

2nd International Environmental Technology Verification Forum

Vancouver, Canada • March 28, 2006

**Qualification and Accreditation of
Testing and Verification Organizations:
The EPA ETV Perspective**

Lora Johnson

Director of Quality Assurance • USEPA

Legal Basis for US Participation in National and International Standards and Conformity Assessment Activities

- 1996 National Technology Transfer and Advancement Act (NTTAA)
 - ✓ promotes the use of voluntary standards and conformity assessment
 - ✓ specifies key role for the US National Institute of Standards and Technology (NIST)
- 1998 Circular No. A-119 *Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities*
 - ✓ provides detailed requirements for implementing NTTAA
- 1979 Trade Agreements Act
 - ✓ Allows for standards related activities

US Public/Private Partnerships: The Key to Engaging Existing Certification/Accreditation Organizations

- 2000 US government (through NIST) established a memorandum of understanding with the American National Standards Institute (ANSI)

ANSI

- ✓ Adopted U.S. National Standards Strategy, August 31, 2000
 - ✓ Is US member body to ISO
 - ✓ Accredits standards development organizations, like ASTM
- 1989 American Society for Quality (ASQ) established an accreditation body to accredit quality management system certification bodies
 - ✓ Evolved into ANSI-ASQ National Accreditation Board (ANAB)

Environmental Technology Verification and the Conformity Assessment Process

Current US Resources – Private Sector

- ANSI-ASQ National Accreditation Board (ANAB), exists to facilitate US conformity assessment process
- ANAB
 - ✓ Signatory to the International Accreditation Forum (IAF)
 - ✓ Accredits certification bodies that then certify organizations
 - ✓ Early focus on Quality Management Systems and Environmental Management Systems
 - ✓ Actively working on others,
- US government facilities use private certification, i.e., ISO 14000 certification

Current US Resources – Government

- NIST operates the National Voluntary Conformity Assessment System Evaluation Program, which will accredit bodies if accreditation not available elsewhere

ETV - Current

- EPA Staff “accredit” verification organizations to the ETV Quality Management Plan*
- EPA provides QA oversight during all phases of verification testing
- EPA provides credibility to the process, including signing verification statements
- Program goal is product verification, not certification or assessment to an established standard
- Use of “certified laboratories” not required
- Does not strive to have testing protocol adopted by standards development organizations

* *Plan is based on “American National Standard: Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs” Milwaukee, Wisconsin; 1994*

ETV Possible Future Directions

- Evaluate national / international quality management system standard for applicability to environmental technology verification organizations, i.e., ISO 9000
- Explore potential for use of certified labs and product certification systems i.e., ISO 17025 and Guide 65
- Work with Standards Development Organizations to adopt ETV testing protocols as the basis for technology verification nationally and internationally i.e., ASTM, ISO
- Harmonize international operations of verification activities through existing the national/international conformity assessment organizations i.e., ANAB, IAF


International Harmonization of Technology Verification: Using Quality Management Systems

Acronyms

- ANAB ANSI/ASQ National Accreditation Board
- ANSI American National Standards Institute
- ASTM American Society for Testing and Materials
- ASQ American Society for Quality
- CASCO Committee on Conformity Assessment
- IAF International Accreditation Forum
- IEEE Institute of Electrical and Electronics Engineers
- ISO International Organization for Standardization

