

## EUROLAB: An international network of measurement, testing and analytical laboratories

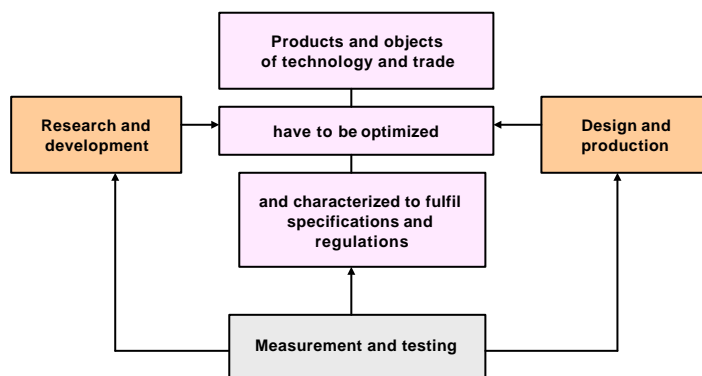
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### Contents

1. The role of measurement and testing for society and economy
2. Free trade requirements: conformity assessment and accreditation
3. EUROLAB: status, scope and objectives
4. EUROLAB's current activities
5. EUROLAB's future strategy



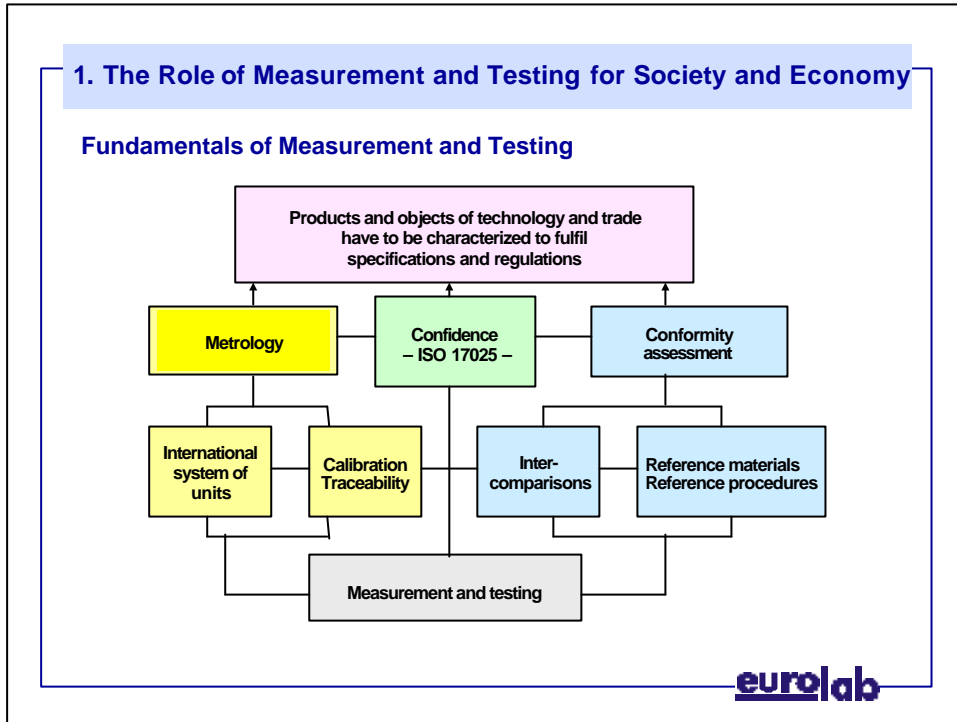
### 1. The Role of Measurement and Testing for Society and Economy



#### Definitions

- **Measurement** is a set of operations for the purpose of determining the value of a quantity (International vocabulary of metrology, BIPM).
- **Testing** is a technical operation that consists of the determination of one or more characteristics of a given product, process or service according to a specified procedure (EN 45020).





### 1. The Role of Measurement and Testing for Society and Economy

#### Metrology and Conformity Assessment

**Metrology**, the science of measurement, is based on the "International System of Units" (SI) of the Metre Convention. Individual measurements have to be related to the SI-Units through "calibration" of measuring instruments and "traceability".

Metrology

®

Measurements

®

Calibration, Traceability

®

Internat. System of Units

**Conformity assessment** is defined according to EN 45020 as any activity concerned with determining directly that relevant requirements are fulfilled. Conformity assessment needs testing, validated through "intercomparisons", "reference materials" and "reference procedures".

