EUROPEAN QUALITY INFRASTRUCTURE NETWORK

CONCEPT NOTE

CENELEC · cen · EURAMET · EA EUROPEAN ACCREDITATION · PROSAFE Joint Actions Best Practice · WELMEC

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1. What is QI?

The system comprises the organizations (public and private) together with the policies, relevant legal and regulatory framework, and practices needed to support and enhance the quality, safety, and environmental soundness of goods, services, and processes.

The quality infrastructure is required for the effective operation of domestic markets, and its international recognition is important to enable access to foreign markets.

It is a critical element in promoting and sustaining economic development, as well as environmental and social well-being.

It relies on (INetQI Definition):

Metrology	Standardisation	Accreditation

Conformity Assessment	Market Surveillance

2. QI for Europe

The functioning of the European Single Market relies on a well-defined and effective Quality Infrastructure (QI).

The European QI system also plays an important role in enabling well-functioning and fair international trading with Europe's partners, based on trust.

The European QI system serves policymakers and businesses in meeting challenges and expectations brought about by globalization.

QI promotes consistency and coherence for industry, societal stakeholders, and regulators.

QI has a positive impact on citizen's daily life through ensuring the highest standards of quality, safety, and reliability of products and services for consumers and businesses throughout the European Single Market.

QI assures the quality of products, improves competitiveness and productivity, contributes to research, development, and innovation, and promotes conformity with the regulatory requirements.

Collaboration between the organizations representing the different pillars of the European QI system is essential to meet the many technological, societal and sustainability opportunities and challenges Europe is facing.

3. QI Organisations

CEN-CENELEC (Standardization)

CEN – European Committee for Standardization
- Regional standardization organization
- Recognized within the framework of the EU Regulation on standardization as being responsible for developing and defining voluntary standards at the European level.
- Members: 34 national standardization bodies of 34 countries
- Applies WTO principles for standards development.

- CEN facilitates the exchange of goods and services and supports the realization of the European Single Market by developing and harmonizing standards for products, production processes, services, and methods.

CENELEC - European committee for electrotechnical standardization
- Regional standardization organization
- Recognized within the framework of the European Union Regulation on standardization as being responsible for developing and defining voluntary electrotechnical standards at European level.

- Members: 34 national committees of 34 countries
- Applies WTO principles for standards development.
- CENELEC facilitates the exchange of goods and services and supports the realization of the European Single Market by developing electrotechnical standards for products, production processes, services, and methods.

EURAMET

EURAMET is the Regional Metrology Organisation (RMO) of Europe. It coordinates the cooperation of National Metrology Institutes (NMI) and Designated Institutes (DIs) in Europe in fields including research in metrology, traceability of measurements to the International System of Units (SI), international recognition of national measurement standards, and related Calibration and Measurement Capabilities (CMC).

EURAMET's vision is to lead the development and application of measurement science, enabling Europe to be competitive, healthy, and sustainable through innovation.

Mission:
- Develop and maintain an appropriate, integrated, and cost-effective measurement infrastructure for Europe aligned to the needs of society and industry
- Ensure that the European measurement infrastructure is internationally competitive and recognised, and is based on world-class R&D
- Support policy and decision makers where metrology is key
- Support members in meeting their national requirements through collaboration and a balanced European measurement infrastructure

European co-operation for Accreditation (EA)

- European Association of National Accreditation Bodies.
- Members: 48 National Accreditation Bodies from 48 countries
- EA Members are appointed by their government as the sole National Accreditation Body in their Member State/country
- Tasks:
    - > Harmonisation of accreditation throughout Europe
    - > Peer evaluation of the National Accreditation Bodies
    - > Cooperation with and support of the European Commission and its DGs and Agencies, as well as EFTA Cooperation with Stakeholders
- Recognised by the EU as the European Accreditation Infrastructure according to Regulation (EC) No 765/2008 on accreditation
- Framework Partnership Agreement with the EU and EFTA

The mission of EA is to ensure trust in accredited conformity assessment results through harmonized operations of accreditation activities in support of European and global economies.

WELMEC

WELMEC – the European Cooperation in Legal Metrology – is a regional legal metrology organisation with 30 member organizations, including the representative national authorities responsible for legal metrology in the EU and EFTA countries.

