



A Quality and Technology Network

ROLE OF ACCREDITED INSTITUTIONS IN ENVIRONMENTAL CONTROL

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Summary

- History of Independent Inspection Companies in Europe
- Role of accredited institutions
- Main areas of activity
- Main institutions in Europe
- CEOC
- Official Authorities and the Accredited Institutions
- Accredited Environmental Institutions



History of Independent Inspection Companies in Europe

- These Institutions appear in Europe about 150 years ago (e.g. HESSEN 1848)
- Main objective was the control of Steam Pressure Vessels
- Steam boiler explosions endanger people, environment & factories with their assets



Role of Accredited Institutions

- Sustainable development of technology
- Safety and quality
- Social and industrial development with technical advance



Main industrial areas of activity

Safety

Water Safety

Quality Management

Assessment of Environmental Events

Steam-Boilers

Electric Systems

Pressure Vessels and Pipework

Materials and Welding

Storage Tanks

Equipment Inspection

Energy Systems (including Nuclear Energy)



Main Institutions in Europe*

TUV (Austria)

Vinçotte (Belgium)

APRAGAS (Belgium)

SAMTS-State Agency for Metrological and Technical
Surveillance

ITI (Czech Republic)

SZU (Czech Republic)

TKK (Estonia)

APAVE (France)

INSPECTA (Finland)

FORCE TECHNOLOGY(Denmark)

DEKRA (Germany)



TUV (Germany)
TUV- VdTUV (Germany)
ÉMI-TUV (Hungary)
MKEH (Hungary)
ISPESL (Italy)
RINA (Italy)
INSPECTA LATVIA (Latvia)
LUXCONTROL (Luxemburg)
TDT (Poland)
UDT (Poland)
WDT (Poland)



ISQ (Portugal)

ISCIR (Romania)

TI (Slovakia)

ATISAE (Spain)

ECA (Spain)

SVTI/ASIT (Switzerland)

SGS (Switzerland)**

Lloyd's Register (United Kingdom)

SAFed (United Kingdom)

* **Members of CEOC**

** **Not member of CEOC**



CEOC

(Confédération Européenne des Organismes de Contrôle) International Confederation of Inspection and Certification Organisations

- Voice of independent third party inspection and certification organisation
- Contributes actively to the development of sound legislative proposals
- Members (slide before)
- Organization
 - General Assembly of Members
 - Board of Directors
 - Technical Commissions**
 - Auditors



Technical Commissions

- Conformity Assessment “CC”
- Non-Destructive Testing “CND”
- Environmental & Major Hazards “CR”**
- Occupational Health “COH”
- Joint Eurolab-CEOC Technical Committee on Product Testing and Certification “JTC PTC”
- Machines, Lifts& Cranes ”CML”
- Electrotechnology “CE”
- Pressure Equipment “CP”
- Inspection ”CI”
- Communication Expert Group “COMMS”



Official Authorities and the Accredited Institutions

- Accredited Institutions (AI) act on behalf of official authorities in specific issues
- AI must be prepared to “Inspect” as Independent Organisms
- AI must be Independent and acting as 3rd party and **accepted** by the other parties
- AI must have (when necessary) specific Laboratories Accredited to perform qualitative and quantitative measurements
- Accreditation on specific issues ad audited periodically by Official Authorities
- The areas of accreditation are dependent on the organization and the strength to maintain the Quality Management Systems



Accredited Environmental Institutions (e.g. ISQ)

ISQ laboratories are accredited by IPQ (Portuguese Institute for Quality), member of IQ net, according to NP EN 45001:

LABCAB - Laboratory of Electrical Cables Testing

LABEL - Laboratory of Electrical Equipments Testing

LABEND - Laboratory of Non Destructive Testing

LABMEC - Laboratory of Mechanical Behaviour

LABMETRO - Laboratory of Metrology

LABMM - Laboratory of Metallurgy and Materials

LABQUI - Laboratory of Environment and Chemistry

LABRD - Laboratory of Acoustic & Noise Testing

LABET-Laboratory of Thermo Dynamical Testing

Other Laboratories:

Laboratory of Concrete Testing

Laboratory of Anticorrosion Protective Coatings

LABCEM - Laboratory of Electromagnetic Compatibility Testing

Laboratory of Electronics

Laboratory of high energy density beams

Laboratory of Welding and Robotics



Targeting essentially the markets identified, ISQ provides to customers the following services and competences:

■ Industrial safety inspection	■ Project review
■ Energy studies	■ Projects Supervision
■ Environmental studies	■ Quality Management
■ Maintenance inspection	■ Research & Development
■ Mechanical & Materials Testing	■ Risk analysis
■ Metrology	■ Risk based inspection
■ Non destructive testing	■ Structural Integrity Assessment
■ Occupational Safety and Health Management	■ Technical inspections
■ Product safety (Electrical testing, etc)	■ Training
■ Production and joining technologies	



Energy studies

- Energy saving consultancy
- Energy auditing
- Thermographic inspection
- Testing and calibration of measurement equipment



Environmental impact studies, analysis and management

- Life Cycle Assessment
- Analysis and characterisation of gas emissions
- Environmental impact assessment
- Inspection of de-pollutant equipment (efficiency)
- Analysis and characterisation of water, waste water and solid wastes
- Dispersion of gas emissions by modelling
- ISO 14000, EMAS



Thank You

