



# NVLAP

## Assessor Training

### International Arrangements



# Outline of Talk

- CIPM MRA
  - KCDB as a tool
- International framework for accreditation
  - ILAC MRA
  - IAAC MLA
  - APLAC MRA
- National Metrology Institutes' quality systems
- NVLAP considerations



## 2009 is the 10th anniversary of the signing of the CIPM MRA

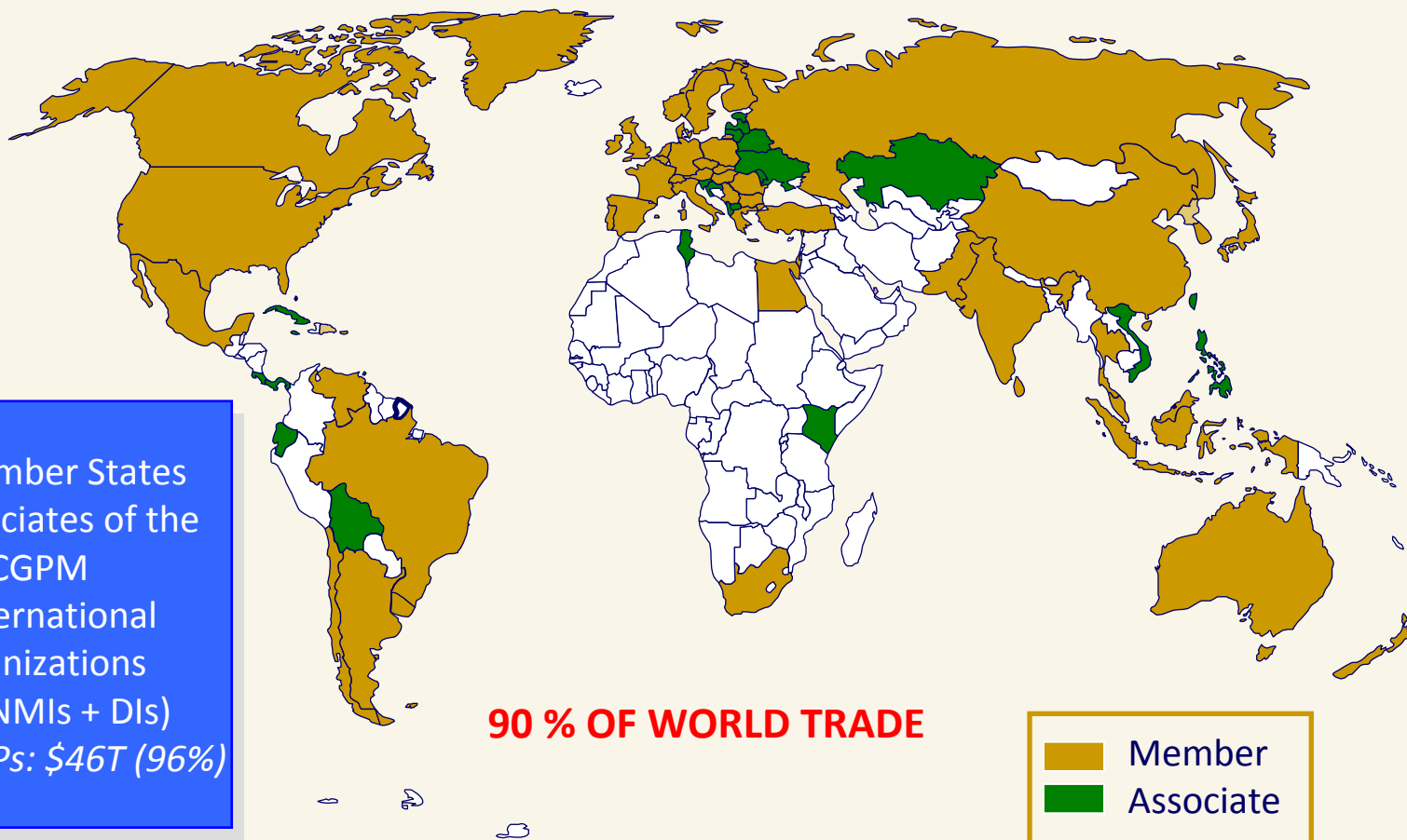
Calibration and Measurement Capability (CMC) in relation to the CIPM-ILAC common statement:

- A CMC is a calibration and measurement capability available to customers under normal conditions:
  - As published in the BIPM KCDB of the CIPM MRA; or
  - As described in the laboratory's scope of accreditation granted by a signatory to the ILAC Arrangement





# Participation in the CIPM MRA



45 Member States  
27 Associates of the  
CGPM  
2 international  
organizations  
(180 NMIs + DIs)  
2006 GDPs: \$46T (96%)



## ILAC TRACEABILITY POLICY

“ILAC has taken note that the information necessary for accreditation bodies to **demonstrate the traceability** of their accredited laboratories is **published in the CIPM MRA**”

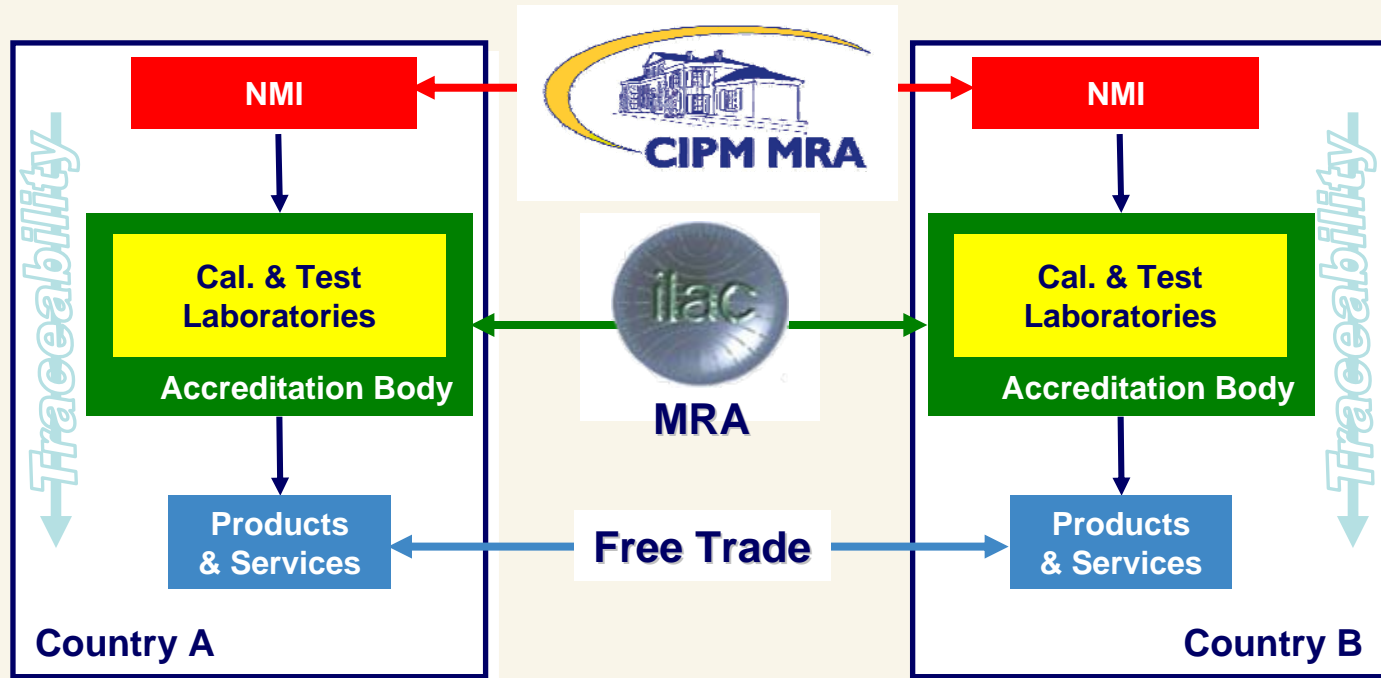
*Source: ILAC policy on the traceability of measurement results ILAC-P10:2002*

<http://kcdb.bipm.org/appendixC/default.asp>





# The CIPM MRA and the ILAC ARRANGEMENT





# Mutual Recognition Arrangement (MRA) Among Accreditation Bodies



- The fundamental purposes of the ILAC MRA:
  - A laboratory accredited by one MRA partner has equivalent competence to a laboratory accredited by the other partners.
  - Enables promotion of acceptance of accredited results by all other partners in their respective spheres of influence.
  - Reduces duplicate testing and duplicate accreditations.

