Test & Measurement Conference
NLA – South Africa
September 2012

Georgia Harris, NCSLI President
NIST Office of Weights and Measures
Overview

• Who is NCSL International?
• Current Leadership and Challenges
• Future Directions and International Strategy
• Committee and Collaboration Opportunities

• 2012 Conference Highlights
• Upcoming Events
NCSL International

NCSL International (NCSLI) is a nonprofit corporation comprised of people and organizations involved in metrology, calibration and testing.

*Tagline: Serving the World of Measurement*

*Note: NCSL International is incorporated as a charitable non-profit educational organization. Funds are solicited through grants, contributions, memberships, and conference revenues.*
History – Who is NCSLI?

- Established in 1961 as a not-for-profit educational body:
  - National Conference of Standards Laboratories
- In 1999, added:
  - International → NCSL International
    - Growing international membership (15 %)
    - International metrology environment; e.g., ISO/IEC 17025, ILAC
    - Intent:
      - no longer U.S.-only focus
      - 2000 - conference held in Toronto, Canada
      - Board meetings have been held in Canada and Mexico
NCSLI Worldwide Members
International Leadership

- Representatives to the Board
  - BIPM
  - NMI: NRC, NIST, CENAM, NMIJ
  - RMO: SIM, EURAMET, COOMET
- Liaisons
  - OIML, CFM, GMA, APMP, Eurolab, NLA-SA
  - MSC, ASQ-MQD
- Regions – with Section Coordinators
  - Regional Deputies: Canada, Latin/South America, European, Middle East, Asia-Pacific, Africa, Central Asia
Ongoing Ad-hoc Committees

1. Financial Strategy
2. International Strategy
3. Publications Assessment (Gap Analysis)
Loss: > 30% in 10 years
New Membership Structure

• Business Group – up to 20 people at any location(s)
  + 1 Member Delegate receives all publications
  + 19 Associate Memberships – receive all publications

• Individual Professional

• Student

Additional refinements will be pursued.
Memoranda of Understanding

- NLA – South Africa
- BIPM
- SIM
- EURAMET
- COOMET
- Eurolab
- CFM
- OIML
- MSC
- ASQ-MQD

Purpose – identify collaborative relationships and projects
Goal – regular review and updates
Progress on 2011-2012 Key Objectives

1. Making the Case for Metrology
2. Encouraging Learning and Development
3. Collaborating – Nationally and Internationally
4. Creating and Marketing Member Benefits
5. Supporting Essential NCSLI Infrastructure
Growing for the Future
International Strategy, Engagement, Membership

Lonnie Spires, NCSLI Executive Vice President
Dynamic Technologies, Trescal
The International Strategy Should Naturally Build From Our Mission/Vision

Vision:
• To be the Recognized Leader for Excellence in Measurement Science.

Mission is to:
• **Invest** in the Advancement of Measurement Science - worldwide (this also refers to members investing)
• **Promote** Education and Skill Development
• **Provide** Tools and Resources to Enhance Member Processes
• **Drive** Technical Integrity in Documentary Standards
NCSL International’s Strategy Statement:

NCSL International's intent is to further our Mission & Vision Internationally through

– offering the benefits of membership and
– building collaborative relationships with RMOs, NMIs, our international regions, international affiliates, and liaisons.

Collaboration amongst this community is designed to increase communication and focus on projects of mutual benefit.
Structure Behind The Strategy

Key Areas Of Strategic Focus

1. Membership
2. Communication
3. Collaboration
4. Regional Support
5. Education

These will overlay onto our existing types of international relationships
Considerations For The Strategic Focus

Each area of focus will have defined and specific purposes, goals, relationships to NCSLI, & activities…. 

• In general, these must:
  – Elevate metrology capabilities worldwide through education and training
  – Support development of mutually beneficial projects
Focus Groups
Workshop at 2012 Conference

1. Membership.
2. Communication.
4. Regional Support.
5. Education and Training.
6. NMI and RMO Input.

Collecting and evaluating inputs; additional workshop at October Board meeting.
Engaging in Metrology Together…..

- 40 Standing Committees
- Greater use of teleconferencing and webmeetings
Now Available On-line to Members

Measure
Journal of Measurement Science

me.trol’o.gist
NCSLI Worldwide News
Measurement Requirements & Analysis (130)

• 131 Measurement Requirements
  – Charter is being revised and search for new Chair ongoing. Interested candidates should contact Bob Fritzsche.

• 132 Measurement Comparison Programs
  – RP-15 “How to” practice on InterLaboratory Comparisons. Document update is drafter; preparing for vote.
  – Voluntary ILCs – with guidelines on planning, coordinating, and reporting.

• 134 Intrinsic and Derived Standards
  – RISP-1, Josephson Voltage Standard is under revision and for planned completion after the 2012 NCSLI
New Traceability Poster
Additional Opportunities

• 142 Committee: New publication: Re-establishing Laboratory Operations – planned and unplanned events (Lab moves, disaster recovery)
• 141 and 153 Committees: RP13 Computer Systems in Metrology – document revision
• 164 Committee: Lesson Plans for Educational Outreach
• Region/Section Hands-On Science Workshop (for working metrologists) – Refining the Plans
NCSLI METROLOGY AMBASSADOR PROGRAM PURPOSE

Workforce Shortages

**Goal**: Inspire the Next Generation of Measurement Professionals

**How**: Target the STEM Pipeline
The STEM Pipeline Starts at the Reservoir

Science and Technology Education Partnership (STEP) Pipeline Model

www.MyScienceEducation.com
Science and Technology Education Partnership (STEP) Pipeline Model

www.MyScienceEducation.com
Ambassador Tools

Educational materials - DVD, website, handouts, posters, flyers, & measurement kits
Find a Cool Career in Metrology DVD and website

Joint project funded by:

- American Society for Quality (ASQ-MQD) ($20K)
- Measurement Science Conference (MSC) ($15K)
- NCSL International ($20K)
- Combined Federal Campaign Contributions to NCSLI ($10K)
- Foundation Grant to NCSLI ($2K, $3K)

- www.MetrologyCareers.com
Measuring Outreach Efforts

- Outreach Events
- Ambassador Tracking Form
Measuring Outreach Efforts

Career Outreach Events

- > 30,000 students (reported)

MetrologyCareers.com

- Links from metrologyinfo.org and worldmetrologyday.org sites
- More than 100 countries
- 49/50 U.S. states

LINK Today!!
Standards & Practices (170)

- **173 Metrology Practices – Mark Kuster**
  - 173.4 – New RP19 “Measurement Decision Risk” - available soon
  - 173.5 – Updating RP12 “Measurement Uncertainty Analysis”
    - Released for Committee Review – due August 31.
    - Amend document by Sept 30 with Comments
    - Submit to BoD for Review by October meeting
Thank You

For your attention and for including NCSL International in the 2012 Test & Measurement Conference!

What questions do you have?