

CITAC/EURACHEM WORKSHOP ON
Measurement Traceability and
Uncertainty in Analytical Chemistry

17 – 18 June 2002

LUZERN, SWITZERLAND

ISO/IEC 17025 Requirements

by

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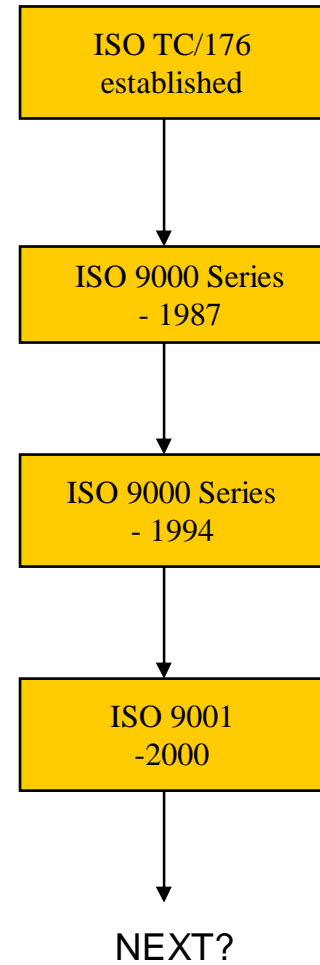
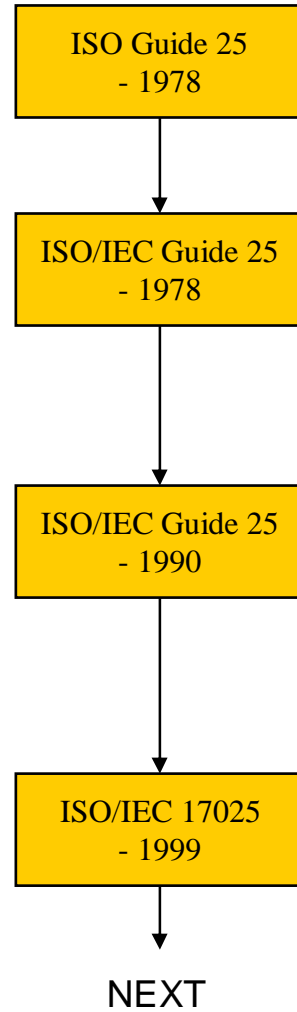
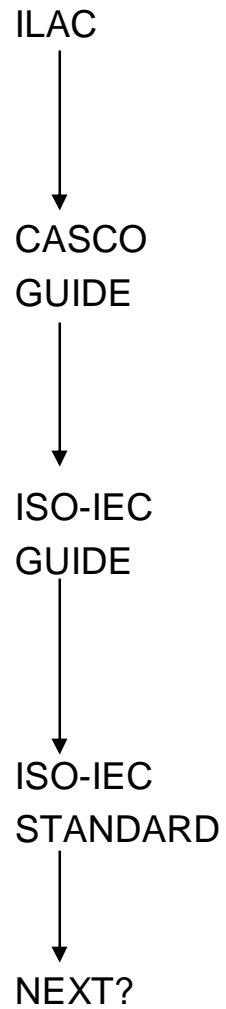


OVERVIEW OF PRESENTATION

1. Brief history of ISO/IEC 17025
2. 17025 vs 25 - significant changes
3. Interpretation and implementation
4. The future
5. Summary and conclusions
6. Useful references



Background - ISO/IEC 17025 and ISO 9000



Significant Changes: New Requirements

- Identification of potential conflicts of interest
- Service to clients
- Preventive action
- Uncertainty procedures for testing



Significant Changes: Enhanced Requirements

- Details of quality policy statement
- Document control
- Identification of client needs
- Non-conforming work
- Corrective action
- Records
- Management review
- Method validation



Accreditation Body Implementation: ILAC Proposal

- ISO/IEC 17025 dated 15 December 1999
- Labs expected to comply by 1 Jan 2003



Accreditation Bodies: Issues to Consider

- Guidance on significant changes and new requirements
- Training of assessors and staff
- Training of laboratories
- Start date for assessments
- Transition and issue of new certificates
- Effective date for compliance