**ILAC's Vision: Once accredited, accepted everywhere**



# ILAC Membership

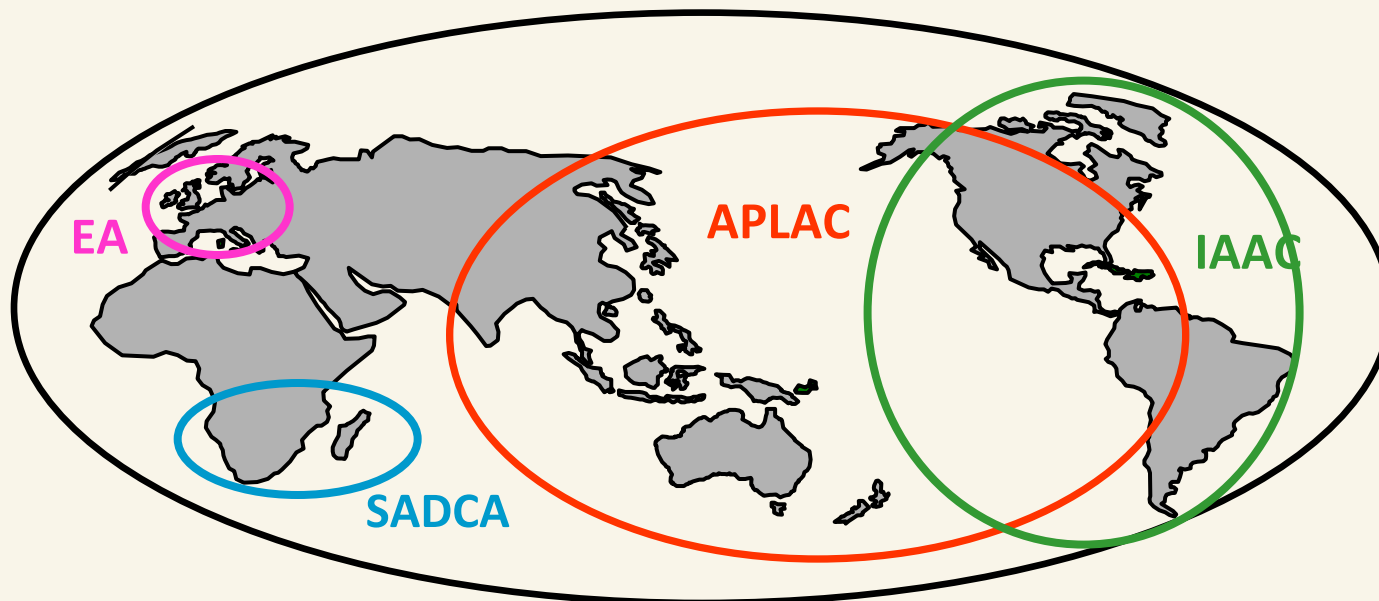


- 139 member bodies representing:
  - 87 countries (98% of global GDP)
  - 65 full member MRA signatories, 50 countries
  - 33,000 accredited laboratories; 6,000 inspection bodies
  - 24 associate accreditation bodies from 23 economies
  - 20 affiliate accreditation bodies from 18 economies
  - 25 stakeholder associations
  - 4 regional cooperation bodies
  - 1 national coordination body





# ILAC



- EA** European cooperation for Accreditation
- APLAC** Asia Pacific Laboratory Accreditation Cooperation
- ILAC** International Laboratory Accreditation Cooperation
- IAAC** Inter-American Accreditation Cooperation



# The Inter American Accreditation Cooperation

- The IAAC Multilateral Recognition Arrangement (MLA) principal elements:
  - Participation in programs of peer evaluation and re-evaluation;
  - Exchange of information on the development and operation of accreditation systems;
  - Participation of personnel from IAAC MLA members in assessment, re-assessment or surveillance visits to conformity assessment bodies performed by other IAAC MLA member bodies; and
  - Participation in IAAC meetings.





# Asia Pacific Laboratory Accreditation Cooperation



This MRA forms a regional network of laboratories and inspection bodies accredited by accreditation bodies that have been peer-evaluated and recognized as being competent. This network facilitates the acceptance of test, calibration and inspection reports in the region, thus contributing to the facilitation of trade and the free-trade goal of “tested/inspected once, accepted everywhere”.