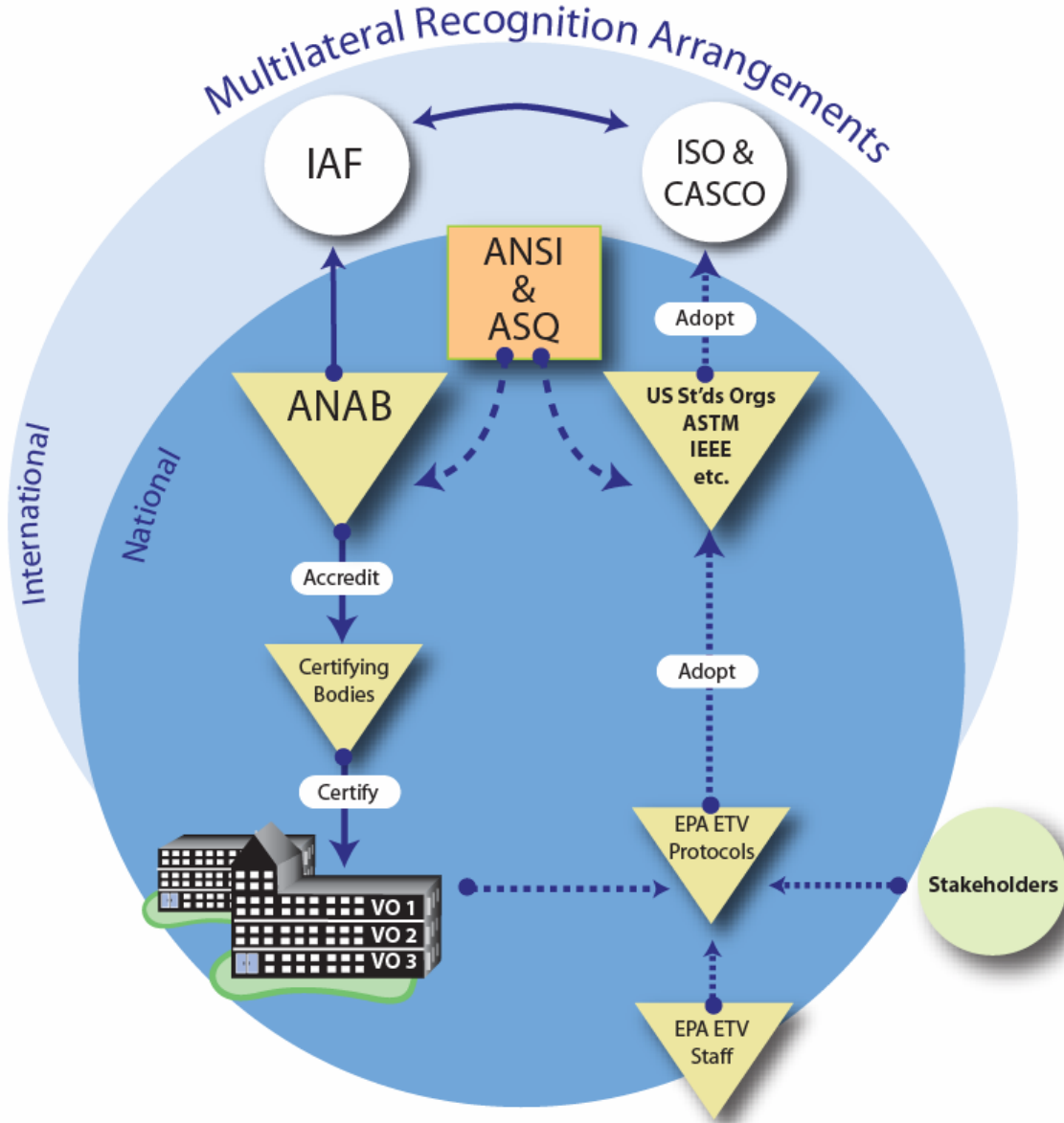
Legend

VO = Verification Organization

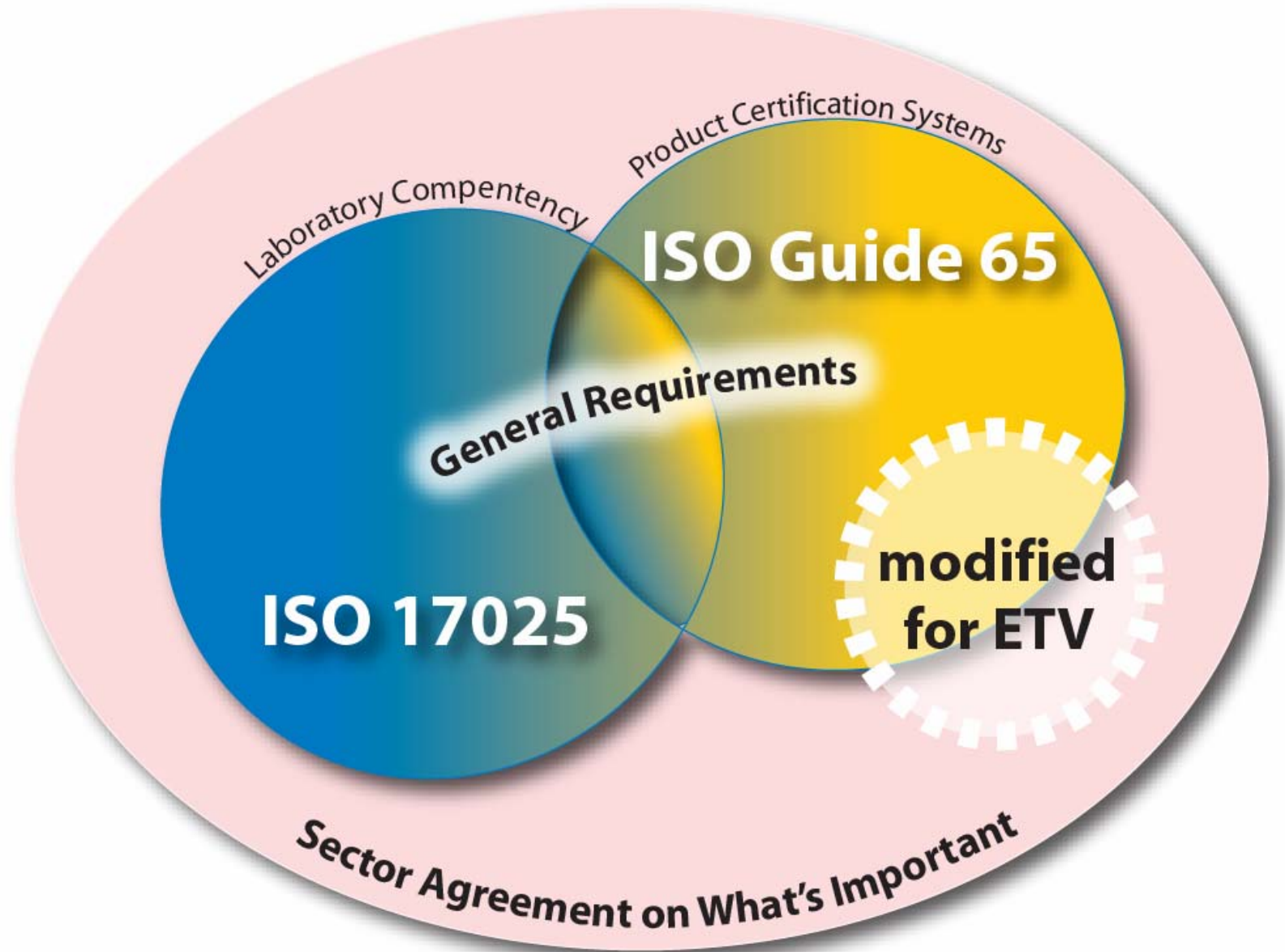
 within conformity assessment process

 standard development process

 oversight/administrative roles



International Harmonization of Technology Verification: Using Certified Labs and Product Certification



Disclaimer

Although this work was reviewed by EPA and approved for publication it may not necessarily reflect official Agency policy.