WELMEC was originally created in 1990 by a Memorandum of Understanding (MoU) for cooperation, coinciding with the adoption of the first new approach metrology directive in Europe, the Non-automatic Weighing Instruments Directive (NAWID).

The main task of WELMEC is for authorities to cooperate and to interact with stakeholders, in order to establish a common understanding that supports the implementation of the European regulatory framework on metrology.

From the outset, members shared a common drive for the free movement of measuring instruments by reducing barriers to trade for a wide range of instruments.

In recent years, the metrology directives of greatest interest have been those relating to units of measurement, measuring instruments, non-automatic weighing instruments, and prepackaged goods. The focus now includes internal market policies and legislation governing aspects, including market surveillance and mutual recognition.

PROSAFE

PROSAFE-The Product Safety Forum of Europe (www.prosafe.org) is a non-profit professional organisation dedicated to enhancing market surveillance, product safety and compliance across the European Economic Area (EEA). PROSAFE's mission is to enhance cooperation among market surveillance authorities, fostering cross-border collaboration to improve product safety and compliance with EU legislation.

Since 2006, PROSAFE has played a leading role in uniting and coordinating the work of over 100 Market Surveillance Authorities from nearly all EU-27 Member States, driving EU-funded cross-sectoral joint actions to strengthen market surveillance, improve compliance, and in turn, protect consumers and promote fair competition within the Single Market.

EUROLAB

The Conformity Assessment pillar within the network is represented by EUROLAB aisbl, as an Observer member accepted in June 2024 for a 2-year period.

EUROLAB is a European Federation that comprises 25 national associations gathering under their umbrella bodies active in the conformity assessment.

Thanks to the expertise and experience of the national associations, EUROLAB unites a vast network of laboratories, inspection, certification, and notified bodies.

This strong foundation enables EUROLAB to maintain robust engagement with key stakeholders at the European level, ensuring that the voice of conformity assessment is represented. This role underscores the dedication to upholding quality and fostering collaboration across borders, reinforcing the trustworthiness and excellence of European conformity assessment practices worldwide.

As representative of the Conformity Assessment pillar in the QI Network, EUROLAB created a Task Force gathering various other CABs organisations (EACL, EFNDT, ETICS, IIOA, NoBoMet, TIC Council, other organisations are welcome) in order to have a wide representation of the sector within the Network.

4. How QI functions work together

The Quality infrastructure system ensures products and services are safe and of high quality. It encompasses these functions: standardisation, conformity assessment (testing, inspection, and certification), accreditation, metrology, and market surveillance.

Within this system and its functions, experts and QI institutions work together to protect people, health, and the environment. These experts create the quality and safety that are important in the lives of citizens, in production processes, and in the market. QI plays a vital role in business, innovation, and trade, both nationally and across borders.

Standardisation – Benefiting business and society

Standards are voluntary documents that describe products, services, technologies, or processes for common and repeated use. They set down compatibility, quality, and safety criteria to ensure certain levels of uniformity and consistency for the benefit of the public.

Standards are developed in a transparent, consensus-based process. All interested parties can participate and contribute their expertise. While the use of standards is voluntary, 'harmonized' standards cited in the Official Journal of the EU provide 'presumption of conformity to some European regulations. Regulation 1025/2012 defines the legal frame for European standardization activities in the EEA.

Voluntary and consensus-based standards are beneficial to the public sector, businesses, and society. They support regulation and self-regulation by industry. By improving product safety and quality, standards build trust between market participants and reduce transaction costs. International standards lower barriers to trade and help businesses create or enter new markets.

Standards support the spread of best practices and state-of-the-art procedures. Companies can build on the latest technologies and approaches and develop them further – this creates innovation.

Standards provide a common technical language for trade partners throughout the world and ease value chains that cross borders. Through the Vienna and Frankfurt Agreements, CEN and CENELEC, develop jointly international standards with ISO and IEC respectively, ensuring efficient use of expertise and facilitating global market access.

Conformity assessment – Ensuring compliance

Conformity assessment involves procedures that demonstrate compliance with specified requirements. These requirements may be defined through legislation, technical regulation, standards or other means. Conformity assessment increases reliability and objectivity when it comes to the quality and safety of products and services.