Implementation strategies: Testing laboratories

- Review quality system and documentation
 - Audit, review, corrective action
 - Document control
- Interact with clients
 - Educate
 - Determine needs: short- and long-term
- Effective date for compliance



Chemical laboratories: Key steps

- Review scope of tests
 - method validation
 - contributions to uncertainty
 - traceability of standards
- Calculate uncertainties
- Evaluate effects on results
- Address “improvable” components
 - improve method, equipment
 - reference materials



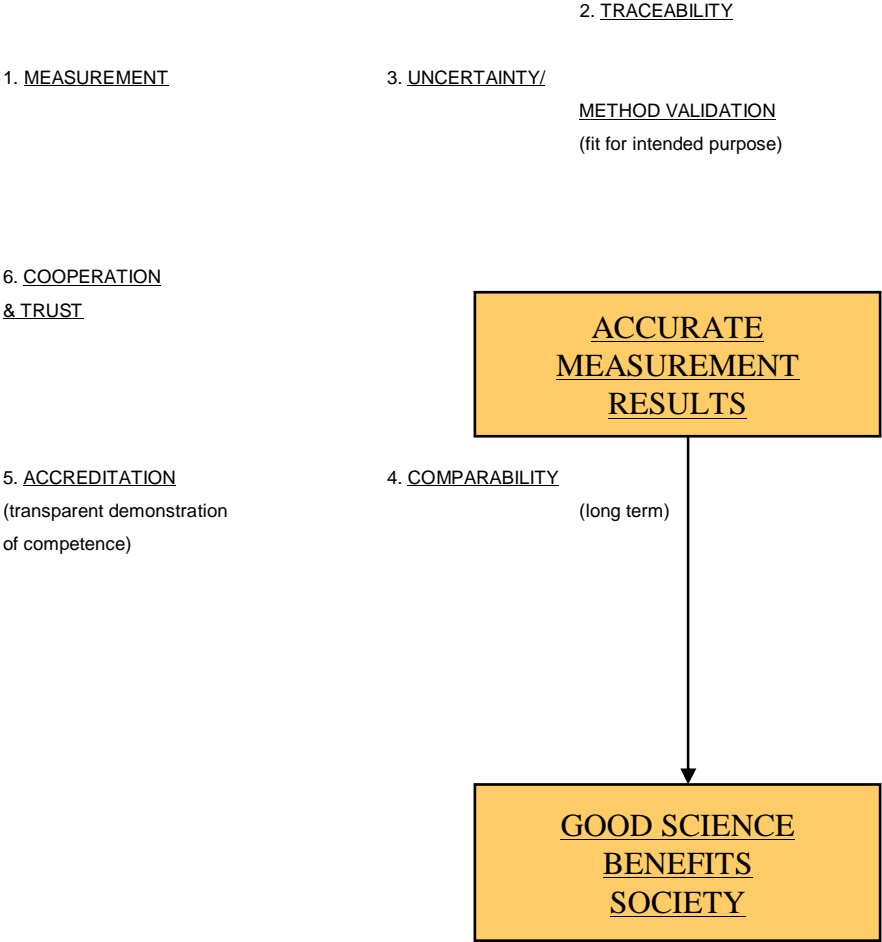
SUMMARY

- Clear, practical guidance documents are essential
- Increased importance of traceability and uncertainty - brings focus on competence of reference material producer
- Successful implementation depends on understanding and acceptance in laboratory and specifier communities
- Education and training is essential



Summary - CRITICAL" Points

METROLOGY IN CHEMISTRY



ISO/IEC 17025

METROLOGY IN CHEMISTRY - USEFUL REFERENCES

ILAC GUIDANCE & POLICY

- ILAC G12:2000 Guidelines for the Requirements for the Competence of Reference Material Producers
- ILAC G13:2000 Guidelines for the Requirements for the Competence of Providers of Proficiency Testing Schemes
- ILAC G15:2001 Guidance for Accreditation to ISO/IEC 17025
- ILAC G17:2002 Strategy to introduce the concept of measuring uncertainty in connection with the introduction of the Standard ISO/IEC 17025
- ILAC P10:2002 ILAC Policy on Traceability of Measurements Results

NOTE: GUIDANCE FROM REGIONAL ACCREDITATION CO-OPERATIONS (EA, APLAC) IS ALSO AVAILABLE.