Conformity assessment

®

Testing

®

Inter-comparisons

®

Reference Procedures & Reference Materials

**Confidence** in measurement and testing is given if the requirements of the standard ISO/IEC 17025 "General requirements for the competence of testing and calibration laboratories" are followed.

## 2. Free trade requirements: conformity assessment and accreditation

**The Global Approach established by the European Council to support the free movement of goods in the European Community\*:**

- Common European standards relating to uniform quality assurance
- Conformity Assessment Modules for products by the New Approach
- Accreditation systems for CABs including inter-comparison techniques
- Mutual Recognition Agreements (MRAs) concerning testing and certification in the non-regulatory sphere

➔ **In connection with the evolution of the EU Single Market, EUROLAB was formed as network of the laboratory community**

\* EC Council Resolution, 1989, completed by Council Decisions 90/683/EEC and 93/465/EEC

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## 3. EUROLAB: status, scope and objectives

### Creation and status of EUROLAB

- EUROLAB supports technology and trade as international organisation of conformity assessment bodies (CABs) representing altogether **over 2000 private and public laboratories**.
- EUROLAB was **created** in Brussels on April 27, **1990** on the basis of a memorandum of understanding, signed by delegations representing the private and public laboratories of 17 out of 19 countries of the EU and EFTA.
- EUROLAB is since October 1998 **a legal entity** in the form of an international association under Belgian law (A.I.S.B.L. - Association Internationale Scientifique Sans But Lucratif) setting it as the European Federation of National Associations of Measurement, Testing and Analytical Laboratories.

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### 3. EUROLAB: status, scope and objectives

#### EUROLAB members



#### EUROLAB Members:

Austrolab (Austria)  
 Belab (Belgium)  
 EUROLAB-Danmark  
 EUROLAB-Finland  
 EUROLAB-France  
 EUROLAB-Deutschland  
 HELLASLAB (Greece)  
 EUROLAB-Iceland  
 ALPI (EUROLAB-Italy)  
 EUROLAB-Nederland  
 EUROLAB-Norge  
 relacre (Portugal)  
 EUROLAB-España  
 EUROLAB-Sverige  
 EUROLAB-CH (Switzerland)  
 EUROLAB-UK (BMTA)

#### Associated Members:

ALA (Romania)  
 BULLAB (Bulgaria)  
 CYPRUSLAB  
 CZECHOLAB  
 HUNGAROLAB  
 LATLAB (Latvia)  
 POLLAB (Poland)  
 SILAB (Slovenia)  
 SK-LAB (Slovakia)

International  
 Affiliate Members



### 3. EUROLAB: status, scope and objectives

#### Organisation

- **The General Assembly is composed of**
  - **active members** (with voting rights), namely one association per country of EU and EFTA, representative of the public and the private laboratory community of their countries,
  - **associated members**, namely one association per country applying to join the European Union and representative of its laboratory community and
  - **international affiliates**, representing international organisations or institutions interested in measurement, testing and analytical activities.
- **Board of Administrators**
- **Technical Committees:**
  - Technical Committees for Quality Assurance (**TC QA**)
  - Joint (EUROLAB and CEOC) Technical Committee for Product Testing and Certification (**JTC PTC**)
- **Technical Secretariat**
- **Secretariat in Brussels**



### 3. EUROLAB: status, scope and objectives

#### The major driving forces for creation and activities of EUROLAB are:

- the need to harmonise and to improve the technical competence and infrastructure of measurement, testing and analytical services also in order to make the innovation process more effective;
- the changing market situation requires more attention to be paid to the customer relationships, and development of new or improved services;
- the increased emphasis on sustainable development, environmental issues and improved reliability and safety;
- the possibility to create or make use of novel R&D results, in future also especially in the field of life sciences and nano-technologies;
- the integration of new EU member countries;
- the internationalisation and globalisation process forcing EUROLAB to be much more active on the international arena.



