timeline**

2012: New Developing Item from Seattle
2013: The GPS item was grouped with other taxi items into a new single Developing item for the USNWG on Taximeters.
2014: Developing
2015: Developing
2016:

- USNWG placeholder item is still Developing.
- California proposed a new draft code for GPS systems.
- Additional states are considering adopting standards in advance of NCWM.

**Length of Time on a Committee(s) Agenda – 5 Years**

**Net Results – No New Rule, Regulation or Law Added to Handbooks**
In addition to the timelines listed above, the committee was also provided with data on final actions taken on voting items from two of the Standing Committees for the years 2011 to 2015. The data does not include split votes or status downgrades by the Committees prior to voting.

### Laws and Regulations Committee

<table>
<thead>
<tr>
<th>Year</th>
<th>Item</th>
<th>Years in System</th>
<th>Action</th>
<th>Title</th>
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<tr>
<td>2011</td>
<td>232-3</td>
<td>1</td>
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<td>1.7.2. Pelletized Ice Cream</td>
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<td>231-3</td>
<td>1</td>
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<td>10.11. Statements of Cubic Measure in Compressed Form</td>
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<td></td>
<td>232-1</td>
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<td>2.13.4. Declaration of Weight (Polyethylene)</td>
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<td>232-2</td>
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<td>2.19. Kerosene</td>
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<td>232-4</td>
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<td>Adopted</td>
<td>2.33. Vehicle Motor Oil</td>
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<td>2.32.1. Definition of Hydrogen Fuel</td>
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<td>2.1.2. Gasoline - Oxygenate Blends</td>
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<td>3.3.4. Nozzle Requirements for Diesel Fuel</td>
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<td>3.13.1. Labeling of Vehicle Motor Oil</td>
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<td>3.2.X. EPA Labeling Requirements Also Apply</td>
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<td>237-7</td>
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<td>4. Retail Storage Tanks and Dispenser Filters</td>
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<td>2.XX. Requirements for Hydrogen Fuel</td>
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<td>4.7. Polyethylene Sheeting Test Procedure</td>
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<td>2013</td>
<td>221-1</td>
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<td>2.33. Oil, 2.33.1.4.5. Tank Trucks and Rail Cars</td>
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<td>2.XX. Retail Sale of Electricity/Vehicle</td>
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## Specifications and Tolerances Committee

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Conclusions:

The Committee members exchanged e-mails and phone calls that fostered discussion on the items identified below. All Committee members agreed practical solutions should be developed to address the concerns listed below.

1. Standing Committee agendas include too many items. In recent years, agendas have overwhelmed committee members. Committee work sessions have become all-consuming and diminish the Committee’s final work product. Late night time commitments affect committee members’ morale and cause difficulties in recruiting new committee members. The existing agenda item designation system only provides guidance to the committees as it relates to the status of an item.

2. Items remain on committee agendas for indefinite periods of time. Clearly, there are agenda items needing extensive development, but revisiting and/or voting on the same items on a yearly basis raises frustration and causes interested groups to question the credibility of the Conference. Interested parties have bypassed the NCWM process and have reached out to the Federal and State Governments for favorable legislation. Some states have passed “boutique legislation” to address that state’s immediate need.

3. Adoption or non-adoption of agenda items by the Conference occurs just once a year. Items that are ready for a vote or have been voted on and are ready for a revote cannot be revisited until the July Annual Meeting. Voting only once a year inherently slows the approval process.

4. Agenda items can be intensely technical and inconsistent technical knowledge of a specific item by committee members can hinder the study of the item. Committees may not have the expertise or time to develop items, and proposal authors may not have the resources or connections to reach out to affected parties except at national meetings. The result is items of a technical nature may not be developed adequately before reaching the committee and may return year after year without significant change because of a continuing lack of resources for development.

5. Committee Chairpersons have broad authority and control over their agendas. The tools provided to committee chairs are explained in detail during the NCWM Committee Orientation process, but we believe committee chairs do not use these tools enough in reviewing agenda content. Also, emphasis should be placed on the most efficient utilization of time outside of the NCWM meeting timeframes to work on agenda items.

6. Comments during open hearings and the voting process at times are not directed to the Committees and their chairpersons, inviting “back and forth” discussions on agenda items. Although comments are strongly encouraged, “back and forth” discussions can cause unnecessary delays and can diminish the time necessary
to consider “last minute” changes. As a result, an item deemed by the Committee ready for a vote may be quickly “pulled back” increasing the time it remains on an agenda.

7. Subcommittees perform an important function by advising and assisting the standing committees on agenda specific topics. A subcommittee’s recommendation and work product become an integral part of an agenda item. Subcommittee members are subject matter experts, whose expertise and background should be fully utilized by standing committees.

8. Every proposal/agenda item presented to a regional association and/or to the NCWM is distinct and raises a corresponding level of interest. Determining “how long” an item takes to move through the NCWM process is difficult and is driven by the uniqueness (technical nature and the widespread effect on the marketplace) of agenda items. Data suggests that most items move relatively smoothly through the Conference approval process, but this suggestion is clearly diminished by the uniqueness of an item.

NCWM members representing different interests have raised concerns that NCWM will not be able rise to the challenges it will confront in the 21st Century. Finding solutions to the concerns identified above will greatly assist the Conference in meeting those challenges.

Mr. John Gaccione, Westchester County, New York | Chairman & Northeastern Representative
Dr. Matthew Curran, Florida | Southern Representative
Mr. Joseph Gomez, New Mexico | Western Representative
Mr. Robert DeRubeis, Michigan | Central Representative
Mr. Eric Golden, Cardinal Scale Manufacturing | Associate Membership
Mr. Robert Upright, Vishay Transducers | Associate Membership
Mr. Don Onwiler, NCWM
Ms. Carol Hockert, NIST/OWM (Retired)

Team Charter Committee Members