Conformity assessment is utilised for a variety of products, services, processes, systems, persons and bodies (organisations). It includes activities such as testing and calibration, inspection, certification, validation and verification, among others. The need for conformity assessment and requirements may either be voluntary or required by law. In critical areas, the government selects the bodies authorised to carry out assessments.

Conformity assessment bodies are organizations that are technically competent and that carry out their activities with impartiality and independence, as proven by the accreditations they receive from national accreditation bodies, and thus the reliability and trustworthiness of products and services is enhanced.

Conformity assessment plays an essential role not only in creating trust between market participants, but also in achieving public goals including consumer safety and environmental protection.

Conformity assessment bodies are mostly private but can also be public.

Accreditation – Generating trust

Accreditation is the attestation by a national accreditation body that a conformity assessment body (CAB) meets the requirements set by international standards and, where applicable, any additional requirements, including those set out in EU legislations or relevant sectoral schemes, to carry out a specific conformity assessment activity.

Due to accreditation, consumers, citizens, and users can have trust in products and services, which have been tested, certified, and verified by conformity assessment bodies.

The EA MLA enables trust to all interested parties with the aim of facilitating the acceptance in the marketplace of conformity assessment results (e.g., reports and certificates) provided by CABs accredited by EA MLA signatories.

Such acceptance has major importance for the development of industry and business opportunities by removing the need to repeat the accredited conformity assessment in different countries. Therefore, the EA MLA contributes to increasing the competitiveness of European products and services by eliminating technical barriers to trade, reducing costs, and adding value to businesses and consumers.

Pursuant to Regulation (EC) No 765/2008, national authorities in the European Economic Area (EEA) shall accept conformity assessment results issued by CABs accredited by a (EEA) National Accreditation Body signatory to the EA MLA.
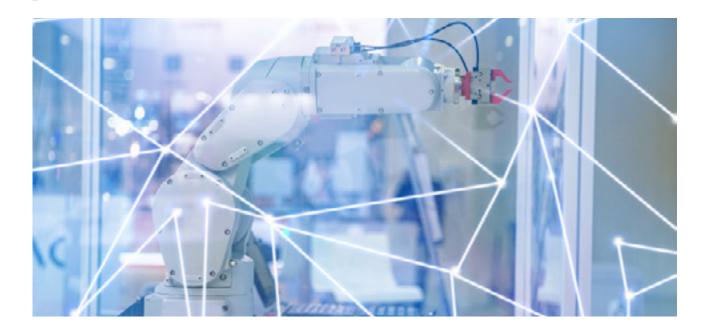

Metrology – To measure is to know

Measurements are present in all aspects of society. Metrology is a basic science, which plays a primary role in fields such as research and development, industrial manufacturing, medicine, telecommunications, trade, etc. Since the dawn of civilization, measurements have defined society, government and progress of humankind.

Metrology is an integral element of quality assurance and lie at the heart of conformity assessment. Metrology ensures the accuracy of measurement results by comparing them with measurement standards or reference materials, by calibrating measuring devices, and by developing and validating measurement procedures.

Metrology is a vector of competitiveness in technologically advanced societies; therefore, developing and improving a country's measurement capabilities is essential to enhance and support the processes of technological innovation and industrial development. Each country's national metrology institute is responsible for the development, realisation, and dissemination of the International System of Units (e.g., kilogram, metre, second), and they cooperate internationally to compare their national measurement standards.

Legal metrology is, together with market surveillance, a vital component to enhance consumer trust by assuring that every economic transaction based on measurements is correct, verifiable, and traceable. Creating the necessary level playing field for all economic actors involved.

Market surveillance and product safety – ensuring fair competition and safety

Market surveillance contributes significantly to safe products on the European internal market and a level playing field for economic actors.

Market surveillance authorities check products to see whether they meet specified requirements under European law. Market surveillance protects consumers and workers against unsafe products and protects businesses from unfair competition by those who ignore the rules.

In the case of dangerous products, market surveillance authorities can order their withdrawal or recall. They also inform other authorities and the public about dangerous products on the market. Through these measures, market surveillance ensures the conformity of products and protects public interests.

The EU Regulation (EU) 2019/1020 ensures the smooth functioning of the European internal market. It also ensures essential parts of the legal framework for market surveillance in the EU.

The EU market surveillance framework is implemented by the member states. The national market surveillance authorities are responsible for the implementation.