### 3. EUROLAB: status, scope and objectives

#### Objectives of EUROLAB

- **Representation** by formulating and voicing the opinion of European laboratories regarding political and technical issues, both on the European scene and worldwide
- **Coordination** by interfacing with all European organizations having activities of interest to the laboratory community
- **Action** by providing adequate means for exchange of information and experience, intensified through the internet: [www.eurolab.org](http://www.eurolab.org)
- **Promotion** of cost-effective testing, calibration and measurement services, for which the accuracy and quality assurance requirements should be adjusted to actual needs



### 3. EUROLAB: status, scope and objectives

#### Contribution of the EUROLAB member laboratories

The contribution of the individual EUROLAB member laboratories is at four levels:

- **the provision and execution of test, calibration and analytical services** to all members of the economy.
- **the implementation of standards and technical regulations**, which usually includes assessment of conformity to performance, safety, health or environmental requirements usually based on measurements and tests,
- **the development of new test and measuring methods**, adapted to the evolution of R&D methodologies in science and technology and to the needs of industry, and, more generally, of the users of test results,
- **the production of standards**, which often contain test and measurement methods.




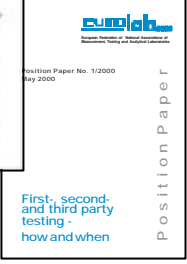
### 4. EUROLAB's current activities

- **EUROLAB's input to international standardisation, e.g.**
  - ⇒ EUROLAB is closely following the discussions on ISO/IEC 17025
  - ⇒ EUROLAB has given comments on ISO/IEC CD 17011
- **EUROLAB Technical Committees and European working groups**
  - ⇒ Technical Committee on Quality Assurance (TC QA)
  - ⇒ Technical Committee on Product Testing and Certification (TC PCT)
  - ⇒ EA / EUROLAB / EURACHEM / EUROMET Working group on Reference Materials (4E-RM)
  - ⇒ EA / EUROLAB / EURACHEM Working group on Proficiency Testing (EEE-PT)
  - ⇒ EA / EUROLAB / EURACHEM Permanent Liaison Group (PLG)
- **Contacts with the EU: DGs Enterprise, Trade and Research**
- **Dialogue and co-operation with accreditation bodies**
- **Co-operation with other organisations**



**4. EUROLAB's current activities**

- **EUROLAB's Information network**
  - ⇒ **EUROLAB homepage:**  
[www.eurolab.org](http://www.eurolab.org)
- **EUROLAB's technology documents**
  - ⇒ **Technical Reports**
    - 1/2000 "Cost of Accreditation"
    - 2/2000 "Accreditation of small laboratories"
    - 1/2001 "The volume of accreditation activities in Europe"
    - 1/2002 "Measurement Uncertainty in Testing"
    - 2/2002 "Satisfaction of customers with European accreditation bodies"
  - ⇒ **Position Papers**
    - 1/2000 "First-, second- and third-party testing – how and when"
    - 2/2000 "What conformity assessment operators expect from accreditation"
    - 1/2003 "Accreditation bodies – national recognised bodies or market players ?"

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**4. EUROLAB's current activities**

- **European technology co-operation: participation in EU projects**
  - ⇒ **EPTIS** **E**uropean **P**roficiency **T**esting **I**nformation **S**ystem in the internet
    - <http://www.eptis.bam.de>
    - European Proficiency Test Information System
    - Database allowing to search for proficiency schemes that are offered in Europe
    - total of ca. 750 PT Schemes from 16 countries in the database
    - plans to extend database internationally
    - supported by ILAC (International Laboratory Accreditation Co-operation)
  - ⇒ **MetroTrade** **M**etro logical **S**upport to **I**nternational **T**rade
    - <http://www.metrotrade.dk>
    - EUROLAB is participating as one of 9 partners in the MetroTrade project
    - aim of the project: to analyse the infrastructure of the testing and metrology field and to examine possible barriers to trade
    - EUROLAB activities in MetroTrade e.g. :
      - Guidance on how to improve international harmonisation of standards / guidelines
      - Workshop on traceability and measurement uncertainty

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## 5. EUROLAB's future strategy

### The strategy in brief:

The major driving forces for the future development of EUROLAB are:

- the globalisation process forcing EUROLAB to be much more active on the international arena,
- the changing market situation requires more attention to be paid to the customer relationships, and development of new or improved services,
- need to improve the technical competence and infrastructure of measurement, testing and analytical services also in order to make the innovation process more effective,
- possibility to create or make use of novel R&D results, especially in the field of life sciences and nano-technologies,
- integration of new EU member countries.



## 5. EUROLAB's future strategy

### As a result of the EUROLAB strategy, the following key goals should be achieved:

- improved cost-effectiveness in the whole value chain of measurement and testing,
- more added value from accreditation,
- stronger influence on legislation by expressing the views of the laboratory community,
- more differentiation in the services provided to EUROLAB members with increased two way communication,
- enhanced information activities, especially in support of technical advice to the laboratory community.