# APLAC MRA



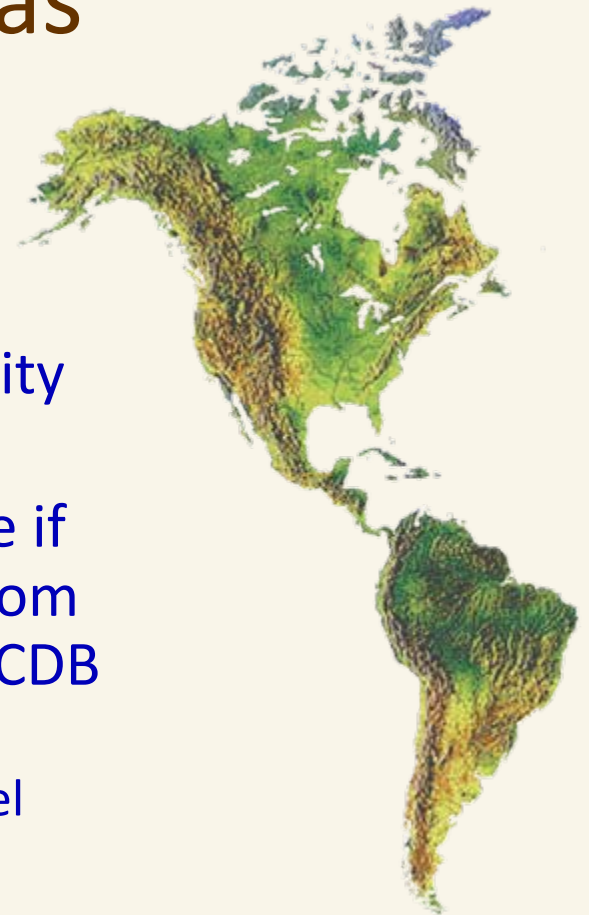
## Obligations of APLAC MRA signatories include:

- Recognition, within its own scope of recognition the accreditation of a laboratory, inspection body or RMP by other signatories as being equivalent to an accreditation by its own organization.
- Acceptance, for its own purposes, endorsed calibration, test or inspection reports or reference materials certificates issued by laboratories, inspection bodies or reference material producers accredited by other signatories on the same basis as it accepts endorsed calibration, test or inspection reports issued by its own accredited laboratories and/or inspection bodies.
- Recommending and promoting the acceptance by users in its economy of endorsed test, calibration, and inspection reports or reference material certificates issued by organizations accredited by other signatories.



# SIM - regional metrology organization for the Americas

- Review of the NMI's quality systems:  
SIM Quality System Task Force
  - At least once every 5 years
  - Greying out of CMCs due to lack of quality system vetting/review
  - Annual survey of the NMIs to determine if they have situations precluding them from offering the CMCs as published in the KCDB
    - Changes in organization/facilities/equipment/personnel
    - Outliers in comparisons





# NVLAP's Participation

- Sally Bruce: ILAC AIC (and specifically, AIC WG2 for calibration and traceability), ILAC ARC, SIM quality system task force
- Betty Sandoval: APLAC Nominations Committee and Technical Committee
- Barbara Belzer: Vice-Chair of Laboratory Sub-Committee for IAAC
- Ileana Martinez: Vice-Chair of IAAC and is the IAAC liaison to EA





## Similar methods and procedures to determine compliance/conformance with the “standards”

- On-site assessment/evaluation
  - Accreditation bodies are evaluated by peers on a 4-year basis; typically a week’s duration with observational visits to the assessments of laboratories
  - NMIs have their quality systems reviewed at least every 5 years; annual status reports in between
  - Accredited laboratories are assessed every two years



# Technical Requirements for ABs and Accredited Laboratories

- Proficiency testing and other quality assurance practices
  - Level of risk may determine frequency
- Witnessing of performance of tests or calibrations during the on-site assessment
  - For ABs, the evaluation team will witness the assessment
  - For ABs, the evaluation team will look for evidence of participation in regional comparisons (APLAC, EA, IAAC)





## NVLAP's Handbook 150 elements related to the International Arrangements

- Traceability policy
- Cross Frontier policy



**Thank you for your  
kind attention**